

PREFACE

Education is a process of learning and acquiring knowledge. Our teachers are the key to this process, they believe in each student's capabilities and facilitate them to explore, understand and therefore learn.

In New Horizon College of Engineering, we take immense pride in providing highest quality of education by paying utmost importance to teaching quality and practical learning. Our excellence is not just confined to the classroom; we are active in organizing conferences, workshops, seminars, guest lectures, co-curricular and extra-curricular activities. These activities and educational methodology helps in an overall development of our students, making them competent for success. Due to such comprehensive practices New Horizon College of Engineering is a favored engineering college in Bangalore.

We also take great pride in our excellent infrastructure and have ensured that the best of the technologies be incorporated in teaching learning process. We aspire to reach to a higher horizon, a horizon at which we are recognized at the national and the international levels and we are well set for this feat.

I firmly believe that NHCE is ready for its Accreditation by NBA. It is in this context that we are submitting our Self Assessment Report (SAR) to the NBA, New Delhi. A strenuous effort has been made to prepare the SAR and making the college ready for accreditation. I would like to express my cordial thanks to our beloved chairman Dr.Mohan Manghnani for guiding us through this journey.

Dr. Manjunatha
PRINCIPAL

PART A – INSTITUTIONAL INFORMATION**1. NAME AND ADDRESS OF THE INSTITUTION**

Name :	NEW HORIZON COLLEGE OF ENGINEERING	
Address :	RING ROAD, KADUBISANAHALLI BELLANDUR POST, NEAR MARATHALLI	
City : BANGALORE	Pin: 560 103	State : KARNATAKA

2. NAME AND ADDRESS OF AFFILIATING UNIVERSITY

VISVESVARAYA TECHNOLOGICAL UNIVERSITY
Jnana Sangama , Shantibastvar Road , Machhe , Belagavi – 590018

3. YEAR OF ESTABLISHMENT OF THE INSTITUTION

2001

4. TYPE OF THE INSTITUTION:

University

☐

Deemed University

☐

Government Aided

☐

Autonomous

☐

Affiliated

☒

5. OWNERSHIP STATUS:

Central Government

☐

State Government

☐

Government Aided

☐

Self financing

☐

Trust

☒

Society

☐

Section 25 Company

☐

Any other (Please specify)

☐**6. OTHER ACADEMIC INSTITUTIONS OF THE TRUST / SOCIETY / COMPANY Etc., IF ANY**

Name of Institutions	Year of Establishment	Programs of Study	Location
New Horizon College of Education	1980	B.Ed	Indiranagar Bangalore
New Horizon Public School	1982	Schooling (Pre KG – X Std.)	Indiranagar Bangalore
New Horizon Pre University College	1982	PUC	Kasturinagar Bangalore
New Horizon College Kasturinagar	2004	Degree (BBM, BCA, B.Com)	Kasturinagar Bangalore

7. DETAILS OF ALL THE PROGRAMS BEING OFFERED BY THE INSTITUTION UNDER CONSIDERATION-

S.N	Program Name	Year of Start	Intake	Increase in Intake	Year of Increase	Year of Initial AICTE approval	Accreditation Status	Accreditation period
1	Information Science & Engineering	2001	60	60	2008	2001	Granted Provisional Accreditation for two years for the period	2008-2011
2	Automobile Engineering	2012	60	0			Applying first time	
3	MBA	2004	60	0		2004	Eligible but not applied	
4	M.Tech Machine Design	2014	18	0		2014	Not Eligible for accreditation	
5	Bio Technology	2002	30	30	2004	2002	Granted Provisional Accreditation for three years for the period	2016-2019
6	Civil Engineering	2009	60	60	2013	2009	Granted Provisional Accreditation for three years for the period	2016-2019
7	Computer Science Engineering	2001	60	30+30	2006	2001	Granted Provisional Accreditation for three years for the period	2016-2019
8	Electronics and Communication Engg.	2001	60	60	2006	2001	Granted Provisional Accreditation for three years for the period	2016-2019
9	Mechanical Engg.	2003	60	60	2012	2003	Granted Provisional Accreditation for three years for the period	2016-2019

10	Electrical & Electronics Engineering	2001	40	20	2002	2001	Granted Provisional Accreditation for two years for the period	2008-2011
SHIFT - II								
11	M.Tech Computer Science & Engg.	2011	18	6	2013	2011	Eligible but not applied	
12	Computer Science & Engg	2011	60	-	-	2011	Granted Provisional Accreditation for three years for the period	2016-2019
13	Electronics and Communication Engg.	2012	60	-	-	2012	Granted Provisional Accreditation for three years for the period	2016-2019
14	Mechanical Engg.	2010	60	-	-	2010	Granted Provisional Accreditation for three years for the period	2016-2019
15	Electrical & Electronics Engineering	2010	60	-	-	2010		

8. PROGRAMS TO BE CONSIDERED FOR ACCREDITATION VIDE THIS APPLICATION

S. No.	Level	Discipline	Program
1	Under Graduate	Engineering & Technology	Automobile Engineering
2	Under Graduate	Engineering & Technology	Electrical & Electronics Engineering
3	Under Graduate	Engineering & Technology	Information Science & Engineering

9. TOTAL NO. OF EMPLOYEES IN THE INSTITUTION. A. REGULAR EMPLOYEES (FACULTY & STAFF)

Items	2017-18		2016-17		2015-16	
	MIN	MAX	MIN	MAX	MIN	MAX
Faculty in Engg. (Male)	138	140	138	152	144	153
Faculty in Engg. (Female)	130	132	142	145	148	151
Faculty in Engg. in Maths, Science & Humanities (Male)	10	10	08	10	08	08
Faculty in Engg. in Maths, Science & Humanities (Female)	21	21	19	22	23	23
Non Teaching Staff (Male)	47	50	48	50	46	51
Non Teaching Staff (Female)	12	13	11	12	09	10

B. CONTRACTUAL EMPLOYEES (FACULTY & STAFF)

Items	2017-18		2016-17		2015-16	
	MIN	MAX	MIN	MAX	MIN	MAX
Faculty in Engg. (Male)	0	0	0	0	0	0
Faculty in Engg. (Female)	0	0	0	0	0	0
Faculty in Engg. in Maths, Science & Humanities (Male)	0	0	0	0	0	0
Faculty in Engg. in Maths, Science & Humanities (Female)	0	0	0	0	0	0
Non Teaching Staff (Male)	0	0	0	0	0	0
Non Teaching Staff (Female)	0	0	0	0	0	0

10. TOTAL NUMBER OF ENGINEERING STUDENTS :

Engineering & Technology- UG



Shift 1



Shift 2

Engineering & Technology- PG



Shift 1



Shift 2

Engineering & Technology-
Polytechnic

Shift 1



Shift 2

MBA



Shift 1



Shift 2

MCA



Shift 1



Shift 2

ENGINEERING AND TECHNOLOGY – UG SHIFT 1

Items	2017-18	2016-17	2015-16
Total No. of Boys	608	660	645
Total No. of Girls	222	211	254
Total	830	871	899

ENGINEERING AND TECHNOLOGY – UG SHIFT 2

Items	2017-18	2016-17	2015-16
Total No. of Boys	183	186	169
Total No. of Girls	55	53	71
Total	238	239	240

ENGINEERING AND TECHNOLOGY – PG SHIFT 1

Items	2017-18	2016-17	2015-16
Total No. of Boys	8	5	18
Total No. of Girls	1	2	5
Total	9	7	23

ENGINEERING AND TECHNOLOGY – PG SHIFT 2

Items	2017-18	2016-17	2015-16
Total No. of Boys	2	13	17
Total No. of Girls	10	5	39
Total	12	18	56

ENGINEERING AND TECHNOLOGY – MBA SHIFT 1

Items	2017-18	2016-17	2015-16
Total No. of Boys	38	41	43
Total No. of Girls	22	18	17
Total	60	59	60

11. VISION OF THE INSTITUTION

To achieve total quality in education and excellent knowledge management through specific, measurable, attainable, relevant time bound goals and continuous improvement methods.

12. MISSION OF THE INSTITUTION

To mould our students into a holistic personality accomplished in emotional, moral, intellectual, social and mental capabilities besides inculcating a capacity for critical and lateral thinking.

13. CONTACT INFORMATION OF THE HEAD OF THE INSTITUTION AND NBA COORDINATOR, IF DESIGNATED.

HEAD OF THE INSTITUTION	
NAME	Dr. Manjunatha
DESIGNATION	PRINCIPAL
MOBILE NO.	9901916000
E-MAIL ID	principal@newhorizonindia.edu
NBA COORDINATOR	
NAME	Dr. M.S. GANESHA PRASAD
DESIGNATION	DEAN , PROF. & HEAD – ME
MOBILE NO.	9886921136
E-MAIL ID	dean_stuaffair@newhorizonindia.edu

CRITERION-1	VISION, MISSION & PROGRAM EDUCATIONAL OBJECTIVES	60
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1.1 STATE THE VISION AND MISSION OF THE DEPARTMENT AND INSTITUTE (5):

DEPARTMENT VISION AND MISSION

The Department of Information Science and Engineering was established in the year 2001 with intake of 60 students, focusing on the Information Technology trends, and domain specific applications. The program facilitates the evolution of skills in students to help them attain a higher degree of knowledge, global competency and excellence, for the betterment of the society. The department progressed in its intake to 120 students in the year 2008-09. The graduates meet day-to-day technological advancements of the ever dynamic IT field through adept training on various subjects of curriculum of Information Science and Engineering and beyond. The Department offers B.E program through autonomous scheme since 2015-16. The Department has a total intake of 120 students with a very good team of highly qualified and experienced faculty members. Department of Information Science and Engineering at New Horizon College of Engineering got its research centre status in the year 2009, by Visvesvaraya Technological University (VTU), Belagavi.

The program at New Horizon College of Engineering is designed to meet industry standards and cope up with the emerging technology. There is a great emphasis on holistic learning to help the students to make significant contributions at all levels and to meet the expectations of stakeholders.

Career Scope: Information Science and Engineering is making an impact on all types of business and services. Career as engineer with Information Science background have plenty of options to work in IT companies, Financial Services Sector, Telecommunication Industry, e-commerce Services, Graphic Design etc. Life without computer technology has become unimaginable and thus the career in this branch has the highest scope.

Skills Involved: Students of this program acquire unique skills to design, develop, and implement solutions of highest quality and standards towards IT industry. The future of this program is filled with innovation, creative thinking, and limitless opportunities.

VISION

TO EVOLVE AS A CENTRE OF ACADEMIC EXCELLENCE AND ADVANCED RESEARCH IN INFORMATION SCIENCE AND ENGINEERING DISCIPLINE AND TO ENDEAVOUR THE COMPUTATIONAL COMPETENCE OF STUDENTS FOR THEIR DREAM CAREER ACHIEVEMENT AND ENHANCING THE MANAGERIAL AND TECHNICAL SKILLS.

MISSION

TO INCULCATE STUDENTS WITH PROFOUND UNDERSTANDING OF FUNDAMENTALS RELATED TO DISCIPLINE, ATTITUDES, SKILLS AND THEIR APPLICATION IN SOLVING REAL WORLD PROBLEMS, WITH AN INCLINATION TOWARDS SOCIETAL ISSUES AND RESEARCH.

INSTITUTE VISION AND MISSION**VISION**

TO ACHIEVE TOTAL QUALITY IN EDUCATION AND EXCELLENT KNOWLEDGE MANAGEMENT THROUGH SPECIFIC, MEASURABLE, ATTAINABLE RELEVANT, TIME-BOUND GOALS AND CONTINUOUS IMPROVEMENT METHODS.

Rationale:

The vision is set taking into consideration the present day technical needs of the society as well as forecasting the future requirements in various technological fields so as to become an element in the growth of the nation, since the prospect of any nation depends on science, technology and human values.

MISSION

TO MOULD OUR STUDENTS INTO A HOLISTIC PERSONALITY ACCOMPLISHED IN EMOTIONAL, MORAL, INTELLECTUAL, SOCIAL AND MENTAL CAPABILITIES, BESIDES INCULCATING A CAPACITY FOR CRITICAL AND LATERAL THINKING.

Rationale:

- To accomplish the vision of the institution, the mission should be comprehensive.
- Providing good infrastructure, state of the art laboratories, and employing qualified, experienced and eminent faculty to improve the quality of technical education.
- Personality development programs encouraging students to do research, building interaction with outside world and providing conducive environment to learn are identified as source of the basic needs to meet the present day technical challenges.
- Introducing professional ethics and morale in the curriculum to inculcate social commitment among students.

New Horizon College of Engineering was established in the year 2001 as a self-financing minority institute founded and managed by “New Horizon Educational and Cultural Trust” which has more than 45 years of footing in the field of quality education. The trust has eight high performing Institutions covering the entire gamut of educational needs of the society from kindergarten to Doctoral Program in various disciplines of learning.

New Horizon College of Engineering is now an Autonomous status from academic year 2015-16 affiliated to Visvesvaraya Technological University (VTU) Belagavi, approved by All India Council for Technical Education (AICTE) and University Grants Commission (UGC). It is accredited by **NAAC** with 'A' grade for five years from 29th March 2016 to 28th March 2021. The departments of Computer Science and Engineering, Electronics and Communication Engineering, Mechanical Engineering, Civil Engineering and Biotechnology have been accredited by the **National Board of Accreditation (NBA) for three years from June 2017 to 30th June 2020**. It is an ISO 9001:2008 certified Institution. New Horizon College of Engineering started with 4 UG programs with an approved intake of 60 each in Electronics and Communication Engineering, Information Science and Engineering, Computer Science & Engineering and Electrical and Electronics Engineering. Over the years the Institution has grown leaps and bounds. Within a short span of time the institute acquired UG, PG and Research programs.

New Horizon College of Engineering was honoured with BEST INTERNATIONAL EDUCATION COLLABORATION OF THE YEAR during ASSOCHAM Higher Education Summit, on February 17th, 2018. The award was presented by Dr. Satya Pal Singh, Honourable Minister of State for Human Resource Development, Govt of India, Higher Education.



Dr. MANJUNATHA, PRINCIPAL OF NHCE RECEIVING THE AWARD FOR THE “BEST INTERNATIONAL EDUCATION COLLABORATION OF THE YEAR ON 17th FEB 2018”.

New Horizon College of Engineering has been awarded as the “BEST ENGINEERING COLLEGE IN INDIA - SOUTH” for the 3rd consecutive time. The award was presented by Dr. Satya Pal Singh, Honorable Minister of State for Human Resource Development Govt of India, Higher Education, during ASSOCHAM Higher Education Summit, on February 17th, 2018.



Dr. GANESH PRASAD, DEAN STUDENT AFFAIRS OF NHCE RECEIVING THE AWARD FOR THE BEST ENGINEERING COLLEGE IN SOUTH INDIA ON 17th FEB 2018

New Horizon College of Engineering has been ranked No. 2 in Karnataka, No. 5 in South India and No. 15 in India among the best private T- schools in June 2017. Source: Dataquest T-school June 2017.

New Horizon College of Engineering has been awarded for filing highest number of patents in Dec 2017 by Indian Engineering Congress.



Dr. MANJUNATHA, PRINCIPAL OF NHCE RECEIVING "THE AWARD FOR FILING HIGHEST NUMBER OF PATENT" ON 23RD DEC 2017.

New Horizon College of Engineering, Bangalore is awarded the "Best Engineering College in India - South" by Shri Prakash Javadekar Hon'ble Union Minister of HRD, Govt. of India during the "ASSOCHAM National Education Excellence Award-2017" on 23rd February 2017.



Dr. MANJUNATHA, PRINCIPAL OF NHCE RECEIVING THE AWARD FOR THE BEST ENGINEERING COLLEGE IN SOUTH INDIA-2017.

New Horizon College of Engineering, Bangalore is awarded the "Best Technical Institute of Employability in India- South" by Shri Prakash Javadekar Hon'ble Union Minister of HRD, Govt. of India during the "ASSOCHAM National Education Excellence Award-2017" on 23rd February 2017.



Dr. LAKSHMINARAYANA, PLACEMENT OFFICER, NHCE RECEIVING THE AWARD FOR BEST TECHNICAL INSTITUTE FOR EMPLOYABILITY IN SOUTH INDIA-2017.

Dr. Mohan Manghnani, Chairman of New Horizon Educational Institution, was awarded and declared '**THE DOYEN –GUARDIAN OF KNOWLEDGE**' for his exemplary contribution and excellence in the field of education. He was recognised for his relentless strife to make education more inclusive and for being a decisive force in the changing landscape of education.



Dr. MOHAN MANGHNANI RECEIVING 'THE DOYEN – GUARDIAN OF KNOWLEDGE' AWARD ORGANIZED BY THE HINDU GROUP ON 27TH MARCH 2017.

New Horizon College of Engineering has been awarded “Outstanding Technical Education Institute in Karnataka-2016”. The award was presented during "National Karnataka Education Summit & Awards 2016" on 14th March, 2016.



DR. MOHAN MANGHNANI RECEIVING THE AWARD FOR EXCELLENT CONTRIBUTION IN EDUCATION- 2016 FROM R V DESHPANDE MINISTER OF INDUSTRIES AND TOURISM.

New Horizon College of Engineering has been awarded “BEST ENGINEERING COLLEGE IN INDIA-SOUTH 2016” during ASSOCHAM National Education Excellence Award-2016.



Dr. MOHAN MANGHNANI, CHAIRMAN & Dr. MANJUNATHA, PRINCIPAL NHCE, RECEIVING THE AWARD FOR THE “BEST ENGINEERING COLLEGE IN SOUTH-INDIA 2016 FROM Dr. RAM SHANKAR KATHERIA, MINISTER OF STATE FOR HRD ON 17TH FEB 2016 IN NEW DELHI.

“VEER VANDANA” a special programme was held on 10th September 2016 to felicitate the brave soldiers of our country and their families, total amount of Rs. 67.5 lakh was awarded to 27 ‘VEER NARIS’



WIFE OF MARTYRED LT COL AJIT BHANDARKAR WAS AWARDED RS. 2.5 LAKH BY DR. MOHAN MANGHNANI, CHAIRMAN OF NEW HORIZON EDUCATIONAL INSTITUTION.



DR. MOHAN MANGHNANI, CHAIRMAN OF NEW HORIZON EDUCATIONAL INSTITUTION AWARDED Rs. 5 LAKH TO SUBEDAR SANJAY KUMAR, INDIAN ARMY, RECIPIENT OF THE PARAM VIR CHAKRA.

Dr. Mohan Manghnani, Chairman of New Horizon Educational Institution has donated Rs.5 Crore to the Prime Minister Fund towards Swachh Bharat Abhiyan to improve cleanliness levels in rural and urban areas, including schools on April 4th, 2015.



DR. MOHAN MANGHNANI, CHAIRMAN OF NEW HORIZON EDUCATIONAL INSTITUTION HAS HANDED OVER THE CHEQUE OF Rs 5 CRORE TOWARDS SWACHH BHARAT ABHIYAN.

New Horizon Educational and cultural Trust has received the prestigious Karnataka state award from the then Hon'ble chief Minister of Karnataka Shri. Jagadish Shettar and minister of Kannada and Culture Shri.Govind Karjol on the auspicious occasion of "Kannada Rajyotsava" held on the 1st November 2012.



DR. MOHAN MANGHNANI RECEIVING THE RAJYOTSAVA STATE AWARD-2012 FROM KARNATAKA CHIEF MINISTER JAGADISH SHETTER

1.2 STATE THE PROGRAM EDUCATIONAL OBJECTIVES (PEOs) AND PROGRAM SPECIFIC OUTCOMES (5)

PROGRAM EDUCATIONAL OBJECTIVES

PEO1: To excel in their professional career with expertise in providing solutions to Information Technology problems.

PEO2: To pursue higher studies with profound knowledge enriched with academia and industrial skill sets.

PEO3: To exhibit adaptive and agile skills in the core area of Information Science & Engineering to meet the technical and managerial challenges.

PEO4: To demonstrate interpersonal skills, professional ethics to work in a team to make a positive impact on society.

PROGRAM SPECIFIC OUTCOMES

PSO1: The ability to understand, analyze and develop computer programs in the areas related to algorithms, system software, multimedia, web design, big data analytics and networking for efficient design of computer based systems of varying complexity.

PSO2: The ability to apply standard practices and strategies in software project development using innovative ideas and open ended programming environment with skills in teams and professional ethics to deliver a quality product for business success.

1.3 INDICATE WHERE THE VISION, MISSION AND PEOs ARE PUBLISHED AND DISSEMINATED AMONG STAKEHOLDERS (10)

THE VISION MISSION AND PEOs ARE PUBLISHED AND DISSEMINATED AT:

- ❖ College website, <http://www.newhorizonindia.edu/nhengineering>
- ❖ Department website, <http://newhorizonindia.edu/nhengineering/information-science-engineering/>
- ❖ Department notice boards
- ❖ HOD room

- ❖ College brochure
- ❖ Staff Rooms
- ❖ Class Rooms
- ❖ Laboratories
- ❖ Corridors
- ❖ Internal Assessment Book

The vision mission and PEOs are disseminated to the stakeholder of the programme i.e. management, faculty, students, staff, alumni, parents and employers through continuous interaction as shown in Figure 1.1.

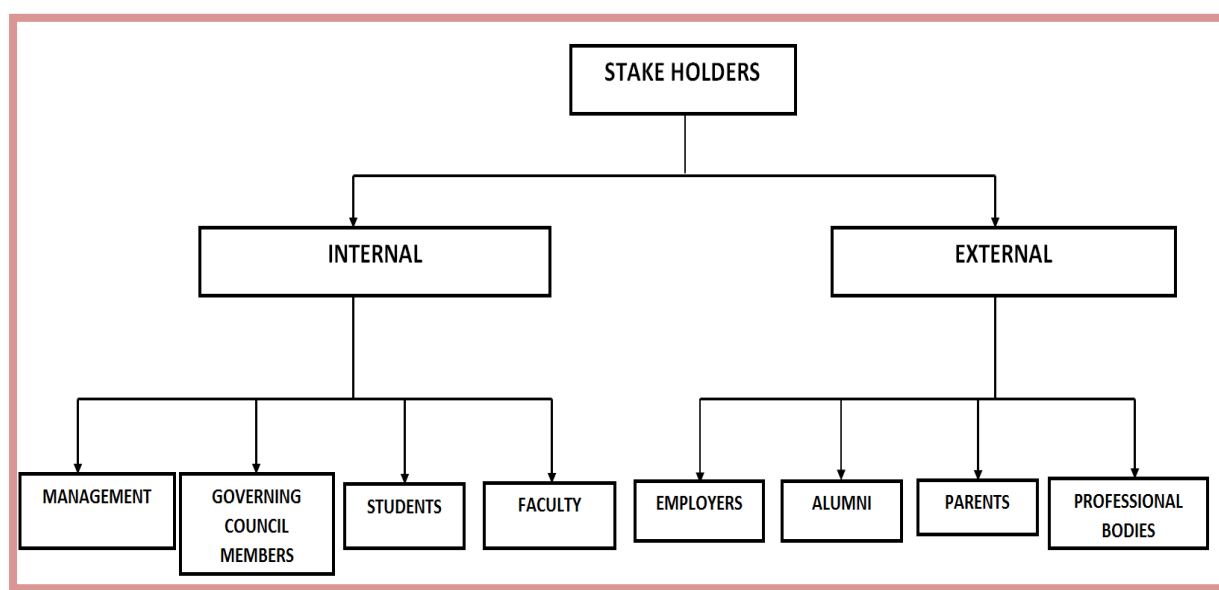


Figure 1.3.1 : Flowchart showing type of stakeholders.

Students

- Most prominent role in the program.
- Student's feedback is considered to introduce innovative teaching and learning methodologies. Students input will help in program to introduce the elective courses to meet current trends.

Faculty

- Involve a vital role in working of the program.
- Faculty involves in various committees to check the consistency of the program.
- Faculty provides inputs for designing the program, PEOs/POs establishment, Course Objectives and assessment.

Alumni

- Focus group because they are a measure of the long-term success of our program.
- Alumni feedback helps in curriculum design to meet recent trends in engineering.
- Recollect their existence during their program study and advise the department with necessary inputs in point of student career.

Employer

- Represents the major end users of our graduates.
- Provides higher focus to the program on future data to create awareness with current industry
- Provides an input which bridges the gap between academics and industry.

Parents

- Expects their wards in good professional career and higher education.

Professional bodies

- Help students to interact with industries.
- Help in conducting seminars/workshops.
- Help the graduates to take up research work.

1.4. STATE THE PROCESS FOR DEFINING THE VISION AND MISSION OF THE DEPARTMENT AND PEOs OF THE PROGRAMME (25)

The department established its vision and mission through consultative process involving the stake holders of the institute / department such as Management, GC members, faculty, students, staff, parents, alumni and employers, the future scope of the department and the societal requirements as shown in Figure 1.2. In establishing the vision and mission of the department, the following steps were followed:

Step 1) Vision and Mission of the institute are taken as basis.

Step 2) Views are taken from the stake holders

Step 3) the accepted views are analysed and reviewed to check the consistency with the vision and mission of the institute.

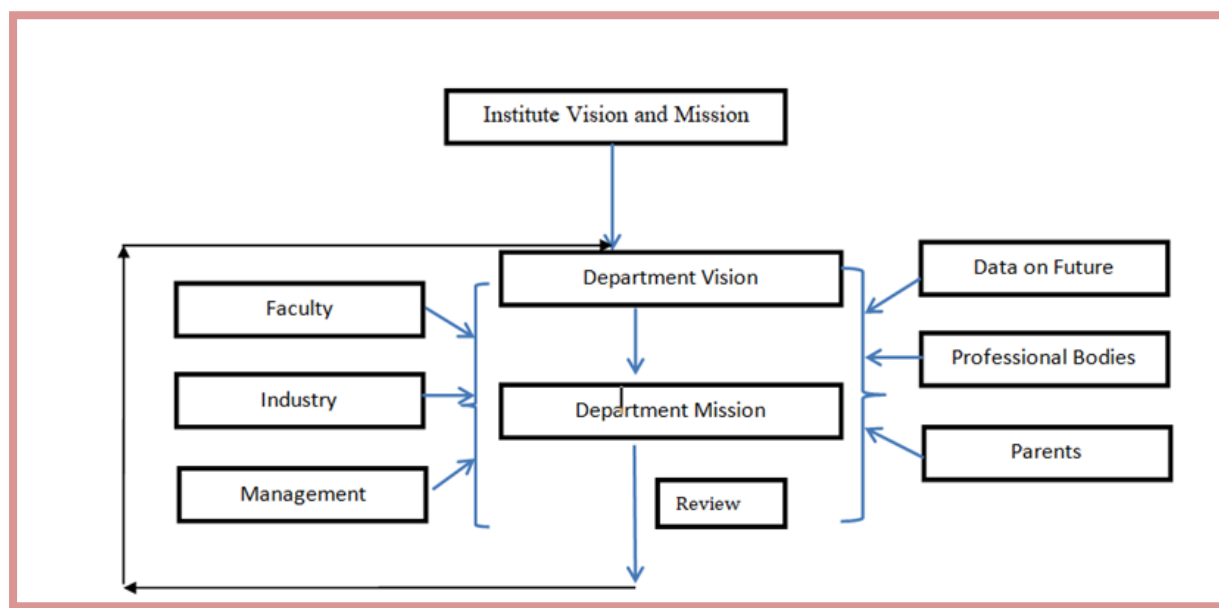


Figure 1.4.1: Process for defining Vision and Mission of the department

Process for defining Program Educational Objectives of the program:

The Program Educational Objectives are established through a consultation process involving the core constituents such as students, alumni, industry, faculty and employers as shown in Figure 1.3. The PEOs are established through the following process steps:

Step 1) Vision and Mission of the department are taken as basis to interact with various stakeholders and graduate attributes defined by NBA are also kept in view.

Step 2) Program coordinator consults the key constituents and collects their views and submits the views to Program Assessment Committee (PAC).

Step 3) PAC summarizes the collected views and expresses its opinion on the views and forward the same to Departmental Advisory Board (DAB)

Step 4) DAB deliberates on the views expressed by the PAC and formulates the accepted views based on which PEOs are to be established.

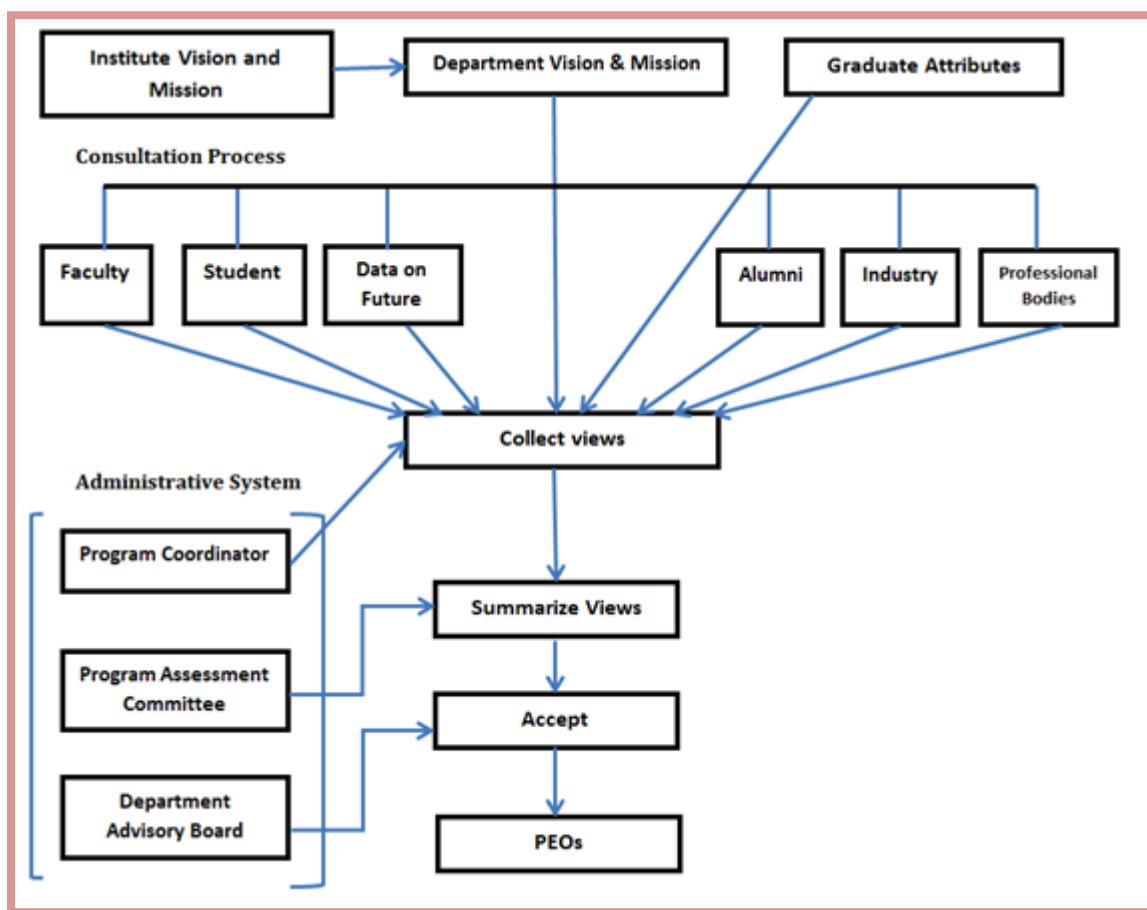


Figure.1.4.2: Illustrates the process for establishing the PEOs

Inputs considered for establishing the PEOs:

Faculty interaction:

The members of the teaching faculty as course coordinators play an important role in establishing PEOs. They are responsible for generating, altering and analyzing all the activities related to the achievement of the course outcomes.

Alumni feedback:

Alumni are those who have intimate knowledge of the programme and as such important in assessment of PEOs. Alumni feedback is obtained through alumni survey. Alumni meet is conducted once in a year.

Employer feedback:

Corporate insight/performance of the graduates with other employees of the organization is through employer feedback.

Program Assessment Committee (PAC):

It consists of program coordinator, module coordinators and course coordinators.

Program Assessment Committee provides guidelines for

- Program academic and administrations unit.
- Student outcome assessment.

Department Advisory Board:

It consists of Head of the Department, program coordinator, industry representatives, representatives from professional bodies and academia. The committee looks after effectiveness of the program through evaluation and proposing necessary changes.

1.5 ESTABLISH CONSISTENCY OF PEOs WITH MISSION OF THE DEPARTMENT (15)

Program Educational Objectives:

PEO1: To excel in their professional career with expertise in providing solutions to Information Technology problems.

PEO2: To pursue higher studies with profound knowledge enriched with academia and industrial skill sets.

PEO3: To exhibit adaptive and agile skills in the core area of Information Science & Engineering to meet the technical and managerial challenges.

PEO4: To demonstrate interpersonal skills, professional ethics to work in a team to make a positive impact on society.

MISSION statements for mapping:

M1: To prepare the students with academic and industry exposure by empowering and equipping them with necessary domain knowledge.

M2: To prepare the students for global career in information technology with relevant technical and soft skills.

M3: To encourage students to participate in co-curricular and extracurricular activities leading to the enhancement of their social and professional skills.

Table 1.1: Consistency of PEOs with Mission of the department

PEOs	MISSION OF THE DEPARTMENT		
	M1	M2	M3
PEO1	3	3	2
PEO2	2	2	2
PEO3	2	2	3
PEO4	2	2	3

1: Slight (Low)

2: Moderate (Medium)

3: Substantial (High)

PEO1 which is concerned with excellence in career maps **substantially** with **M1 and M2**. This mission statement focuses on the learning concepts of Information Science and Engineering with industry exposure which is required by the information technology industry for the successful career growth of graduates. Also **PEO1 moderately** maps with **M3**. The Mission statement **M3** deals with co-curricular and extracurricular activities which moulds their overall personality development to enhance their professional career.

PEO2 which focuses on higher studies **moderately** maps with **M1**. The Mission statement **M1** deals with enhancing their domain knowledge with academic and industry exposure which helps them to choose their specialisation in higher studies and excel. In addition **PEO2** maps **moderately** with **M2 and M3** as these Mission statements deal with the industry relevant technical and soft skills to have a good professional career in the field of information technology.

PEO3 which focuses on adapting quickly to new environments and technologies maps **moderately with M1 and M2**. The mission statements **M1 and M2** deal with the learning process of curriculum with necessary domain knowledge and relevant technical skills. Also **PEO3 substantially** maps with **M3** which focuses on overall personality development of students with extra and co-curricular activities which helps them to adapt with ever challenging Information Technology industry for a successful career and to work in team with mutual respect and dignity.

PEO4 which is concerned with interpersonal skills and professional ethics **moderately maps with M1**. This mission statement focuses on strong foundation of academics and relevant technical skills for their career excellence. The **PEO4 moderately maps** with mission statement **M2** as this statement deals with technical and soft skill required to work in a team in their career. Also **PEO4 substantially** maps with **M3** as this statement relates with extra and co-curricular activities which will help the overall personality growth of the students to be a great team player while working in teams in IT industry.

CRITERION-2**PROGRAM CURRICULUM AND
TEACHING- LEARNING PROCESSES****120****2.1. Program Curriculum****(20)**

2.1.1. State the Process Used to Identify Extent of Compliance of the University Curriculum for Attaining the Program Outcomes and Program Specific Outcomes as Mentioned in Annexure I. Also Mention the Identified Curricular Gaps, if any (10)

(State the process details; also mention identified curricular gaps).

Note: In case all POs are being demonstrably met through University Curriculum then 2.1.2 will not be applicable and the weightage of 2.1.1 will be 20.

Since New Horizon College of Engineering (affiliated to Visvesvaraya Technological University (VTU), Belgavi, Karnataka) is Autonomous institute from July 2015, the curriculum followed is both that of VTU and Autonomous. The program curriculum is in compliance with AICTE norms.

Table 2.1.1a: Comparison of curriculum of AICTE & VTU

SL.NO	Types of Courses	AICTE	VTU
1	Humanities & Social Science	05	03
2	Basic Science	19	08
3	Engineering Science	18	07
4	Core Subjects	38	29
5	Elective Subjects	16	05
6	Project Work	-	01
7	Mandatory Courses	06	03

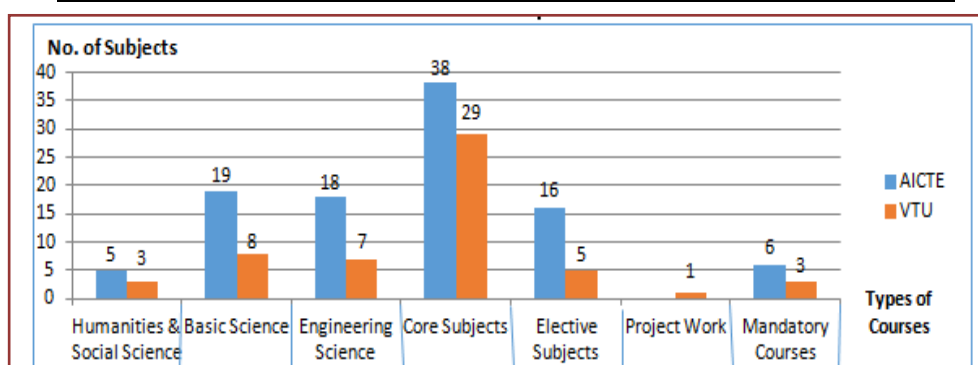


Figure 2.1.1a: Comparison of curriculum of AICTE & VTU

Table 2.1.1b: Structure of the curriculum

Course Code	Course Title	Teaching Hours / week		Examination		
		Theory	Practical	IA Marks	Final Exam	Total
SEMESTER 1&2						
10MAT11	Engineering Mathematics – I	4	-	25	100	125
10PHY12/ 10PHY22	Engineering Physics	4	-	25	100	125
10CHE12/ 10CHE22	Engineering Chemistry	4	-	25	100	125
10CIV13/ 10CIV23	Elements of Civil Engineering & Engineering Mechanics	4	-	25	100	125
10CCP13/ 10CCP23	Computer Concepts & C Programming	4	-	25	100	125
10EME14/ 10EME24	Elements of Mechanical Engineering	4	-	25	100	125
10CED14 /10CED24	Computer Aided Engineering Drawing	4	-	25	100	125
10ELE15 / 10ELE25	Basic Electrical Engineering	4	-	25	100	125
10ELN15 / 10ELN25	Basic Electronics	4	-	25	100	125
10WSL16 / 10WSL26	Workshop Practice	-	3	25	50	75
10CPL16 / 10CPL26	Computer Programming Laboratory	-	3	25	50	75
10PHYL16 /10PHYL26	Laboratory Experiments in Engineering Physics	-	3	25	50	75
10CHEL16 / 10CHEL26	Engineering Chemistry Laboratory	-	3	25	50	75
10MAT21	Engineering Mathematics – II	4	-	25	100	125
SEMESTER 3						
10MAT31	Engineering Mathematics – III	4	-	25	100	125
10CS32	Electronic Circuits	4	-	25	100	125
10CS33	Logic Design	4	-	25	100	125
10CS34	Discrete Mathematical Structures	4	-	25	100	125
10CS35	Data Structures with C	4	-	25	100	125
10CS36	Object Oriented Programming with C++	4	-	25	100	125
10CSL37	Data Structures with C/C++ Lab	-	3	25	50	75
10CSL38	Electronics Circuit & Logic Design Lab	-	3	25	50	75

SEMESTER 4						
10MAT41	Engineering Mathematics – IV	4	-	25	100	125
10CS42	Graph Theory & Combinatorics.	4	-	25	100	125
10CS43	Design and Analysis of Algorithms	4	-	25	100	125
10CS44	Unix and Shell Programming	4	-	25	100	125
10CS45	Microprocessors	4	-	25	100	125
10CS46	Computer Organization	4	-	25	100	125
10CSL47	Design and Analysis of Algorithms Lab	-	3	25	50	75
10CSL48	Microprocessors Lab	-	3	25	50	75
SEMESTER 5						
10IS51	Software Engineering	4	-	25	100	125
10CS52	Systems Software	4	-	25	100	125
10CS53	Operating Systems	4	-	25	100	125
10CS54	Database Management Systems	4	-	25	100	125
10CS55	Computer Networks – I	4	-	25	100	125
10CS56	Formal Languages and Automata Theory	4	-	25	100	125
10CSL57	Database Applications Lab	-	3	25	50	75
10CSL58	Systems Software & OS Lab	-	3	25	50	75
SEMESTER 6						
10AL61	Management & Entrepreneurship	4	-	25	100	125
10CS62	UNIX System Programming	4	-	25	100	125
10IS63	File Structures	4	-	25	100	125
10CS64	Computer Networks – II	4	-	25	100	125
10IS65	Software Testing	4	-	25	100	125
10IS661	Operations Research	4	-	25	100	125
10IS662	Compiler Design	4	-	25	100	125
10IS663	Data Compression	4	-	25	100	125
10IS664	Pattern Recognition	4	-	25	100	125
10IS665	Computer Graphics & Visualization	4	-	25	100	125
10IS666	Programming Languages	4	-	25	100	125
10ISL67	File Structures Lab	-	3	25	50	75
10ISL68	Software Testing Lab	-	3	25	50	75

SEMESTER 7						
10CS71	Object Oriented Modeling & Design	4	-	25	100	125
10IS72	Information Systems	4	-	25	100	125
10CS73	Programming the WEB	4	-	25	100	125
10IS74	Data Warehousing and Data Mining	4	-	25	100	125
10IS751	Advanced DBMS	4	-	25	100	125
10IS752	Embedded Computing Systems	4	-	25	100	125
10IS753	JAVA & J2EE	4	-	25	100	125
10IS754	Multimedia Computing	4	-	25	100	125
10IS755	Advanced Software Engineering	4	-	25	100	125
10IS756	Neural Networks	4	-	25	100	125
10IS761	C# Programming and .Net	4	-	25	100	125
10IS762	Digital Image Processing	4	-	25	100	125
10IS763	Game Theory	4	-	25	100	125
10IS764	Artificial Intelligence	4	-	25	100	125
10IS765	Storage Area Networks	4	-	25	100	125
10IS766	Fuzzy Logic	4	-	25	100	125
10CSL77	Networks Lab	-	3	25	50	75
10CSL78	WEB Programming Lab	-	3	25	50	75
SEMESTER 8						
10IS81	Software Architectures	4	-	25	100	125
10CS82	System Modeling and Simulation	4	-	25	100	125
10IS831	Wireless Networks and Mobile Computing	4	-	25	100	125
10IS832	Web 2.0 and Rich Internet Applications	4	-	25	100	125
10IS833	User Interface Design	4	-	25	100	125
10IS834	Network Management Systems	4	-	25	100	125
10IS835	Information and Network Security	4	-	25	100	125
10IS836	Microcontroller - Based Systems	4	-	25	100	125
10IS841	Ad - hoc Networks	4	-	25	100	125
10IS842	Information Retrieval	4	-	25	100	125
10IS843	Supply Chain Management	4	-	25	100	125
10IS844	Services Oriented Architecture	4	-	25	100	125
10IS845	Clouds, Grids and Clusters	4	-	25	100	125
10IS846	Decision Support Systems	4	-	25	100	125
10IS85	Project Work	-	6	100	100	200
10IS86	Seminar	-	-	50	-	50

Semester	No. of Courses (Theory/Lab)	Teaching Hours / week		Examination		
		Theory	Practical	IA Marks	Final Exam	Total
1&2	10 / 4	40	12	350	1200	1550
3	6 / 2	24	6	200	700	900
4	6 / 2	24	6	200	700	900
5	6 / 2	24	6	200	700	900
6	6 / 2	24	6	200	700	900
7	6 / 2	24	6	200	700	900
8	4 / Project & Seminar	16	24	250	500	750

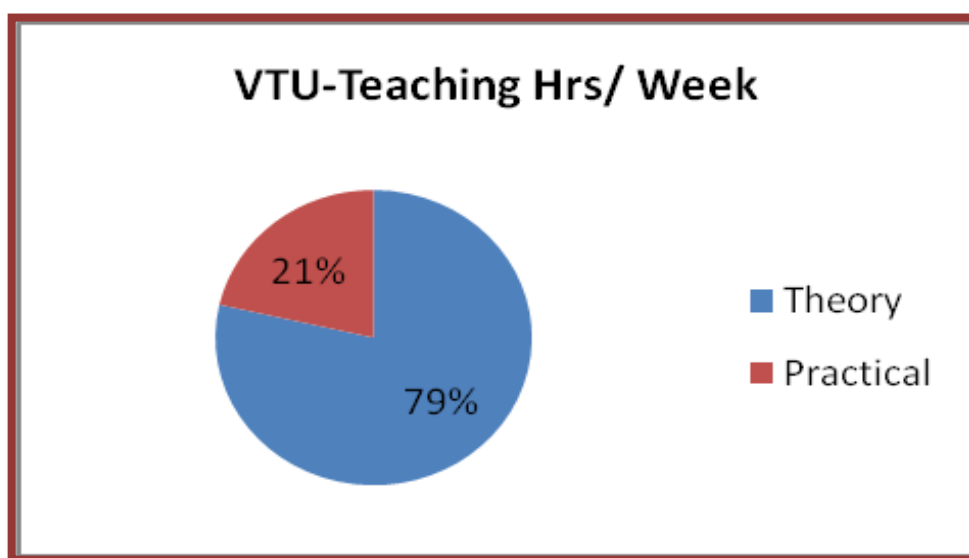


Figure 2.1.1b: VTU- Teaching Hours/Week

The following processes are used to identify extent of compliance of the curriculum for attaining the POs and PSOs:

- 1) **Course End Survey:** A questionnaire about the course is prepared and is distributed to students to get their feedback at end of the semester.



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COURSE END SURVEY

Programme: ISE Semester: 7th Academic Year: 2016-17 (ODD)

(Scale: 5-Excellent 4-Very Good 3-Good 2-Average 1-Poor)

Sl. No	Parameters	Course Code 10CS71	Course Code 10TS72	Course Code 10CS73	Course Code 10TS74	Course Code 10TS75	Course Code 10TS76
1	The course objectives were clear	5	5	5	5	5	5
2	The course and subject matter were well organized	4	4	5	5	5	5
3	The teacher demonstrated great knowledge on the course and concepts were communicated effectively	5	5	5	5	5	5
4	The instructional approach(es) used was (were) appropriate to the course.	4	4	5	5	5	4
5	This course incorporated a good amount of research and technology	4	3	4	5	5	5
6	I was provided with adequate orientation and guidance for proceeding with laboratory activities	5	4	5	5	5	4
7	Would you recommend this course to other students?	5	5	5	5	5	5
8	What is your overall rating on the subject	5	4	5	5	5	5
9	What was the most effective part of this course? Please provide the written comments	UML Diagrams	E-commerce Ideas	Generation of WebPages	Data storage & Retrieval	Real time Application development	Storage devices
10	What are your suggestions that would improve this course? Please provide written comments	Lab Sessions needs to be included	More case studies can be included	JSON Concepts can be included	More data science algorithms can be included	More lab sessions can be included	Practical demo sessions can be introduced

Figure 2.1.1c: Course End Survey

- 2) **Graduate Survey:** A questionnaire about program is prepared and distributed to students to get their feedback at the end of last semester. Further, the results are analyzed.



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DEPARTMENT OF Information Science Engineering
GRADUATE SURVEY FORM

Name : Shivangi Uniyal USN : INH11TS097
 Year / SEM: 2015 VIIIth Programme : BE/ISE

Sl.No	Program Outcomes(POS)	Excellent (5)	Very Good (4)	Good (3)	Satisfactory (2)	Poor (1)
1	Engineering Knowledge Were you able to apply the knowledge of Mathematics, Science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.	✓				
2	Problem analysis : Were you comfortable in identifying , formulating reviewing, research literature and analysing complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.		✓			
3	Design / Development of Solutions: Were you able to design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety and the cultural, societal,		✓			
4	Conduct investigations of complex problems Was it easy to use research - based knowledge and research methods, including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.		✓			
5	Modern tool usage Were you able to create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations			-	✓	

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Figure 2.1.1d: Graduate Survey

Sl.No	Program Outcomes(POS)	Excellent (5)	Very Good (4)	Good (3)	Satisfactory (2)	Poor (1)
6	The engineer and society Did you apply reasoning informed by the contextual knowledge to assess societal, health, safety legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice				✓	
7	Environment and sustainability Did you understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.		✓			
8	Ethics were you able to apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.				✓	
9	Individual and team work Did you function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings		✓			
10	Communication Did you communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.	✓				
11	Project management and finance Did you demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multi disciplinary environments.	✓				
12	Life - long learning How far you recognize the need for , and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change	✓				

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Figure 2.1.1d: Graduate Survey <contd.>

- 3) **Exit Survey:** A questionnaire is prepared and given to students at end of the program to get their feedback.



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 DEPARTMENT OF ISE

STUDENT EXIT SURVEY FORM

Name : Jyothi Jennifer Dias USN: INH13ISO42
 Name of the Degree completed: BE Year of Graduation: 2017

You are here by informed to give your healthy comment for the following

Sl.No	Program Outcomes(POS)	Excellent (5)	Very Good (4)	Good (3)	Satisfactory (2)	Poor (1)
1	How do you rate the overall personality development programme during these 4 years of your stay			✓		
2	Infrastructural facilities such as Library, Laboratories, workshops, canteen, Hostel and other campus facilities.		✓			
3	How was encouragement for students participation in various co-curricular activities (seminars, conferences, guest lecturers etc.,)	✓				
4	How is quality of academic resources – say teaching faculty, course material etc.,		✓			
5	How was encouragement towards extracurricular activities	✓				
6	How about mentoring facility		✓			
7	Do you recommend NHCE as a college of your choice for admission to your siblings, friends , relatives etc.,	YES	✓	NO		
8	Any other suggestions for improving the college as a college of excellence or a model college					

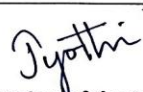

 Signature of the Student

Figure 2.1.1e: Student Exit Survey

4) Feedback from Parents: Feedback is taken from parents


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DEPARTMENT OF Information Science & Engineering

PARENTS FEED BACK FORM

Name of the Parent : Mr. Suresh Phone No: 9449986471
 Postal Address : No 15/3 10th Cross 13th main BTM 2nd Stage
Bangalore - 76
 Name : SUSHMA D.S USN : 1NH10JS113
 Name of the Degree completed: BE (ISE) Year of Graduation : 2016

You are hereby informed to give your healthy comment for the following

Sl.No	Parameters	Excellent (5)	Very Good (4)	Good (3)	Satisfactory (2)	Poor (1)
1	How do you rate the overall personality development of your son/daughter during their 4 years of stay		✓			
2	How do you feel about infrastructural facilities such as library, laboratories workshops, canteen, Hostel and other campus facilities		✓			
3	Did your son / daughter got encouragement for participation in various co-curricular activities (say seminar, conference, guest lectures etc.)	✓				
4	How do you rate the quality of academic resource (say teaching faculty, course material etc.)	✓				
5	Your reaction about placement activities conducted.		✓			
6	Encouragement towards extra curricular activities (sports etc.)		✓			
7	How is mentoring facility in the campus		✓			
8	Do you recommend NHCE as a college of your choice for admission to your siblings, friends, relatives etc.?	yes				
9	Any other suggestions for improving the college as a college of excellence or a model college	Make students to work on projects so that it is helpful for their career in industry				

Signature of the Parent 

Figure 2.1.1f: Parents Feedback

- 5) **Feedback from recruiters:** Feedback is taken from employers based on various graduate attributes to assess the performance of the graduates. The results are analyzed to see whether the program outcomes are attained or not.



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 DEPARTMENT OF Information Science

SURVEY QUESTIONNAIRE TO EMPLOYER

Sir,

Our Institute is falling in line with outcome based education in continuity with the international practices (as per Washington Accord). The assessment of the outcome has to be through a survey (such as Graduate survey, Alumni survey, parent feedback, employer survey etc.). The following questions need your valued consideration. Please find some time and send in your answers to the following questions. This report will be kept confidential.

Yours Truly,

PRINCIPAL

Company Name : <u>Amazon Web Services</u>		
Mailing Address : <u>Tenney metro station, Brigade south Parade, Bangalore.</u>		
City <u>Bangalore</u>	State <u>karnataka</u>	Pin Code <u>560003</u>
Employment Details	Year <u>2017 -</u>	NAME: <u>Supriya P</u> Email : <u>supriya.p@amazon.com</u>

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Figure2.1.1g: Recruiters Survey

Sl. #	Questions	Graduate Attributes	Program Outcomes	Excellent	Very Good	Good	Satisfactory	Poor
				(5)	(4)	(3)	(2)	(1)
1	Your views on strengths of our graduates?	i) Engineering Knowledge ii) Ethics iii) Individual & Team Work iv) Communication v) Project Management & Finance vi) Life Long Learning	P01 P08 P09 P010 P011 P012	✓				
2	How did you find our student in applying the knowledge of maths, science in the solution of complying engineering problems?	i) Engineering Knowledge ii) Design & Development of solution iii) Conduct Investigations of complex problems iv) Modern tool usage v) The engineer & Society	P01 P03 P04 P05 P06		✓			
3	How you found our student with respect to technical skills?	i) Problem Analysis ii) Design & Development of solution iii) conduct Investigations of complex problems	P02 P03 P04			✓		
4	How you rate our student with respect to their ethical and moral values?	i) Ethics	P08	✓				
5	How you rate our students with respect to work?	i) Ethics ii) Individual & Team Work	P08 P09		✓			
6	How you find our curriculum with respect to industry?	i) Life Long Learning	P012		✓			
7	Were you happy with the support you received from the college during placement drive?	NA	NA	✓				
8	How you rate our student with respect to communication skills?	i) Communication	P010		✓			
9	How you rate our student with respect to being open to new ideas and learning new technologies	i) Lifelong learning	P012	✓				
10	How do you rate our student with respect overall performance in	Adheres to all 12 Graduate Attributes	P01 to P012		✓			

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Figure 2.1.1g: Recruiters Survey<contd.>

- 6) **Alumni Survey:** A questionnaire is prepared and is given to the alumni. It is collected once in every year to check the relevance and attainment of POs. The results are analyzed to see whether the program outcomes are attained or not.



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DEPARTMENT OF ISe

ALUMNI FEED BACK FORM

We shall be thankful to and appreciate you, if you can spare some of your valuable time to fill up this feedback form and give us your valuable suggestion for further improvement of the Institution programme. Your valuable input will be of great use to improve the quality of our academic program and enhance the credibility of the Institute.

Yours Truly,

PRINCIPAL

Name of the Alumni : <u>VIREN CHHABLA</u>				
Degree	☒ BE	☐ M.Tech	☐ MBA	☐ MCA
Programme	<u>AUTO / BT / CIVIL / CSE / EC / EEE / IS / ME</u>			
Year of Graduation	<u>2014</u>			
Name of the organization where you are working	<u>TATA CONSULTANCY SERVICES</u>			
Designation	<u>SYSTEM ENGINEER</u>			

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Figure 2.1.1h: Alumni Survey

Please give your overall assessment of the Institute academics. Please rate us on

1. Very Good (VG)
2. Good (G)
3. Fair (F)
4. Satisfactory (S)
5. Unsatisfactory (UN)
6. Not applicable (NA)

Sl. #	Details	Graduate Attributes	Program Outcome	Assessment					
				VG	G	F	S	UN	NA
1	Environment	NA	NA	✓					
2	Infrastructure	Modern tool Usage	P05	✓					
3	Lab facilities	Modern tool Usage	P05	✓					
4	Faculty	i) Engineering Knowledge ii) Ethics iii) Communication	P01, P08, P010	✓					
5	Project Guidance	i) Engineering Knowledge ii) Problem Analysis iii) Design / Development of Solutions iv) Modern Tool usage v) Individual & Team Work vi) Communication	P01, P02, P03, P05, P09, P010	✓					
6	Quality of Support Material	NA	NA	✓					
7	Training and placement	i) Individual & Team Work ii) Communication	P09, P010	✓					
8	Library facilities	NA	P05, P012	✓					
9	Canteen Facilities	NA	NA		✓				
10	Hostel Facilities	NA	P09						✓
11	Overall rating of the college	NA	NA	✓					
12	Alumni Association / Networking of old friends	NA	NA		✓				

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Figure 2.1.1h: Alumni Survey<contd.>

Your suggestions

1. Relevance of curriculum in your job.

CORE CONCEPTS OF COMPUTER NETWORKS HELPED
ME IN UNDERSTANDING CURRENT IT TECHNOLOGIES

2. Need any change in curriculum and syllabi.

MORE INDUSTRY ORIENTED SUBJECTS CAN BE INCLUDED

3. Improvement in Teaching Learning process .

USAGE OF ICT TECHNOLOGY IN TEACHING

4. Have you learned the basic concepts through your projects .

YES, LEARNT BASIC LOGICAL AND ANALYTICAL SKILLS
IN FINAL YEAR PROJECT

5. Any other suggestions / Comments.

KEEP UP THE GOOD WORK!!!

NAME & SIGNATURE

V Chabria

VIREN CHHABRIA

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Figure 2.1.1h: Alumni Survey<contd.>

➤ Curricular Gaps

The shortcomings or gaps in the syllabus are worked upon through industry experts and academia. They are invited to discuss regarding requirements/refinements in curriculum of that semester. Such interactions work in two folds; in confidence building amongst students and exposure to newer avenues in Information Science and Engineering while enriching of curricula.

Table 2.1.1c: Gaps Identified

Course Code	Course Title	Gap Identified
10CS35	Data Structures with C	Hashing techniques
10IS51	Software Engineering	Software Rejuvenation
10CS53	Operating Systems	RTOS, Bootstrap Concepts in Operating Systems
10CS54	Database Management Systems	Elaborated concepts on 4NF and transactions, PL/SQL concepts.
10CS55	Computer Networks – I	Advances in wireless communication, and networking technologies
10CS56	Formal Languages and Automata Theory	Testing tools to verify and validate the constructed automaton
10IS65	Software Testing	Extreme programming, Advanced software testing tools, Primitive Software Testing Issues, Challenges and solutions
10CS73	Programming the WEB	Advanced tools for web application development software.
10IS74	Data Warehousing and Data Mining	Recent advances in data mining and web mining algorithms.
10IS753	JAVA & J2EE	Real time applications development in JAVA and J2EE
ISE33	Analog and digital electronics	Asynchronous sequential circuits, A/D and D/A conversion and extension of verilog implementation
ISE34	Data Structures	Advanced Searching techniques and trees concepts like red black trees and splay trees
ISE35	Unix and Shell Programming	Perl Scripting
ISE43	Object Oriented Programming With C++	File Handling with stream Classes and Implementation of linear and non linear data structures with C++.
ISE51	Software Engineering	Advances in software testing and test automation
ISE52	Database Management Systems	Elaborated concepts on SQL.
ISE53	Operating Systems	Advances in file and disk management

ISE54	Design and Analysis of Algorithms	Real time applications of algorithms.
ISE55	Java and J2EE	Framework for developing java based web applications.
ISE62	Computer Networks	Cryptography techniques
ISE652	Cloud computing	Advances in cloud security

2.1.2 State the delivery details of the Content beyond the Syllabus for the Attainment of POs and PSOs (10)

(Provide details of the additional course / learning material / content / laboratory experiments / projects etc., arising from the gaps identified in 2.1.1 in a tabular form in the format given below)

In order to enrich syllabus contents as per growing Information Technology sector, Department of Information Science and Engineering invites experts/trainers from both industry and academia to share newer avenues and update students as well as faculty members with contemporary developments in industry and research scenario. Following tables summarizes action taken for gaps identified and delivery details on contents covered beyond the syllabus in Information Science and Engineering.

➤ Delivery details of Gaps Identified

Table 2.1.2a: Delivery details of Gaps Identified

CAY: 2017-18

Sl. No	Course Name and Code	Identified gaps in syllabus	Action Taken	Date	Resource Person details.	% of student attendees / sem	Relevance to POs, PSOs
1	Operating Systems ISE53	Advances in file and disk management	Expert Lecture on “Advanced file system and disk scheduling”	25/10/2017	Mrs. Pruthvi , Senior Software Engineer, Zinka Logistics Pvt Ltd, Bengaluru.	92% V Sem	POs: 1-12, PSO1,2
2	Database Management Systems ISE52	Elaborated concepts on SQL	Expert Lecture on “Advanced SQL concepts”	28/10/2017	Mrs. Sushma V, Technical Architect, FIS Technologies, Bengaluru	90% V Sem	POs: 1-12, PSO1,2
3	Design and analysis of algorithms ISE54	Real time applications of algorithms.	Expert Lecture on “Practical usage of algorithms in industry”	3/11/2017	Mr. Sreenivasan J V, Senior Software engineer, Cisco, Bengaluru	95% V Sem	POs: 1-12, PSO1,2
4	Software Engineering ISE 51	Advances in software testing and test automation	Expert Lecture on “Software testing and test automation tools”	09/11/2017	Mrs. ThiripuraSundari Project ManagerHCL Technologies, Bengaluru	91% V Sem	POs: 1-12, PSO1,2

5	Analog and Digital Electronics ISE33	Asynchronous sequential circuits, A/D and D/A conversion and extension of verilog implementation	Expert Lecture on “Design of Sequential Circuits-verilog implementation”	10/11/2017	Mr. Senthil Kumar A S Staff Engineer, Qualcomm Technologies, Bengaluru	90% III Sem	POs: 1-12, PSO1,2
6	Java and J2EE ISE 55 & 10IS753	Framework for developing java based web applications.	Expert Lecture on “STRUTS-AWeb Framework”	11/11/2017	Mrs. Sushma V Technical architect. FIS technologies.	90% V and VII Sem	POs: 1-12, PSO1,2
7	Data Structures ISE34	Advanced Searching techniques and trees concepts like red black trees and splay trees	Expert Lecture on “Trees and graphs”	11/11/2017	Mr. RajashekarMedapatti, Senior Software Engineer, JDA Software,	90% III Sem	POs: 1-12, PSO1,2
8	Programming with Unix ISE35	Perl Scripting	Expert Lecture on “Perl Programming”	18/11/2017	Mr. Deepu, Senior Expert, ZTE Telecom	90% III Sem	POs: 1-12, PSO1,2

CAYm1: 2016-17

Sl. No	Course Name and Code	Identified gaps in syllabus	Action Taken	Date	Resource Person details.	% of student attendees / sem	Relevance to POs, PSOs
1	Software Engineering 10IS51.	Software Rejuvenation	Expert Lecture on “Software Rejuvenation”	23/9/2016	Dr. Srinivasan, Professor Of ISE Department, RVCE, Bengaluru	95% V Sem	POs: 1-12, PSO 1,2
2	Finite automata and formal languages 10CS56	Testing tools to verify and validate the constructed automaton	Expert Lecture on “Testing tools in Automata Theory”	22/10/2016	Mr.Raghavendra Prasad, Assistant Professor, ISE, RV College of Engineering, Bengaluru	95% V Sem	POs: 1-12, PSO 1,2
3	Operating Systems 10CS53	RTOS, Bootstrap Concepts in Operating Systems	Expert Lecture on “Bootstrap Essentials”	3/11/2016	Mr. TanmayPratap, Software Engineer, Cisco, Bengaluru	90% V Sem	POs: 1-12, PSO 1,2
4	Database Management Systems 10CS54	Elaborated concepts on 4NF and transactions, PL/SQL concepts.	Expert Lecture on “SQL Server”	07/11/2016	Ms. Madhuri A Software Engineer, CTS, Bengaluru	90% V Sem	POs: 1-12, PSO 1,2
5	Programming the WEB 10CS73	Advanced tools for web application development software.	Expert Lecture on “Developing Web Application using Google App Script”	09/11/2016	Mr. Ram kumar, Freelancer, Bengaluru	90% VII Sem	POs: 1-12, PSO 1,2

6	Software Testing 10IS65	Advanced software testing tools Primitive Software Testing Issues, Challenges and solutions	Expert lecture on “Primitive Software Testing Concepts & Tools”	6/4/2017	Mrs. Hema.B.C, Test Engineer, Cerebra Integrated Technologies, Bengaluru	95% VI Sem	POs: 1-12, PSO 1,2
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CAYm2: 2015-16

Sl. No	Course Name and Code	Identified gaps in syllabus	Action Taken	Date-Month-Year	Resource Person details.	% of student attendees / semester	Relevance to POs, PSOs
1	Data Structures with C 10CS35	Hashing techniques	Expert lecture on “Hashing and collision resolution schemes”	30/9/2015	Dr. Dinesh R, Engineer, Amazon	92% III Sem	POs: 1-12, PSO 1,2
2	Operating Systems 10CS53	RTOS, Bootstrap Concepts in Operating Systems	Expert lecture on “RTOS for general purpose operating systems “	28/10/2015	Mr. Vijay K R Test Engineer, L& T technologies	94% V Sem	POs: 1-12, PSO 1,2
3	Data Warehousing and Data Mining 10IS74	Recent advances in data mining and web mining algorithms.	Expert lecture on “Swarm Intelligence “	28/10/2015	Ms. Chandana Software Engineer, Suyog Technologies	90% VII Sem	POs: 1-12, PSO 1,2
4	Java & J2EE 10IS753	Real time applications development in JAVA and J2EE	Expert lecture on “Real Time application development using JAVA”	30/10/2015	Mrs. Sushma Sravanthi Team Lead, Virtusa Technologies.	90% VII Sem	POs: 1-12, PSO 1,2
5	Computer Networks – I 10CS55	Advances in wireless communication, and networking technologies	Expert lecture on “Advances in Networking Technologies”	06/11/2015	Mr. Ashwin M Network Engineer, CISCO	90% V Sem	POs: 1-12, PSO 1,2
6	Software Testing 10IS65	Extreme programming Advanced software testing tools, 4 Primitive Software Testing Issues, Challenges and solutions	Expert lecture on “Software quality improvement and advanced testing tools”	31/3/2016	Mrs. Hridya Krishna Kumar, Test Lead, VOLVO Ltd	90% VI Sem	POs: 1-12, PSO 1,2

➤ Delivery details of Content Beyond Syllabus

Table 2.1.2b: Delivery details of content beyond syllabus

CAY: 2017-18

Sl. No.	Enrichment areas / topics identified	Action Taken	Date	Resource Person details.	% of student attendees / semester	Relevance to POs, PSOs
1	Software as a service in Cloud Computing	Guest Lecture on “Overview of SaaS & Cloud Computing Essentials”	19/8/2017	Mr. Karthikeyan Narayanan, Advisory Software Developer, IBM India Pvt. Ltd,	95% V Sem	POs: 1-12, PSO1,2
2	Security issues in Cloud Computing	Guest Lecture on “Cloud Computing Security”	9/9/2017	Mrs. Ananthamalar Ramarathinam, Principal Consultant, Mercedes Benz	90% VII Sem	POs: 1-12, PSO1,2
3	Trends on Internet of things	Guest Lecture on “IOT Revolution: A Sneak Peak”	10/10/2017	Mrs. Thiripura Sundari, Project Manager, HCL Technologies	94% III Sem	POs: 1-12, PSO1,2
4	Advanced Classification Algorithms	Guest lecture on “Bayesian Belief Networks: Advanced Classifier”	28/10/2017	Mr. Harish, Data Scientist, Data Matics.	90% VII Sem	POs: 1-12, PSO1,2
5	Nested RAID Levels	Guest lecture on “Nested Raid levels :50,60,100”	8/11/2017	Mr. Murali, SAN Division, EMC2	90% VII Sem	POs: 1-12, PSO1,2
6	Data Mining & Artificial Intelligence Concepts	Guest Lecture on “Conversation on UI and Chatbots”	17/11/2017	Mr Antony Willet, Framework and Platform Architect, LG Soft India Pvt Ltd	92% VII Sem	POs: 1-12, PSO1,2

CAYm1: 2016-17

Sl. No.	Enrichment areas / topics identified	Action Taken	Date	Resource Person details.	% of student attendees / semester	Relevance to POs, PSOs
1	Tools on Data Management	Guest Lecture on Overview Of Data Management Platform Tools	8/4/2017	Mr. Sreekantha T, Vice President, Market Data Management Platform	90% VI Sem VIII Sem	POs: 1-12, PSO1,2
2	Advanced Inter-process Communication Methods	Guest lecture on “Interprocess Communication in BSD release of UNIX operating system”	11/4/2017	Mr. Deepu, Sr. Expert, ZTE Telecom	90% VI Sem	POs: 1-12, PSO1,2
3	IT industry aspects in Software Development	Guest Lecture on “Software Development Process”	27/8/2016	Mr. Amit Goyal Service Manager For Ap&Emea, Honeywell, Bangalore	90% VII Sem	POs: 1-12, PSO1,2
4	Protocols in software engineering	Guest Lecture on “Software Engineering Etiquettes”	8/9/2016	Mrs. Raghavi Bhujang, Freelancer, Bengaluru	90% V Sem	POs: 1-12, PSO1,2

5	Advanced data structures	Guest lecture on “Random binary search trees”	19/10/2016	Mr. Nagesh, Sr. Consultant, Deloitte	90% III Sem	POs: 1-12, PSO1,2
6	Advanced topics in mobile adhoc networks	Guest Lecture on “Mobile Adhoc networks”	02/11/2016	Ms. Priya R, Software Engineer, Mavenir Systems.	90% VII Sem	POs: 1-12, PSO1,2

CAYm2: 2015-16

Sl. No.	Enrichment areas / topics identified	Action Taken	Date	Resource Person details.	% of student attendees / semester	Relevance to POs, PSOs
1	Advances in Dynamic Programming	Guest Lecture on “Advances in Dynamic Programming: Saving space & time”	25/2/2016	Mr. Veerendra Vasumathy Information Technology, Schneider Electric, Bengaluru	90% IV Sem	POs: 1-12, PSO 1,2
2	Strategies in Supply chain management	Guest Lecture on “Advances in Logistics & Supply chain management”	31/3/2016	Prof. B Ananth Narayan, Free Lance Faculty, Amrita School of Buisiness, Coimbatore	93% VIII Sem,	POs: 1-12, PSO 1,2
3	System administration	Guest Lecture on “UNIX System Administration and programming”	15/04/2016	Mr. Ramesh Sadashiva, Capgemini, Bengaluru	96% VI Sem	POs: 1-12, PSO 1,2
4	Testing concepts	Guest Lecture on “Black box testing”	06/05/2016	Mr. Manoj Jain, EMC2, Bengaluru	91% VI Sem	POs: 1-12, PSO 1,2
5	Arithmetic Circuits: Binary Adder – Half Adder Implementation	Guest lecture on “Arithmetic Circuits”	07/10/2015	Mr. Puneeth Tyagi, System Engineer, Texas Instruments, Bengaluru.	95% III Sem	POs: 1-12, PSO 1,2
6	Voice communication techniques	Guest Lecture on “Voice over internet protocol (VOIP)”	04/11/2015	Mr. Rajgopal Krishnamurthy, AT&T, Bengaluru	90% V Sem	POs: 1-12, PSO 1,2

2.2. Teaching - Learning Processes (100)

2.2.1. Describe Processes Followed to Improve Quality of Teaching & Learning (25)

(Processes may include adherence to academic calendar and improving instruction methods using pedagogical initiatives such as real world examples, collaborative learning, quality of laboratory experience with regard to conducting experiments, recording observations, analysis of data etc. encouraging bright students, assisting weak students etc. The implementation details and impact analysis need to be documented)

Keeping in mind the university and college calendar of events, department comes out with its own calendar of events. Course preferences are asked by Head of the Department to all the faculty members and courses are allotted.

Academic Calendar

The academic calendar is prepared as per the VTU guidelines of the first and last working days. Public holidays have been taken into account. Dates are fixed for the internal assessment tests, guest lecture, industrial visits etc. The following figures show the VTU calendar of events and Department Calendar of events for the academic year 2016-17 (Even Semester).

Academic Calendar of VTU, Belagavi for EVEN Semester of 2016-2017 (Feb 2017 – July 2017)											
	II, IV & VI Sem B.E/B.Tech II, IV, VI, VIII Sem B.Arch	VIII Sem BE/B.Tech & X Sem B.Arch	IV Sem MCA	VI Sem MCA	IV Sem MBA	IV Sem M.Tech	IV Sem M.Arch	II Sem MCA	II Sem MBA	II Sem M.Tech	II Sem M.Arch
Commencement of EVEN Semester	13.02.2017	13.02.2017	13.02.2017	13.02.2017	13.03.2017	02.02.2017	13.02.2017	13.02.2017	13.02.2017	13.02.2017	13.02.2017
Last Working day of EVEN Semester	02.06.2017	02.06.2017	02.06.2017	02.06.2017	30.06.2017	22.05.2017	16.06.2017	02.06.2017	02.06.2017	02.06.2017	16.06.2017
Practical Examination	05.06.2017 To 14.06.2017	-	05.06.2017 To 10.06.2017	-	-	-	-	05.06.2017 To 10.06.2017	-	05.06.2017 To 10.06.2017	-
Theory Examinations	16.06.2017 To 20.07.2017	05.06.2017 To 16.06.2017	12.06.2017 To 28.06.2017	-	03.07.2017 To 29.07.2017	12.06.2017 To 17.06.2017	-	12.06.2017 To 28.06.2017	05.06.2017 To 17.06.2017	12.06.2017 To 30.06.2017	19.06.2017 To 30.06.2017
Viva Voce	-	19.06.2017 To 24.06.2017	-	-	-	-	-	-	-	-	-
Summer Project / Professional Training	-	-	-	05.06.2017 To 17.06.2017 (Submission of Report to VTU)	02.05.2017 To 16.05.2017 (Submission of Report to VTU)	24.05.2017 To 09.06.2017 (Submission of Report to VTU)	-	-	-	-	-
Commencement of ODD Semester	01.08.2017	-	01.08.2017	-	-	-	-	01.08.2017	01.08.2017	01.08.2017 (Internship of 16 Weeks)	01.08.2017

1. College Time Table shall be arranged for five and a half week days and planned to accommodate EDUSAT transmission slots, the schedule of which will be notified separately.
 2. The faculty/staff shall be available to undertake any work assigned by the university.
 3. If any of the above date is declared to be a holiday then the corresponding event will come into effect on the next working day.
 4. Notification regarding Calendar of Events relating to the conduct of University Examination will be issued by the Registrar (Evaluation) from time to time

REGISTRAR 07/04/17

Figure 2.2.1a Academic Calendar of VTU 2016-17 Even semester

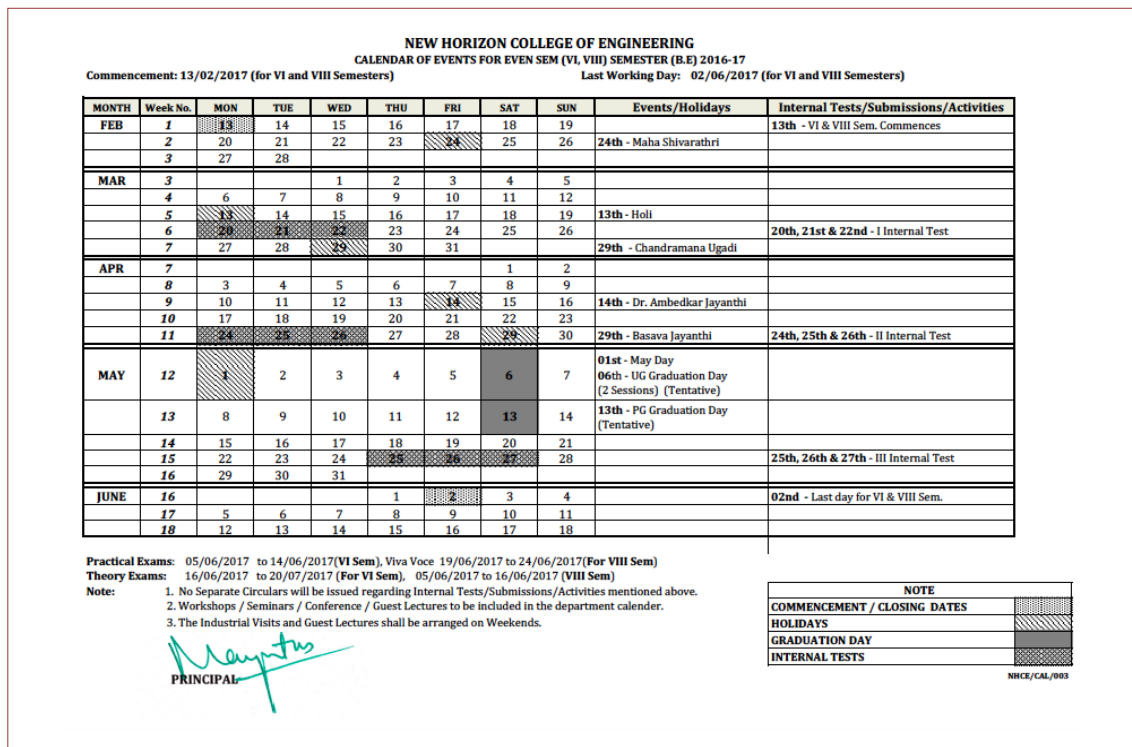


Figure 2.2.1b Academic Calendar of College 2016-17 Even semester

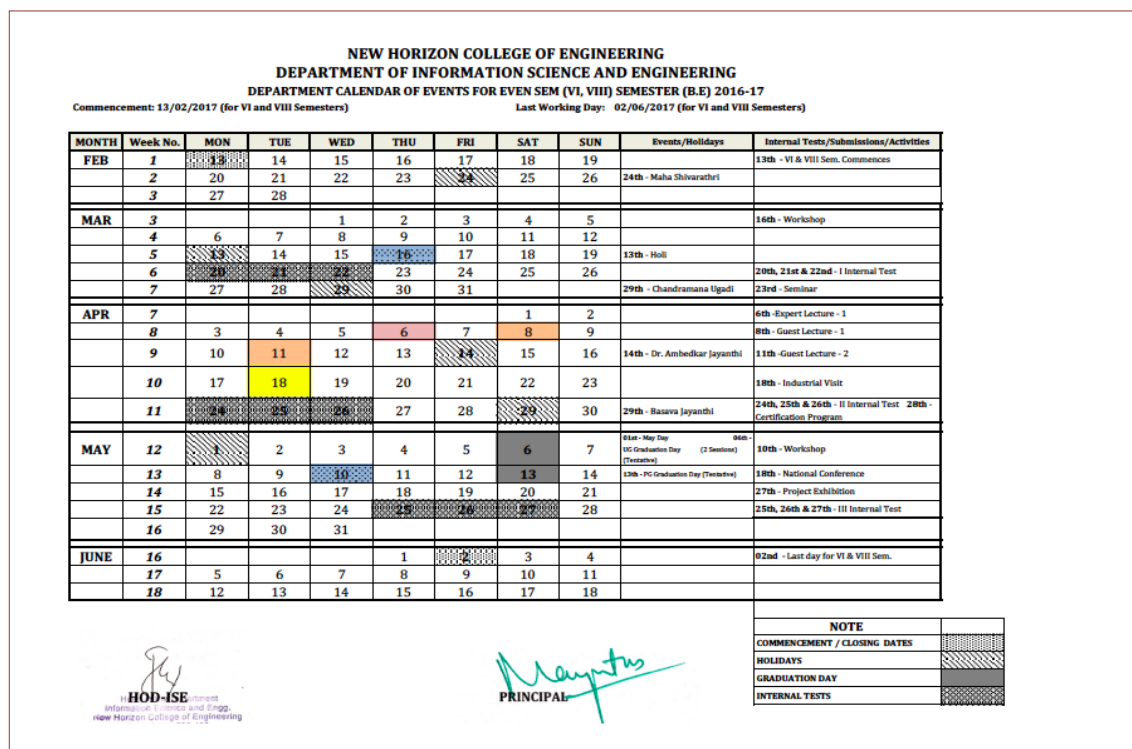


Figure 2.2.1c Academic Calendar of Department 2016-17 Even semester

➤ Lesson Plan

Lesson planning is a vital component of the teaching-learning process. Once the courses are allotted to faculty members, they will prepare a lesson plan as per the template. Proper classroom planning will keep teachers organized and on track while teaching thus allowing them to teach more, help students reach outcomes more easily.

Lesson planning:

- i) Provides a coherent framework for smooth efficient teaching.
- ii) Helps the teacher to be more organized.
- iii) Gives a sense of direction in relation to the syllabus.
- iv) Helps the teacher to be more confident when delivering the lesson.
- v) Provides a useful basis for future planning.
- vi) Helps the teacher to plan lessons which cater for different students.

➤ Question Bank

Questioning is the most important device of teaching. The teacher can know the amount of knowledge acquired by the students with the help of questioning. Every course in the curriculum has number of questions as part of question bank.

➤ Assignments

Assignments are tasks requiring student engagement that enables faculty member to assess what students know and don't know. They represent one of the most common ways to assess learning.

➤ Pedagogies

Pedagogy is the art (and science) of **teaching**. Effective **teachers** use an array of **teaching** strategies because there is no single, universal approach that suits all situations. Different strategies used in different combinations with different groupings of students will improve learning outcomes.

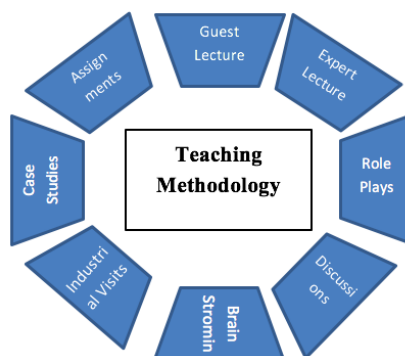


Figure 2.2.1d: Pedagogy to improve learning outcomes.

1. Chalk &Talk
2. Lectures with power point presentation
3. Videos
4. Lecture interspersed with discussions
5. Tutorial/ E-tutorial
6. Assignments
7. Projects
8. Lab experiments
9. Quizzes (conventional/ brainstorming/ group discussion)
10. Seminars
11. Group Discussions
12. Designing and Problem solving through simulation
13. Case Studies
14. Laboratory sessions

➤ **Methodologies to support Slow Learners and encourage Bright Students**

➤ **Methods to Identify Bright Students**

- The bright students are identified from their participation in classroom discussion, performance in the assessment tests, quizzes, participation in classroom seminars, questioning, answering ability and university result analysis etc.

Methods to encourage Bright Students

- The bright students are encouraged to participate in symposia, workshops and seminars to gain knowledge on the latest developments.
- The students are encouraged to take up industry based projects in the advanced topics under the guidance of the faculty members.
- They are provided with the guidance about project management and prototype building.
- Bright students are encouraged to lead the students' association team which organizes various activities viz. paper presentation, poster presentation, technical events etc.

Table 2.2.1a: Sample Bright Students Details

Sl. No	Name	USN	Academic Year
1	ASHWINI A	1NH12IS016	2012-2016
2	C U KUSHALAPPA	1NH12IS027	2012-2016
3	SANNUTHA S HOLLA	1NH12IS100	2012-2016
4	SUSHMA D S	1NH12IS113	2012-2016
5	S AKSHYA	1NH13IS089	2013-2017
6	SHISHIR UMESH	1NH13IS099	2013-2017
7	SIRAJ UL MUNEERA S	1NH13IS105	2013-2017
8	SUMANTH REDDY	1NH13IS116	2013-2017
9	ASHIKA A	1NH14IS018	2014-2018
10	HARSHITHA R	1NH14IS040	2014-2018
11	IJAZ NIZAMI S	1NH14IS041	2014-2018
12	JEEVETHA K C	1NH14IS043	2014-2018

➤ **Academic Progress of Bright Student**

Sample graph of academic progress of Ashwini A (1NH12IS016)

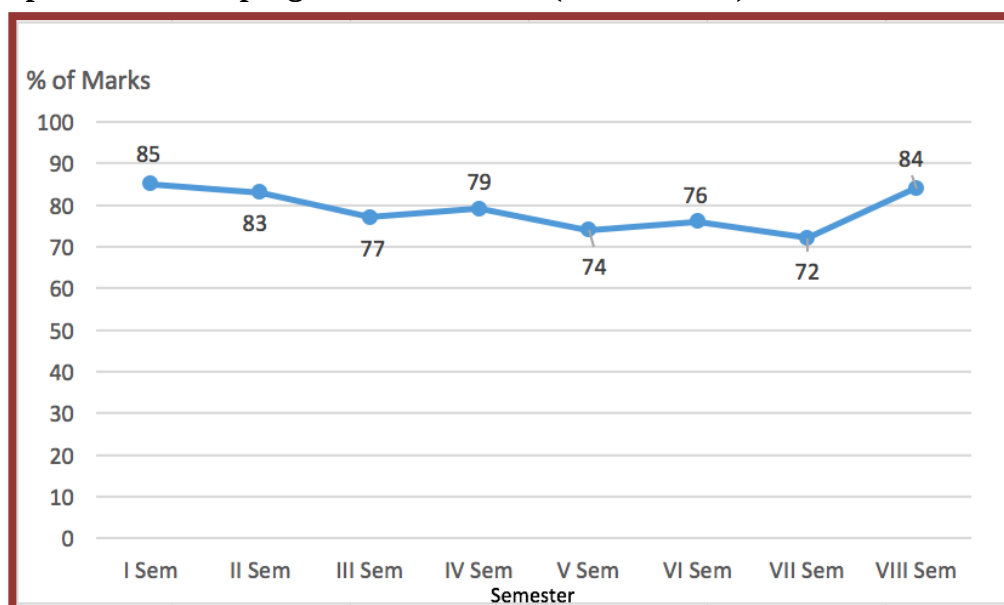


Figure 2.2.1 e: Academic Progress of Bright Student

➤ **Methods to Identify Weak Students:**

- The weak students are identified from their participation in classroom discussion, performance in the assessment tests (less than 15 out of 25), participation in classroom seminars, questioning & answering ability, university result analysis, etc.

➤ Methods to Assist Weak Students

- Department arranges remedial lectures for weak students in all the courses.
- Teacher teaches as per requirement of weak students.
- Attempts are made by the teachers to give personal attention to these students.
- Question banks and assignments are given.
- Participative and progressive weak students are given chance to improve their team work to motivate and appreciate their efforts.

Table 2.2.1b: Sample Weak Students' Details

Sl. No	Name	USN	Academic Year
1	MOHMMED JABIR HUSSAIN	1NH12IS065	2012-2016
2	MOHAMMED FAROOQ	1NH12IS064	2012-2016
3	MOHAMED NAFEEL K P	1NH12IS063	2012-2016
4	B L GOPINATH	1NH12IS020	2012-2016
5	HARSHITA M	1NH13IS037	2013-2017
6	SRI BHARGAVI PALEM	1NH13IS091	2013-2017
7	D T RAJESH	1NH14IS028	2014-2018
8	DEEPAK BHAT	1NH14IS030	2014-2018
9	KARTHIGEYAN S	1NH14IS046	2014-2018
10	P M VENKATESHWARDHAN	1NH14IS070	2014-2018

➤ Academic Progress of Weak Student

Sample graph of academic progress of Harshita M(1NH13IS037)

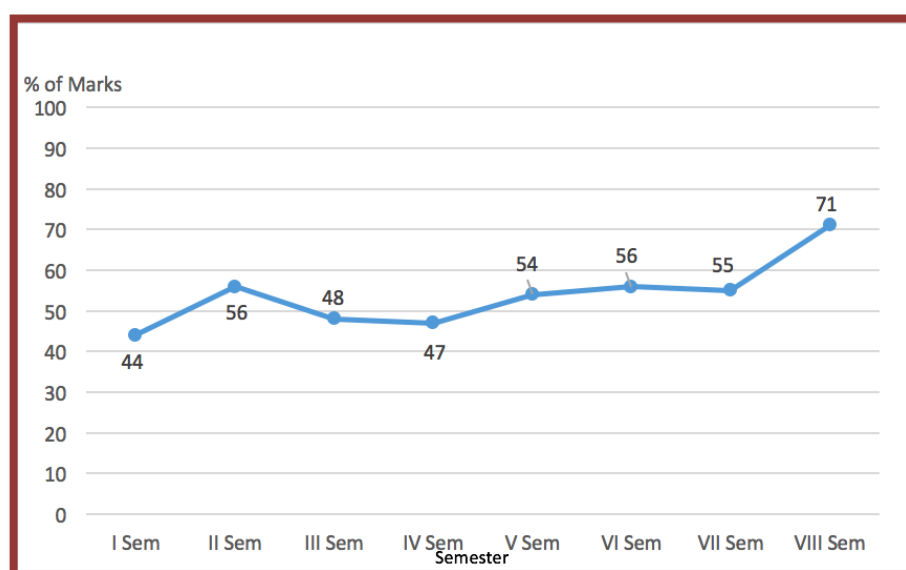


Figure 2.2.1 f: Academic Progress of Weak Student

➤ **Quality of Classroom Teaching**

➤ **Course Delivery Methods**

Classroom teaching: The lecture delivery by the faculty is through a set of educational technology/tools such as

- Chalk and talk - Lecturing is done using green/black board.
- Power point presentation (PPT).
- Demo in Lab
- Usage of videos
- Assignments
- Question bank
- Quiz.
- Group discussion.

➤ **Conduct of Experiments**

- Problem definition
- Implementation using respective programming language
- Execution of experiment.
- Observation and evaluation of results.

➤ **Collaborative Learning**

The students are taught to work as a team to improve their knowledge and working skills.

Table 2.2.1c: Collaborative Learning – Mini Projects

Sl. No	Name Of The Team Leader With USN	Title	No. Students Involved	Outcome
1	C U Kushalappa (1NH12IS027)	Inventory Operation System Using Hash Function	04	POs:1-12,PSO1,2
2	S Akshya (1NH13IS089)	Comparison Of Different Sorting Technique	04	POs:1-12,PSO1,2
3	Shishir Umesh (1NH13IS099)	E-Commerce Filtration	04	POs:1-12,PSO1,2
4	SirajUIMuneera S (1NH13IS105)	Spellchecker Using Hashing Technique	04	POs:1-12,PSO1,2
5	Sumanth Reddy (1NH13IS116)	Mobile Queue Management System	04	POs:1-12,PSO1,2
6	Ashika A (1NH14IS018)	Hidden words – Game Solver	04	POs:1-12,PSO1,2
7	Ijaz Nizami S (1NH14IS043)	Password Generator Using Java	04	POs:1-12,PSO1,2

8	Ashwini A (1NH12IS016)	Playing with Jumbled letters	04	POs:1-12,PSO1,2
9	Sannutha S Holla (1NH12IS100)	Aqua ALERT MONITORING SYSTEM For User	04	POs:1-12,PSO1,2
10	Sushma D S (1NH12IS113)	Cab Service Management System	04	POs:1-12,PSO1,2

Table 2.2.1d: Collaborative Learning – Student Paper Publication

Sl. No	Name of the team leader with USN	Title of the Paper	Academic Year	Outcome
1	Shishir Umesh (1NH13IS099)	Recognizing and handling the malware propagation in large scale networks	2016-17	POs:1-12,PSO1,2
2	Sridevi.S (1NH13IS090)	A survey on minix 3 os with dynamic timeout choice	2016-17	POs:1-12,PSO1,2
3	KrithikaV.Rao (1NH13IS052)	Mapreduce based-Fidoop	2016-17	POs:1-12,PSO1,2
4	Shantanu Singh (1NH13IS097)	A time based personalized retail recommender strategy using data mining	2016-17	POs:1-12,PSO1,2
5	Ashwini A (1NH12IS016)	Survey on attendance management system using face recognition	2015-16	POs:1-12,PSO1,2
6	Paurav Surendra (1NH11IS070)	Data Transfer between Independent Systems using Visible Light Communication	2014-15	POs:1-12,PSO1,2

➤ **Continuous Assessment in the laboratory**

- Continuous Assessment is divided into two components
 - Evaluation in every lab session
 - Internal Assessment Test
- Continuous Evaluation is done by the faculty in every lab session for 15 marks, Internal Assessment test is conducted for 10 marks based on rubrics and the average marks is considered for awarding final internal assessment work.

➤ **Student feedback of teaching learning process and actions taken**

- Faculty Feedback Performance for every course is assessed from students with various parameters as defined by departmental level.
- Some of the parameters are:
 - Clarity in explaining course
 - Course explained was easy to understand
 - Content quality is relevant and useful
 - Faculty answers to your queries
 - Coverage of topic/course is on time.

2.2.2. Quality of Internal Semester Question Papers, Assignments and Evaluation (20)

(Mention the initiatives, implementation details and analysis of learning levels related to quality of semester question papers, assignments and evaluation)

➤ Affiliated Scheme

Internal Assessment marks set as per VTU regulations is 25 for theory and lab subjects, 50 for seminar while it is 100 for project. The internal assessment marks for theory is based on three tests conducted as per the calendar of events. The time table for the same will be announced 2-3 days prior to the commencement of the test.

➤ Quality of Internal Question Paper:

- Every course has a Coordinator who is responsible to set the question paper. The Course Coordinator is also responsible for analyzing the quality and pattern of question paper.
- The scheme and solution of question paper is maintained by Course Coordinator and Program Coordinator.
- While setting the question paper, the Coordinator addresses various levels of university scheme.
- Departmental Internal Assessment Test scrutiny committee is constituted which will review the question paper. The committee consists of four members:
 - Head of the department as Chairperson
 - 1 Professor as member
 - 2 senior faculties as members

➤ Procedure for Internal Assessment Test:

- The Program Coordinator informs the Course Coordinator to set the question papers for internal tests as per university norms.
- The Course Coordinator conducts three Internal Tests once in every month.

➤ Implementation of Internal Assessment Test:

- The students take the Internal Assessment Tests (IA Tests) in bluebooks, which are maintained by the department for at least one year after the announcement of the university results and are thus available for verification.

2.2.3 Quality of Student Projects (25)

➤ Identification of Project group/Project domains:

- Project Coordinator & Faculty educate students with different verticals/domains/areas.
- HOD sends circular for identifying the domains after educating students about the following different verticals:
 - **Big Data Analytics**
 - **Internet of Things**
 - **Artificial Intelligence**
 - **Image Processing**
 - **Computer Networks**
 - **Software Engineering**
- This circular bears expectation of department and encouragement on undertaking relevant, achievable, time bound projects that attempt to solve recent technology in Information Science Engineering.
- Students are allowed to form groups/team members on their own, with a team consisting of minimum 2 to maximum 4 members.
- Students (primarily research oriented and/or bright students) are invited to choose/bring out a problem for the execution of the project Allocation.
- Project Coordinator and HOD discuss, choose guides / topics in an open meeting of guides with list of student batch.
- All the students must refer **reputed peer-reviewed UGC approved journals**. Such projects could also be extension of previous/on-going works also.
- Faculty response is compiled as project titles along with guides/supervisor's names are notified to all students by the Project Coordinator through HOD.
- Some students are seen keen in undertaking projects at external labs (govt./private/research centres). In this case, HOD provides Letter of Reference to the concerned external agencies. A teacher of the department functions as Internal Guide to such students and the scientist/researcher at external agency functions as External Guide.

➤ Continuous Monitoring:

- A Project Review Committee is formed under the chairmanship of HOD.
- All student's group need to submit the synopsis to the internal guide .
- The Project Guides/teachers gives suggestions towards the improvements of the synopsis

- Based on these inputs, students commence their project work. If the students are doing project at external agency, then they need to consult with internal as well as external guide towards implementation of project.
- Three times in a year, the project students give presentation on the project in front of the project review committee.
- The project review committee give suggestions to students from time to time that they need to incorporate before the submission of final report
- The review committee along with guide finalizes the Internal marks of the project for each student

Table 2.2.3a: Project Review Schedule (CAYm1 2016-2017)

Description	Schedule
Vertical Identification	September 2016
Allotment of guide	September 2016
Selection of Base Paper (Reputed Journal Papers)	October 2016
Topic/Title Discussion with HOD & Guide	October 2016
Submission of Synopsis & First Review Paper Publication	October 2016
Project Phase 1-Review of related literature	November 2016
Project Phase 2-Review	February 2017
Implementation of the Project	March 2017
Second Paper Publication	April 2017
Project Phase 3-Review	April 2017
Submission of Final Report	May 2017
External Viva	June-July 2017

➤ **Project Evaluation:**

- The Final Project Reports are evaluated by Internal and External examiners as appointed by the university.
- The external examiner is from other affiliated college
- The examiners conduct viva-voce examination for the students. The students in team come forward and defend the carried out project work. Based on the performance in viva-voce examination, final marks are awarded to the students that are sent to university.

➤ **Developing prototypes and enhancing the relevance of projects:**

- Department supports students to present their academic projects in various national and international conferences and National Level Project exhibitions to showcase their ideas.

- The best projects identified from the project exhibition are sent to different colleges/institute for taking part in different competitions.
- The department even encourages the best projects to file patent/report discoveries
- The internal guide helps the students to publish their work in national/international conference and journal.
- The best project of the department are often awarded prize and/or certificates

➤ **Summary of Best Projects:**

Table 2.2.3b: Best Projects

Sl. No	CAY	Student Name	USN	Project Title	Project Guide
1	2016-17	Priyadarshini D	1NH13IS080	Adaptive Monitoring in Micro kernel Operating Systems- Evaluation of Scalability of the approach.	Dr. Vishwanath Y
		Sri Devi	1NH13IS090		
		Sai Bhargavi P	1NH13IS091		
		Shraddha V	1NH13IS101		
3		Goutham G	1NH13IS034	Cloud Based Smart Parking System	Dr. Jitendranath Mungara
		Abhishek D V	1NH13IS002		
		Athish	1NH13IS021		
		Abhishek A	1NH11IS004		
4		Anitha R	1NH12IS013	Cloud Based Smart Parking System using Internet of Things	Mr. Vishwanath Y
		Aishwarya D K	1NH12IS007		
		Debarupa Rakshit	1NH12IS030		
		Madhu R	1NH12IS053		
5	2015-16	DivyaKumari	1NH12IS037	Biometric Authentication for Accident Victims during Emergency	Ms. Divya K V
		Manoj Sharma	1NH12IS058		
		Meghashritha	1NH12IS062		
6		Pavitra N	1NH12IS079	Implementing CST in meta-thinking layer of CSIA for higher level of intelligence in agricultural issues	Ms. Ashwini K
		Srineja N	1NH12IS067		
		Sushma D S	1NH12IS113		
		Vishwitha N	1NH12IS126		

2.2.4. Initiatives Related to Industry Interaction (15)

(Give details of the industry involvement in the program such as industry-attached laboratories, partial delivery of appropriate courses by industry experts etc. Mention the initiatives, implementation details and impact analysis).

The department invites experts from industry for invited lectures that the students and staff attend. The lectures result in lively discussion thus imparting current state of the art knowledge to students and staff.

➤ **Partial delivery of appropriate courses by industry experts.**

VMware Software India Private Limited, Bengaluru. has involved in designing curriculum syllabus and the same is used for delivering as regular course. The company trained the faculties of ISE department and those faculties provide knowledge delivery to the students.

➤ **Initiatives and Implementation details of Industry-Institute Interaction**

WIPRO LTD, Bengaluru has provided JAVA training and certification for faculty members, Mr. Gangadhar Immadi and Mrs. Vandana C P, Assistant Professors, Dept. of ISE and they delivered JAVA training to the students of different departments in the college. In result of this, good number of students were got placed WIPRO LTD.

List of ISE department students placed for WIPRO LTD in the year 2017-18

Table 2.2.4a: Students Placed for Wipro AY-2017-18

Sl. No	USN	Name
1	1NH14IS066	Namrata Pandey
2	1NH14IS080	Rabubieyya Aiiysha Zahra
3	1NH14IS101	Sarah Smruthi

List of ISE department students placed for WIPRO LTD in the year 2016-17

Table 2.2.4b: Students Placed for Wipro AY-2016-17

Sl. No	USN	Name
1	1NH13IS125	Vinaya B
2	1NH13IS113	Sujithra K S
3	1NH13IS005	Aditya Srivastava
4	1NH13IS105	Siraj Ul Muneera S
5	1NH13IS067	Nimith Shetty M
6	1NH13IS089	S. Akshaya

7	1NH13IS073	P.Maheshwaran
8	1NH13IS096	Shaik Mohammed Sajid
9	1NH13IS047	Khateejathul Kubra Aafreen
10	1NH13IS052	Krithika V Rao

➤ **Workshops/Seminars/Expert talks/Trainings/ Project Exhibitions conducted by Industry Experts**

Table 2.2.4c: Workshops/Seminars/Expert talks / Trainings / Project Exhibitions conducted by Industry Experts

CAY: 2017-18

Sl. No	Name, Designation and Company of Industry Expert	Date	Title of the Workshops/Seminars/Expert talks/Trainings	Relevance to PO's and PSO's
1	Mr. Haribabu , Scientist Mr. Tulasi Dwarakanath, Mr. Harikrishna Research Associates, C-DAC,Bangalore	24-9-2017	Workshop on “Technical Challenges and Applications in IOT”	POs:1-12, PSO1,2
2	Mr. Badrish Agarwal, Founder and CTO, Uolo Technology	14-11-2017	Seminar on “Machine Learning -Industry Use Cases And Getting Started With Implementation In Python”	POs:1-12, PSO1,2
3	Mr.AthishGupta,Software Engineer, Networking& security Unit at VMWARE	16-11-2017	Expert talk on “Basic vSphere Networking”	POs:1-12, PSO1,2

CAY: 2016-17

Sl. No	Name, Designation and Company of Industry Expert	Date	Workshops/Seminars/Trainings/Project Exhibitions	Relavance to PO's and PSO's
1	MrRamkumar Armugam-Head - Model Exams,Madurai	26-10-2016	Workshop on Hybrid “Mobile App development using apache cordova”	POs:1-12, PSO1,2
2	Mr.Nagamallikarjuna, Senior Architect,Cloudera Bangalore	16-3-2017	Workshop on ”R Tool”	POs:1-12, PSO1,2
3	Mr. Allamaprabhu S Sotti, Senior Software Engineer, Snapdeal, Bangalore	10-5-2017	Workshop on “Game console Interface development on iOS platform ”	POs:1-12, PSO1,2

4	Mr.Vikas Reddy,Head of Amazon Robotic Lauch EU &Japan ,London,UK&Luxember, Germany	27-5-2017	National Level Project Exhibition “TECHORIZON-2017”	POs:1-12, PSO1,2
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CAY: 2015-16

Sl. No	Name, Designation and Company of Industry Expert	Date	Title of the Workshops/Seminars /Lectures/Traning.	Relavance to PO's and PSO's
1	Mr. Venkat Ramana Reddy, Key Resource,DBRC.	3-9-2015	Workshop on “Making Professionals Powerful”	POs:1-12, PSO1,2
2	MrVaidraju, Managing Director, Scaltech,Bangalore	13-2-2016 to 27-3-2016	Training on “CISCO Certified Network Associate”	POs:1-12, PSO1,2
3	Mr.Abhishek Soni, IFC3 India, IIT Hyderabad, Inferio, Scitech Council.	1-4-2016 and 2-4-2016	Workshop on “Cloud Computing”	POs:1-12, PSO1,2

➤ **Outcomesof Initiatives Related to Industry Interaction**

1. The interaction develops student’s awareness on job functions in the industries, attitude to adapt industrial environment, proper practical and relevant knowledge, skills and competencies etc.
2. Integration of industrial trainings and other inputs from industry and involvement of industrial experts in curriculum designing provides great impact with teaching-learning process
3. Collaboration, discussion and decision making process produce mutual agreements and understanding of the real conditions in the work place, industrial functioning and its expectations.
4. Industry Institute Interaction is beneficial to institute to generate resources, improve quality of faculty and have more relevant curriculum. On the other hand it is beneficial for industry to access the latest technological and management developments, keep their workforce skill updated, get fresh and well trained technical personnel, get their research work done through institute collaborative research opportunity.

2.2.5. Initiatives Related to Industry Internship/Summer Training (15)

(Mention the initiatives, implementation details and impact analysis)

➤ Initiatives: Industrial Visits

The department organizes industrial visits for students once in a year/semester to relevant organizations /companies to enable the students to experience the practical implementation of theoretical knowledge in real world

➤ Implementation Details of Industrial Visits

Industrial visit coordinator of the department communicates with industry and allocate slots for industrial visits. These visits help the students to learn about people management, which is essential in any organization.



Figure 2.2.5a: Industrial Visit to SAP Labs, ITPL, Bangalore

Table 2.2.5a: Industrial visits

CAY: 2017-18

Sl.No	Date of Visit	Organization Visited	% of students attendees/ Semester	Relevance to POs, PSOs
1	10-11-2017	Toyota Kirloskar Motor Pvt. Ltd., Bidadi, Bangalore	95% V Sem	POs:1-12,PSO1,2

CAYm1: 2016-17

Sl.No	Date of Visit	Organization Visited	% of students attendees / Semester	Relevance to POs, PSOs
1	18-04-2017	Jetking Data Center, Sadashivnagar, Bangalore	90% IV Sem	POs:1-12,PSO1,2
2	04-11-2016	SAP Labs, ITPL, Bangalore	90% V Sem	POs:1-12,PSO1,2

CAYm2: 2015-16

Sl.No	Date of Visit	Organization Visited	% of students attendees / Semester	Relevance to POs, PSOs
1	22-04-2016	CISCO, Bangalore	95% VI Sem	POs:1-12,PSO1,2
2	16-02-2016	Yokogawa IT Technologies India Private Ltd., Bangalore	92% VI Sem	POs:1-12,PSO1,2
3	31-10-2015	Amtek Auto India Ltd., Hosur	90% VII Sem	POs:1-12,PSO1,2

➤ Outcomes of Industry Visit

Students submit the report on industrial visits. Industrial visits help students to acquire knowledge on

- Why IT industry is needed and various fields where IT industries reside on.
- Different working methods and interpersonal skills.
- Identifying their prospective areas of work in the overall organizational function.
- The importance of learning different programming languages especially in IT industries.
- To focus on real time problems that involve interdisciplinary approach

➤ Initiatives: Internships

The students are encouraged to take internship program during their semester break. Faculty members give their guidelines, suggestions and scope and contact details of an internship. They also help the students by interacting with the industrial experts, provide the students recommendation letters and other necessary supports. Our students have undergone internship training in companies like Cerner, VMware, Wipro, Intel, Incadea.

➤ **Implementation Details of Internships**

- i) The College/placement cell will facilitate and monitor the student internship program. The College/Department/placement cell will strongly encourage students to undergo Internship during vacation
- ii) The internal guide has to visit the origination to know the performance of students during internship period.
- iii) The student shall make a midterm presentation of the activities undertaken during the internship to a panel comprising Internship guide, a senior faculty from the department and Head of the Department.
- iv) The student has to submit internship report to the Department.
- v) In case, if student makes any patents/copyrights, then royalty will be shared among all (industry side, college side).

The following tables show the various internships undergone by our students.

Table 2.2.5b: Internships

CAY: 2017-18

Sl. NO	Company Name	No. of Students	Semester	Outcomes
1	National Aerospace Laboratories, Bangalore	4	VIII	POs:1-12,PSO1,2
2	Defence Research and Development Organization, Bangalore	3	VIII	POs:1-12,PSO1,2
3	Cerner,Bangalore	3	VIII	POs:1-12,PSO1,2
4	Robert Bosch, Bangalore	4	VIII	POs:1-12,PSO1,2
5	Ellucian Higher Education Systems India Pvt. Limited	1	VIII	POs:1-12,PSO1,2

CAYm1: 2016-17

Sl. NO	Company Name	No. of Students	Semester	Outcomes
1	Cerner,Bangalore	5	VIII	POs:1-12,PSO1,2
2	Incadea, Bangalore	3	VIII	POs:1-12,PSO1,2
3	Wipro, Bangalore	11	VIII	POs:1-12,PSO1,2

CAYm2:2015-16

Sl. NO	Company Name	No. of Students	Semester	Outcomes
1	vmware,Bangalore	3	VIII	POs:1-12,PSO1,2
2	Intel,Bangalore	1	VIII	POs:1-12,PSO1,2
3	Incadea, Bangalore	1	VIII	POs:1-12,PSO1,2

➤ Outcomes of Internships

1. Acquiring practical training and valuable experience in their prospective career area, adding strength to their resume, and thus improving their job prospects upon graduation.
2. Getting the "inside track" on full-time employment opportunities with the same company in which the student interned, through established professional contacts.
3. Students submit the internship reports.

CRITERION-3	COURSE OUTCOMES AND PROGRAM OUTCOMES	120
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3.1: ESTABLISH THE CORRELATION BETWEEN THE COURSES AND THE PROGRAM OUTCOMES (PO) AND PROGRAM SPECIFIC OUTCOMES (PSO) (20)

(Program Outcomes as mentioned below and Program Specific Outcomes as defined by the Program).

Table 3.1: Program Outcomes

Program Outcomes
<u>PO1: Engineering knowledge:</u> Apply the knowledge of Engineering Mathematics, Basic Sciences, Engineering Fundamentals, and Engineering Specialization to the solution of complex Information Science and Engineering problems. <u>PO2:Problem analysis:</u> Identify, formulate, review research literature, and analyze complex engineering problems of Information Science and Engineering reaching substantiated conclusions using first principles of Engineering Mathematics and Engineering Sciences. <u>PO3:Design/development of solutions:</u> Design solutions for complex Information Science problems and design system components or processes of Information Science and Engineering that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations. <u>PO4:Conduct investigations of complex problems:</u> Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions in Information Science and Engineering. <u>PO5:Modern tool usage:</u> Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations in Information Science and Engineering. <u>PO6:The engineer and society:</u> Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice in Information Science and Engineering. <u>PO7:Environment and sustainability:</u> Understand the impact of the professional engineering solutions in Information Science and Engineering in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development. <u>PO8:Ethics:</u> Apply ethical principles and commit to professional ethics and responsibilities and norms of the Information Science and Engineering practice.

PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10:Communication: Communicate effectively on complex Information Science engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11:Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12:Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

The following are the Program Specific Outcomes:

PSO#	PROGRAM SPECIFIC OUTCOMES
PSO1	The ability to understand, analyze and develop computer programs in the areas related to algorithms, system software, multimedia, web design, big data analytics and networking for efficient design of computer based systems of varying complexity.
PSO1	The ability to apply standard practices and strategies in software project development using innovative ideas and open ended programming environment with skills in teams and professional ethics to deliver a quality product for business success.

3.1.1. Course Outcomes (COs) (05)

(SAR should include course outcomes of one course from each semester of study, however, should be prepared for all courses and made available as evidence, if asked).

(Note: Number of outcomes for a course is expected to be around 6)

Course Name: Ciii Year of Study: YYYY – YY; for ex. C202 Year of study 2013-14.

Table 3.1.1.1: Course Outcomes of Engineering Physics (10PHY12) (First Semester)
At the end of the Course, the Student will be able to:

NO OF COURSE OUTCOME	NAME OF THE COURSE OUTCOME
10PHY12.1	Gain knowledge about Modern Physics and Quantum Mechanics for strengthening basic concepts of Engineering Physics
10PHY12.2	Study the material properties and their applications for the prime role to understand and use in engineering applications and studies
10PHY12.3	Study Lasers and Optical fibers and its applications to impart knowledge and to develop skills for learning modern instruments in the engineering applications.
10PHY12.4	Describe the Crystal structure and applications to boost the technical skills with its applications
10PHY12.5	Understand basic concepts of nano science and technology.
10PHY12.6	Understand basic concepts of nano science and technology, basic principles and to develop problem solving skills and implementation in technology

Table 3.1.1.2: Course outcomes of Computer Concepts and C Programming (10CCP23) (Second Semester)
At the end of the Course, the Student will be able to:

NO OF COURSE OUTCOME	NAME OF THE COURSE OUTCOME
10CCP23.1	Understand the basic structure of C Programming.
10CCP23.2	Describe the evaluation of formulas and expressions in C programming.
10CCP23.3	Demonstrate the concept of user defined functions and their mechanism in C.
10CCP23.4	Differentiate the branching and looping statements in C.
10CCP23.5	Illustrate the Derived and User defined Data types in C.
10CCP23.6	Analyze the concept of parallel programming and synchronization

Table 3.1.1.3: Course outcomes of Data Structures with C (10CS35)(Third Semester)
At the end of the Course, the Student will be able to:

NO OF COURSE OUTCOME	NAME OF THE COURSE OUTCOME
10CS35.1	Describe the concept of Dynamic memory Allocation and Analyze the Performance of Algorithms.
10CS35.2	Identify the key Characteristics of an Abstract Data Type and relate to Arrays and Structures.
10CS35.3	Apply the appropriate linear data structures for a Problem definition.
10CS35.4	Identify the usage of Linked-lists Concept in Data Structures.
10CS35.5	Describe the standard structure of a Tree, Binary trees and Binary Search Trees.
10CS35.6	Illustrate Efficient Binary Search Trees for problem solving and programming.

**Table 3.1.1.4: Course outcomes of UNIX AND SHELL PROGRAMMING, (10CS44)
(Fourth Semester)**

At the end of the Course, the Student will be able to:

NO OF COURSE OUTCOME	NAME OF THE COURSE OUTCOME
10CS44.1	Define and describe the fundamental concepts of UNIX Operating system.
10CS44.2	Analyse the working of various UNIX commands using vi editor and examine UNIX file system, attributes and processes.
10CS44.3	Apply various filters and recognize use of regular expressions with pattern matching utilities like grep and sed.
10CS44.4	Formulate and execute shell scripts effectively.
10CS44.5	Compose and develop programs in AWK.
10CS44.6	Compose and develop programs in Perl scripting

**Table 3.1.1.5: Course outcomes of Software Engineering (10IS51) (Fifth Semester)
At the end of the Course, the Student will be able to:**

NO OF COURSE OUTCOME	NAME OF THE COURSE OUTCOME
10IS51.1	Describe the design of a system, component, or process to meet desired needs within realistic constraints.
10IS51.2	Analyze critical thinking and clearly identifying and using evidence, criteria, and values in decision making process of a System Design.
10IS51.3	Identify and analyze software engineering problems using a well-defined engineering process and Software Engineering Practices.
10IS51.4	Design a system model and manage the development of a computing-based system.
10IS51.5	Investigate the design and implementation of a software product and maintain software systems.
10IS51.6	Enhance the competency in Software Development best practices.

**Table 3.1.1.6: Course outcomes of File Structures (10IS63) (Sixth Semester)
At the end of the Course, the Student will be able to:**

NO OF COURSE OUTCOME	NAME OF THE COURSE OUTCOME
10IS63.1	Describe fundamental concepts of file structures and types of storage systems
10IS63.2	Identify the field, record structures and apply object oriented concepts to design file system.
10IS63.3	Analyze reclaiming techniques, consequential processing and sorting of large files for performance.
10IS63.4	Develop Indexing techniques such as AVL, PBT, B Trees, B+ and B* tress
10IS63.5	Create Hashing techniques by understanding basics of hashing
10IS63.6	Develop dynamic Hashing techniques and analyze their performance

Table 3.1.1.7: Course outcomes of Programming the Web(10CS73) (Seventh Semester)

At the end of the Course, the Student will be able to:

NO OF COURSE OUTCOME	NAME OF THE COURSE OUTCOME
10CS73.1	Describe the fundamentals of Internet, www and Markup languages.
10CS73.2	Design the static and dynamic Web pages using html and javascript concepts.
10CS73.3	Apply the Document Object Model and Client side scripting with respect to Web based Applications.
10CS73.4	Design the Web Pages using Server side Scripting, providing a consistent API for receiving and processing user input.
10CS73.5	Generate interactive applications using PHP.
10CS73.6	Analyze the Real time exchange of data over the internet and implement server side Application Framework using Ruby and Rails.

Table 3.1.1.8: Course outcomes of Software Architectures (10IS81) (Eighth Semester)

At the end of the Course, the Student will be able to:

NO OF COURSE OUTCOME	NAME OF THE COURSE OUTCOME
10IS81.1	Describe the importance of software architecture with respect to Software Development.
10IS81.2	Develop methods and case studies for various Architecture Styles.
10IS81.3	Discuss the quality attributes and tactics used in Software Quality Assurance.
10IS81.4	Design software by incorporating software architectural styles.
10IS81.5	Apply various design patterns in the software process.
10IS81.6	Develop documents related to Architectural view of the software.

3.1.2. CO-PO Matrices of Courses Selected in 3.1.1 (05)

(Six matrices to be mentioned; one per semester from 3rd to 8th semester)

Table 3.1.2.1: COs - POs of Data Structures with C (10CS35) (Third Semester)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
10CS35.1	3	3	3	3	1	2	2	1	2	2	2	3
10CS35.2	3	3	2	2	1	2	2	1	2	2	2	3
10CS35.3	3	3	2	3	2	2	2	1	2	2	2	3
10CS35.4	3	2	3	3	2	1	1	1	2	2	2	2
10CS35.5	3	2	2	2	2	1	1	1	2	2	2	2
10CS35.6	3	2	2	2	1	1	1	1	2	2	2	2
Average	3	2.5	2.33	2.5	1.5	1.5	1.5	1	2	2	2	2.5

Table 3.1.2.2: COs - POs of Unix and Shell Programming 10CS44 (Fourth Semester)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
10CS44.1	3	3	3	3	1	2	2	1	2	3	2	2
10CS44.2	3	3	3	2	1	2	2	1	2	2	2	2
10CS44.3	3	3	3	2	2	2	2	1	2	2	2	2
10CS44.4	3	3	2	2	2	2	2	1	2	2	2	2
10CS44.5	3	2	2	2	2	1	2	1	2	2	2	2
10CS44.6	2	2	2	2	2	1	1	1	2	1	2	2
Average	2.83	2.6	2.5	2.16	1.66	1.66	1.83	1	2	2	2	2

Table 3.1.2.3: COs - POs of Software Engineering 10IS51(Fifth Semester)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
10IS51.1	3	3	3	2	1	3	3	3	3	3	3	3
10IS51.2	3	3	3	2	2	3	3	3	3	3	3	3
10IS51.3	3	3	3	2	2	3	3	3	3	3	3	3
10IS51.4	2	2	2	2	2	2	2	2	2	2	2	2
10IS51.5	2	2	2	2	2	2	2	2	2	2	2	2
10IS51.6	2	2	1	2	2	2	2	2	2	2	2	2
Average	2.5	2.5	2.33	2	1.83	2.5	2.5	2.5	2.5	2.5	2.5	2.5

Table 3.1.2.4: COs - POs of File Structures 10IS63 (Sixth Semester)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
10IS63.1	3	3	3	3	2	3	2	3	2	1	2	2
10IS63.2	3	3	3	3	2	3	2	3	2	2	2	2
10IS63.3	2	3	3	3	2	2	2	2	2	2	2	2
10IS63.4	3	2	3	2	2	2	2	2	2	2	2	2
10IS63.5	3	2	3	2	2	2	2	2	2	2	2	2
10IS63.6	3	3	2	2	2	2	2	2	2	2	2	2
Average	2.83	2.66	2.83	2.5	2	2.33	2	2.33	2	1.83	2	2

Table 3.1.2.5: COs - POs of Programming the Web 10CS73 (Seventh Semester)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
10CS73.1	3	3	3	3	3	2	2	2	2	3	1	3
10CS73.2	3	3	3	3	3	2	2	2	2	3	1	3
10CS73.3	3	3	2	2	3	2	2	2	2	2	2	3
10CS73.4	3	3	2	2	1	2	2	2	2	2	2	2
10CS73.5	2	2	2	2	3	2	2	2	2	2	2	2
10CS73.6	2	2	2	2	3	2	2	2	3	2	2	2
Average	2.66	2.66	2.33	2.33	2.66	2	2	2	2.16	2.33	1.66	2.5

Table 3.1.2.6: COs - POs of Software Architectures 10IS81 (Eighth Semester)

CO	PO 1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
10IS81.1	3	3	3	3	3	2	3	3	3	2	2	3
10IS81.2	3	3	3	3	2	2	3	3	3	2	2	3
10IS81.3	3	3	3	3	2	2	3	3	3	2	2	3
10IS81.4	2	2	2	2	2	2	2	2	2	2	2	2
10IS81.5	3	2	2	2	2	2	2	2	2	2	2	2
10IS81.6	2	2	2	2	2	2	1	2	2	2	2	2
Average	2.6 6	2.5	2.5	2.5	2.16	2	2.33	2.5	2.5	2	2	2.5

Note: Enter correlation levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

If there is no correlation, put “ - ”

2. Similar table is to be prepared for PSOs.

Table 3.1.2.7: COs - PSOs of Data Structures with C (Third Semester)

CO	PSO1	PSO2
10CS35.1	3	2
10CS35.2	3	2
10CS35.3	3	2
10CS35.4	3	2
10CS35.5	3	2
10CS35.6	3	2
AVERAGE	3	2

Table 3.1.2.8: COs - PSOs of Unix and Shell Programming (Fourth Semester)

CO	PSO1	PSO2
10CS44.1	2	3
10CS44.2	2	3
10CS44.3	2	3
10CS44.4	3	2
10CS44.5	3	2
10CS44.6	3	2
AVERAGE	2.5	2.5

Table 3.1.2.9: COs - PSOs of Software Engineering 10IS51 (Fifth Semester)

CO	PSO1	PSO2
10IS51.1	3	3
10IS51.2	3	3
10IS51.3	3	3
10IS51.4	3	3
10IS51.5	3	3
10IS51.6	3	3
AVERAGE	3	3

Table 3.1.2.10: COs - PSOs of File Structures 10IS63 (Sixth Semester)

CO	PSO1	PSO2
10IS63.1	3	3
10IS63.2	3	3
10IS63.3	3	3
10IS63.4	3	2
10IS63.5	3	2
10IS63.6	3	2
AVERAGE	3	2.5

Table 3.1.2.11: COs - PSOs of Programming the Web 10CS73 (Seventh Semester)

CO	PSO1	PSO2
10CS73.1	3	3
10CS73.2	3	3
10CS73.3	3	3
10CS73.4	3	2
10CS73.5	3	2
10CS73.6	3	2
AVERAGE	3	2.5

Table 3.1.2.12: COs - PSOs of Software Architectures 10IS81 (Eighth Semester)

CO	PSO1	PSO2
10IS81.1	2	3
10IS81.2	2	3
10IS81.3	2	3
10IS81.4	2	3
10IS81.5	2	3
10IS81.6	2	2
AVERAGE	2	2.83

3.1.3 Program level Course PO / PSOs matrix of ALL courses including first year courses (10)

Note: Enter correlation levels 1, 2 or 3 as defined below:

- Slight (Low)
- Moderate (Medium)
- Substantial (High); If there is no correlation, put “-”

Table 3.1.3.1: Mapping courses with PO's

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
I Semester												
10 MAT11	2.67	2.83	2.00	2.00	2.00	-	-	-	1.50	1.50	-	1.50
10 PHY12	3.00	3.00	3.00	1.00	-	-	1.00	-	2.33	1.00	-	2.00
10 CIV13	3.00	2.83	2.67	3.00	2.00	2.00	3.00	2.00	2.00	1.00	3.00	1.00
10 EME14	2.50	2.17	2.17	2.17	2.17	0.33	0.67	3.00	-	-	-	2.17
10 ELE15	3.00	3.00	2.00	-	1.00	1.00	1.00	-	-	-	-	2.00
10 WSL16	2.87	2.00	3.00	2.17	-	1.00	1.00	-	2.50	1.17	0.17	1.50
10 PHL17	3.00	2.20	2.20	1.00	-	-	1.00	-	3.00	1.00	-	2.00
10 CIP18	-	-	-	-	-	1.00	1.00	3.00	1.00	2.00	-	1.00
II Semester												
10MAT21	2.66	2.83	2.00	2.00	2.00	-	-	-	1.50	1.50	-	1.50
10CHE22	2.83	2.83	3.00	2.16	2.00	0.33	1.00	1.33	1.66	-	-	2.00
10CCP23	1.67	1.83	1.67	2.17	1.83	2.33	2.00	1.40	1.67	-	-	2.00
10CED24	3.00	2.00	2.00	2.00	2.83	1.00	1.00	-	-	-	-	2.00
10ELN25	3.00	2.83	2.00	1.00	1.00	1.60	1.50	1.00	2.17	1.00	1.20	2.00
10CPL26	1.33	1.50	1.83	2.00	1.50	2.20	1.50	-	2.00	-	-	1.40
10CHEL27	3.00	3.00	2.00	2.00	1.00	-	1.00	2.00	2.00	-	-	2.00
10CIV28	1.16	1.50	2.00	1.75	1.67	2.00	1.80	1.25	1.50	2.00	2.00	2.00

III Semester												
10MAT31	2.67	2.83	2.00	2.00	2.00	-	-	-	1.50	1.50	-	1.50
10CS32	2.33	2.33	2.16	2.33	2.00	-	2.00	-	-	-	-	1.50
10CS33	2.60	2.50	2.50	2.33	1.83	-	-	1.00	1.83	-	-	2.00
10CS34	3.00	2.83	2.50	2.50	2.00	1.50	2.17	2.50	2.00	2.00	2.17	1.00
10CS35	3.00	2.50	2.33	2.50	1.50	1.50	1.50	1.00	2.00	2.00	2.00	2.50
10CS36	3.00	3.00	3.00	2.50	1.50	2.00	1.50	2.00	2.00	2.00	2.00	2.50
10CSL37	2.83	2.60	2.60	2.50	1.50	2.00	2.00	2.00	1.00	2.00	2.00	2.50
10CSL38	2.00	2.50	2.00	2.50	2.00	2.00	2.00	2.00	2.00	-	-	2.00
IV Semester												
10MAT41	2.83	2.50	2.67	2.33	2.33	-	-	-	1.50	1.83	-	1.33
10CS42	2.83	2.50	2.67	2.33	2.33	-	-	-	1.50	1.83	-	1.33
10CS43	2.83	2.83	2.50	2.50	2.00	2.00	1.83	2.00	2.50	2.00	2.00	2.50
10CS44	2.83	2.60	2.50	2.16	1.66	1.66	1.83	1.00	2.00	2.00	2.00	2.00
10CS45	2.50	2.50	2.50	2.00	2.00	2.00	-	2.00	2.00	-	1.00	1.33
10CS46	2.50	2.50	2.16	2.00	2.00	-	1.00	-	-	2.00	1.00	2.00
10CSL47	2.50	2.60	2.70	2.50	2.00	2.00	1.83	2.00	2.50	2.00	2.00	2.50
10CSL48	2.50	2.50	2.50	2.50	2.00	2.00	2.33	2.00	2.00	-	-	2.00
V Semester												
10IS51	2.50	2.50	2.33	2.00	1.83	2.50	2.50	2.50	2.50	2.50	2.50	2.50
10CS52	2.66	2.60	2.50	2.00	2.00	-	2.00	2.00	0.83	2.00	1.50	2.00
10CS53	2.50	2.50	2.50	2.50	2.00	-	2.00	2.00	1.00	2.00	1.00	2.00
10CS54	3.00	3.00	3.00	2.50	2.50	2.50	2.00	2.00	2.00	2.30	2.00	2.50
10CS55	2.00	2.33	3.00	2.30	2.50	2.50	2.50	2.00	2.00	2.00	2.00	2.50
10CS56	2.83	2.83	3.00	2.33	2.50	2.00	-	2.00	-	2.00	-	2.00
10CSL57	3.00	3.00	3.00	2.50	2.50	2.50	2.50	2.50	2.00	2.00	2.00	2.50
10CSL58	2.50	2.50	2.16	2.50	2.50	2.50	2.50	2.50	2.00	2.00	2.00	2.50
VI Semester												
10AL61	2.20	2.20	2.67	2.67	2.00	3.00	2.67	3.00	3.00	2.00	3.00	2.00
10CS62	2.83	2.66	2.33	2.33	2.00	-	1.00	2.00	1.16	2.00	1.00	2.00
10IS63	2.83	2.66	2.83	2.50	2.00	2.33	2.00	2.33	2.00	1.83	2.00	2.00
10CS64	2.83	2.83	3.00	2.50	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
10IS65	2.83	2.66	2.50	2.50	2.00	2.00	2.00	2.00	2.50	2.00	2.00	2.00
10CS661	3.00	2.66	2.33	1.16	-	-	-	-	-	-	-	1.00
10ISL67	2.66	2.66	2.50	2.50	2.00	2.00	2.50	2.00	2.00	1.83	-	2.00
10CSL68	2.50	2.83	2.33	2.50	2.00	2.00	2.50	2.00	2.00	2.33	-	2.50
VII Semester												
10CS71	2.83	2.33	3.00	2.00	1.50	-	-	-	-	2.00	-	2.50
10IS72	2.66	2.50	2.16	2.33	1.50	2.30	1.83	2.30	2.00	2.50	2.00	2.50
10CS73	2.66	2.66	2.33	2.33	2.66	2.00	2.00	2.00	2.16	2.33	1.66	2.50
10IS74	2.83	2.33	2.00	2.33	2.50	2.00	1.16	2.00	1.00	2.00	1.16	2.50
10CS753	2.50	2.33	2.33	2.00	2.50	2.00	2.00	2.00	2.00	2.50	2.00	2.50
10CS765	3.00	2.00	2.50	1.83	2.00	2.30	1.30	2.30	2.00	2.50	2.00	2.50
10CSL77	2.50	2.33	2.16	2.50	2.00	2.30	2.50	2.30	2.00	2.00	2.00	2.50
10CSL78	2.66	2.66	2.70	2.50	2.50	2.30	2.50	2.30	2.00	2.00	1.00	2.50

VIII Semester												
10IS81	2.66	2.50	2.50	2.50	2.16	2.00	2.33	2.50	2.50	2.00	2.00	2.50
10CS82	2.50	2.50	2.33	2.33	2.00	2.16	2.16	2.16	2.16	2.16	2.00	2.33
10IS833	2.16	2.16	2.66	2.00	1.83	2.16	2.16	2.16	2.00	1.83	2.00	2.50
10CS835	2.00	2.00	2.50	2.00	1.00	2.00	2.50	2.00	2.50	-	-	2.50
10CS843	1.33	1.83	2.50	2.33	1.66	2.00	1.83	2.00	0.33	-	-	2.00
10IS845	2.33	1.83	1.83	1.16	2.16	2.00	1.83	2.30	2.30	1.33	1.66	2.33
10IS85	3.00	3.00	3.00	3.00	3.00	2.50	2.50	2.50	2.50	2.50	2.50	3.00
10IS86	3.00	3.00	3.00	3.00	3.00	2.50	2.50	2.50	2.50	2.50	2.50	3.00

Table.3.1.3.2: PSOs ATTAINMENT POINTS

Course	PSO1	PSO2
I-SEMESTER		
10MAT11	-	-
10PHY12/22	-	-
10CIV13/23	1	-
10EME14/24	3	3
10ELE15/25	2.33	1.33
10WSL16/26	3	3
10PHYL17/27	-	-
10CIP18/28	-	-
II-SEMESTER		
10MAT21	-	-
10CHE12/22	-	-
10CCP13/23	3	2
10CAED14/24	3	3
10ELN15/25	2	2
10CCPL16/26	3	2
10CHEL17/27	-	-
10CIV18/28	1	-
III-SEMESTER		
10MAT31	1	1
10CS32	1	1
10CS33	2	2
10CS34	2	1
10CS35	3	2
10CS36	3	2
10CSL37	3	2
10CSL38	2	2
IV-SEMESTER		
10MAT41	1	1
10CS42	1	1
10CS43	3	2
10CS44	2.5	2.5
10CS45	2	2
10CS46	2	2

10CSL47	3	2.5
10CSL48	2	2.5
V-SEMESTER		
10IS51	3	3
10CS52	3	2.5
10CS53	3	2.5
10CS54	3	2.33
10CS55	3	2.33
10CS56	3	2
10CSL57	3	2.5
10CSL58	3	2.5
VI-SEMESTER		
10AL61	2.33	2.5
10CS62	3	2.5
10IS63	3	2.5
10CS64	3	2
10IS65	2	2.83
10CS661	2	2
10ISL67	2.83	2.5
10CSL68	2.5	2.5
VII-SEMESTER		
10CS71	2	2.5
10IS72	2.33	2.5
10CS73	3	2.5
10IS74	2.16	2
10CS753	3	2.5
10CS765	2	2.5
10CSL77	3	2
10CSL78	3	2.83
VIII-SEMESTER		
10IS81	2	2.83
10CS82	2	2.5
10IS833	1.33	2.3
10CS835	1.83	1.83
10CS843	1.66	1.66
10IS845	1.33	2.33
10IS85	3	3
10IS86	3	3

3.2 Attainment of Course Outcomes (50)

3.2.1 Describe the assessment processes used to gather the data upon which the evaluation of course outcome is based (10)

(Examples of data collection processes may include, but are not limited to , specific exam/tutorial questions, assignments, laboratory tests, project evaluation, student portfolios (A portfolio is a collection of artifacts that demonstrate skills, personal characteristics and accomplishments created by the student during study period), internally developed assessment exams, project presentations, oral exams etc.)

The key aspects in Outcome-Based Education (OBE) are the assessment of course outcomes. At the initial stage of OBE implementation, the Course Outcomes (CO's) for each course are defined based on the Programme Outcome (PO's). At the end of each course, the COs needs to be assessed and evaluated, to check whether it has been attained or not.

Assessment is the process carried out by the department that identify, collect, and prepare data to evaluate the achievement of programme educational objectives and programme Outcomes.

Attainment is the action or fact of achieving a standard result towards accomplishment of desired goals. Primarily attainment is the standard of academic attainment as observed by test or examination result.

Attainment displays the student's knowledge and skills from their performance. It can be determined from the performance of the students in all the relevant assessment instruments – like internal assessments, assignments, quiz and final university examination. These methods provide a sampling of what students know and/or can do and provide strong evidence of student learning.

Internal Tests/Exams:

- The Internal Assessment marks in theory papers shall be based on two tests generally conducted every month once, each semester as per the calendar of events.
- An additional test may be conducted for the desirous students before the end of the semester to give an opportunity to such students to improve the Internal Assessment marks.
- There shall be a maximum of 25 Internal Assessment Marks in each theory subjects.
- Question papers for the corresponding course will be prepared by the respective course coordinator and will be submitted to the Internal Test Coordinator well in advance.

The Test Coordination team consists of following faculties:

Faculty Name	Designation
Mrs.Vandana CP	Asst.Professor
Mrs.A.Rafega Beham	Asst.Professor

Students' performance in the IA test is evaluated as per the scheme and solution prepared by the corresponding course Instructors.

Laboratory Exam Evaluation:

- The Internal Assessment marks shall be based on the laboratory reports and practical test.
- The laboratory in-charge will conduct the practical test.
- There shall be a maximum of 25 Internal Assessment Marks in each practical paper and 50% (Minimum 13 marks) of Internal Assessment is mandatory in order to obtain the eligibility to appear for the university practical examination.
- The evaluation procedure for laboratory programs are done by the laboratory In-Charge(s) based on the following parameters:
- Divided into two components: Continuous Assessment: 15 marks

Internal Test : 10 marks

Continuous Assessment:

1) Will be carried in every lab

2) Each lab / Program will be evaluated for 15 Marks.

Break up of 15 marks:

Sl.No	Attributes	Descriptors	Scores
1	Program Write Up (5)	1) Complete Program with correct syntax.	5
		2) Complete program,not proper syntax.	3
		3)Incomplete Code	2
		4)Not Written	0
2	Execution & Result(5)	1) Proper output for all the test cases.	5
		2) Proper output for specified test cases.	4
		3) Fails in some test cases.	3
		4) Incomplete Execution.	0
3	Viva(2)	1) Answers Correctly.	2
		2) Satisfactorily.	1
		3)Do not Answer	0
4	Record Submission(3)	1) Submits in time and Completed.	3
		2)Fails to submit the record in time / incomplete	0

Seminar Work Evaluation:

One seminar will be conducted per student in the final year (8th semester) by a committee consisting of the Head of the Department and two senior faculty members of the department.

The Chief Committee members are:

Faculty Name	Designation
Dr. Jitendranath Mungara	Professor and Head
Dr. Guruprasad	Professor
Dr. Vishwanath .Y	Professor

- Seminar topic shall be selected from the emerging technical areas.
- The Internal Assessment marks are given based on the evaluation done by the committee members (Head of the Department and Seminar Coordinator(s)) along with the guide and reviewer following the rubrics set by the department as follows:

Rubrics for Seminar Evaluation:

Innovativeness of the topic	5 MARKS
Technical Content	15 MARKS
Delivery (Oral delivery, contact with audience, slides, timing)	10 MARKS
Subject knowledge and Quality of Answers	10 MARKS
Presentation of the report (Organization, Clarity, Use of figures/ diagrams, Use of English)	10 MARKS

The marks will be submitted to the department once the evaluation is done and 40% of Internal Assessment mark is the minimum requirement.

Project Work Evaluation:

- Project work at 8th semester shall be completed batch wise, each batch consisting of a maximum of four candidates.
- The Project Coordinator(s) gives the instructions to the students by the end of 7th Semester and project batches are formed among the student.
- The Project Coordination team consists of the following faculty members:

Faculty Name	Designation
Dr. Jitendranath Mungara	Professor and Head
Dr. Guruprasad	Professor
Dr. Vishwanath .Y	Professor

- Students will submit the synopsis of their project to the project coordinator(s) for scrutinizing.
- By the end of 7th semester zeroth review will be conducted to the students in order to approve and finalize the selected topic on the area of specialization and competency skills of the faculties, project coordinator(s) will allocate the batches to the internal guides.
- The internal guide will continuously guide and monitor the students on weekly basis and get the updates of the works done by their corresponding batch of students.
- The Internal Assessment marks in case of project shall be based on the evaluation at the end of 8th semester by the committee consisting of Head of the Department, Project Coordinator(s) and faculty members of the department whom shall be the project guide.
- The Internal Assessment marks will be submitted to the department once the evaluation is done and 50% is the minimum requirement in order to obtain the eligibility to appear for the university project viva voce.
- Viva-voce examination in project work shall be conducted batch-wise by the panel of members assigned by the university. Based on the performance of the students, the external viva voce marks are awarded and the same is submitted to the university.
- The department encourages the students to showcase their skills by publishing papers in conferences/journals forum and participating in technical paper presentations.

Rubrics for Project Evaluation:

Project Objective Formulation and Design	30 MARKS
Literature Survey and Method	20 MARKS
Demo (Working and completeness)	30 MARKS
Presentation of the report (Organization, Clarity, Use of figures/ diagrams, Use of English)	10 MARKS
Quality of Answers	10 MARKS

3.2.2. Record the Attainment of Course Outcomes of all Courses with Respect to Set Attainment Levels (40)

Program shall have set Course Outcome attainment levels for all courses. (The attainment levels shall be set considering average performance levels in the university examination or any higher value set as target for the assessment years. Attainment level is to be measured in terms of student performance in internal assessments with respect to

the Course Outcomes of a course in addition to the performance in the University examination).

Example related to attainment levels Vs. targets: (The examples indicated are for reference only. Program may appropriately define levels)

Attainment Level 1: 60% students scoring more than University average percentage marks or set attainment level in the final examination.

Attainment Level 2: 70% students scoring more than University average percentage marks or set attainment level in the final examination.

Attainment Level 3: 80% students scoring more than University average percentage marks or set attainment level in the final examination.

Attainment is measured in terms of actual percentage of students getting set percentage of marks.

If targets are achieved then all the course outcomes are attained for that year. Program is expected to set higher targets for the following years as a part of continuous improvement.

If targets are not achieved the program should put in place an action plan to attain the target in subsequent years.

Measuring COs attained through University Examinations

Target may be stated in terms of percentage of students getting more than the university average marks or more as selected by the Program in the final examination. For cases where the university does not provide useful indicators like average or median marks etc., the program may choose an attainment level on its own with justification.

Measuring COs attainment through Internal Assessments :(The examples indicated are for reference only, Program may appropriately define levels).

Target may be stated in terms of percentage of students getting more than class average marks or set by the program in each of the associated COs in the assessment instruments (midterm tests, assignments, mini projects, reports and presentations etc. as mapped with the COs)

Example

Mid-term test 1 addresses C202.1 and C202.2. Out of the maximum 20 marks for this test 12 marks are associated with C202.1 and 8 marks are associated with C202.2. Examples related to attainment levels vs. targets:

Attainment Level 1: 60% students scoring more than 60% marks out of the relevant maximum marks.

Attainment Level 2: 70% students scoring more than 60% marks out of the relevant maximum marks.

Attainment Level 3: 80% students scoring more than 60% marks out of the relevant maximum marks.

Attainment is measured in terms of actual percentage of students getting set percentage of marks.

If targets are achieved then the C202.1 and C202.2 are attained for that year. Program is expected to set higher targets for the following years as a part of continuous improvement.

If targets are not achieved the program should put in place an action plan to attain the target in subsequent years.

Similar targets and achievement are to be stated for the other midterm tests/internal assessment instruments.

Course Outcome Attainment:

For example:

Attainment through University Examination: Substantial i.e. 3

Attainment through Internal Assessment: Moderate i.e. 2

Assuming 80% weightage to University examination and 20% weightage to Internal assessment, the attainment calculations will be (80% of University level) + (20% of Internal level) i.e. 80% of 3 + 20% of 2 = 2.4 + 0.4 = 2.8.

Target Set and Attainment levels of Cos (Internal Assessment)(Batch: 2013-2017)

SUBJECT CATEGORY	SUBJECT NAME & CODE	TARGET SET (MARKS) Stated in terms of number of students scoring greater than or equal to the respective marks in the internal assessment for a maximum marks of 25.	TARGET ATTAINMENT LEVEL (PERCENTAGE) Respective percentage of the students scoring greater than or equal to the respective marks in the internal assessment is set as an attainment level and if the targets are achieved then all the course outcomes of the respective subject are attained for that year.
Basic sciences	Engineering Mathematics I, II & III (10MAT11, 21, 31,41)	≥17	65%
	Engineering Physics (10PHY12)		
	Engineering Chemistry (10CHE22)		
	Constitution of India & Professional Ethics		

	(10CIP18)		
	Environmental Sciences (10CIV28)		
	Discrete Mathematics (10CS34)		
	Graph Theory and Combinatorics(10CS42)		
Associated engineering sciences	Elements of Civil Engineering (10CIV13)	≥17	60%
	Elements of Mechanical Engineering (10EME14)		
	Basic Electrical Engineering (10ELE15)		
	Computer Aided Engineering Drawing (10CAED24)		
	Basic Electronics (10ELN25)		
	Electronic Circuits(10CS32)		
	Micro Processor (10CS45)		
Professional Core Subjects	Computer Concepts & C Programming(10CCP23)	≥17	65%
	• Logic Design(10CS33)		
	• Data Structures(10CS35)		
	• Object Oriented Programming with C++(10CS36)		
	• Design and Analysis of Algorithms(10CS43)		
	• Unix and Shell Programming(10CS44)		
	• Computer Organization(10CS45)		
	• System Software(10CS52)		
	• Database Management Systems(10CS54)		
	• Computer Networks-I(10CS55)		
	• Formal Languages and Automata Theory(10CS56)		
	• Unix System and Programming(10CS62)		
	• Object Oriented Modelling and Design(10CS71)		
	• Information Systems(10IS72)		
	• Programming the Web(10CS73)		
	• Data ware house and Data Mining(10IS74)		
	• Java AND J2EE(10IS753)		
	• Storage Area Networks(10CS765)		
	• Software Architectures(10IS81)		
	• System Modelling and Simulation(10CS82)		
	• User Interface and Design(10IS833)		
	• Supply Chain Management(10IS843)		
	• Information and Network Security(10IS835)		
	• Clouds, Grids and Clusters(10IS845)		

Professional Core Subjects	• Software Engineering(10IS51) • Operating Systems(10CS53) • Management and Entrepreneurship(10AL61) • File Structures(10IS63) • Computer Networks-II(10CS64) • Software Testing(10IS65) • Operations Research(10CS661)	≥ 20	65%
Project Work	Project Work (10IS85)	Stated in terms of number of students scoring greater than or equal 80 marks in the internal assessment for a maximum mark of 100.	65% of the students scoring greater than or equal to the 80 marks in the internal assessment is set as an attainment level and if the targets are achieved then all the course outcomes are attained for that year.
Seminar	Seminar (10IS86)	Stated in terms of number of students scoring greater than or equal 35 marks in the internal assessment for a maximum mark of 50.	65% of the students scoring greater than or equal to the 35 marks in the internal assessment is set as an attainment level and if the targets are achieved then all the course outcomes are attained for that year.

Laboratories	- Workshop Lab (WSL16), - Engineering Physics Lab(10PHYL17), - Engineering Chemistry Lab (10CHEL27) - Computer Programming Lab(10CPL26) - Data Structures with C/C++ Lab (10CSL37) - Electronics Lab(10CSL38) - Design and Analysis Algorithms(10CSL47) - Microprocessor Lab(10CSL48) - Database Applications Lab(10CSL57) - System Software and Operating Systems Lab (10CSL58) - File Structures Lab (10ISL67) - Software Testing Lab(10ISL68) - Computer Networks Lab (10CSL77) - Web Programming Lab (10CSL78)	Stated in terms of number of students scoring greater than or equal 17 marks in the internal assessment for a maximum mark of 25.	65% of the students scoring greater than or equal to the 17 marks in the internal assessment is set as an attainment level and if the targets are achieved then all the course outcomes are attained for that year.

Table 3.2.2.1: Target and Attainment Levels of COs using Internal Assessment for batch (2013-2017)

Course	INTERNAL ASSESSMENTS (COLLEGE EXAMS)											
	Targeted Percentage of Cos						Attainment Percentage of COs					
	CO1	CO2	CO3	CO4	CO5	CO6	CO1	CO2	CO3	CO4	CO5	CO6
I Semester												
10MAT11	65	65	65	65	65	65	86	86	86	86	86	86
10PHY12	65	65	65	65	65	65	89	89	89	89	89	89
10CIV13	60	60	60	60	60	60	97	97	97	97	97	97
10EME14	60	60	60	60	60	60	91	91	91	91	91	91
10ELE15	60	60	60	60	60	60	86	86	86	86	86	86
10WSL16	65	65	65	65	65	65	88	88	88	88	88	88
10PHYL17	65	65	65	65	65	65	96	96	96	96	96	96
10CIP18	65	65	65	65	65	65	98	98	98	98	98	98
II Semester												
10MAT21	65	65	65	65	65	65	98	98	98	98	98	98
10CHE22	65	65	65	65	65	65	91	91	91	91	91	91
10CCP23	65	65	65	65	65	65	85	85	85	85	85	85
10CAED24	60	60	60	60	60	60	96	96	96	96	96	96
10ELN25	60	60	60	60	60	60	84	84	84	84	84	84
10CPL26	65	65	65	65	65	65	88	88	88	88	88	88
10CHEL27	65	65	65	65	65	65	99	99	99	99	99	99
10CIV28	65	65	65	65	65	65	97	97	97	97	97	97
III Semester												
10MAT31	65	65	65	65	65	65	86	86	86	86	86	86
10CS32	60	60	60	60	60	60	85	85	85	85	85	85
10CS33	65	65	65	65	65	65	96	96	96	96	96	96

10CS34	65	65	65	65	65	65	97	97	97	97	97	97
10CS35	65	65	65	65	65	65	97	97	97	97	97	97
10CS36	65	65	65	65	65	65	95	95	95	95	95	95
10CSL37	65	65	65	65	65	65	95	95	95	95	95	95
10CSL38	65	65	65	65	65	65	88	88	88	88	88	88
IV Semester												
10MAT41	65	65	65	65	65	65	87	87	87	87	87	87
10CS42	65	65	65	65	65	65	87	87	87	87	87	87
10CS43	65	65	65	65	65	65	77	77	77	77	77	77
10CS44	65	65	65	65	65	65	89	89	89	89	89	89
10CS45	60	60	60	60	60	60	68	68	68	68	68	68
10CS46	65	65	65	65	65	65	88	88	88	88	88	88
10CSL47	65	65	65	65	65	65	92	92	92	92	92	92
10CSL48	65	65	65	65	65	65	86	86	86	86	86	86
V Semester												
10IS51	65	65	65	65	65	65	82	82	82	82	82	82
10CS52	65	65	65	65	65	65	85	85	85	85	85	85
10CS53	65	65	65	65	65	65	100	100	100	100	100	100
10CS54	65	65	65	65	65	65	95	95	95	95	95	95
10CS55	65	65	65	65	65	65	90	90	90	90	90	90
10CS56	65	65	65	65	65	65	95	95	95	95	95	95
10CSL57	65	65	65	65	65	65	95	95	95	95	95	95
10CSL58	65	65	65	65	65	65	95	95	95	95	95	95
VI Semester												
10AL61	65	65	65	65	65	65	100	100	100	100	100	100
10CS62	65	65	65	65	65	65	86	86	86	86	86	86
10IS63	65	65	65	65	65	65	84	84	84	84	84	84
10CS64	65	65	65	65	65	65	88	88	88	88	88	88
10IS65	65	65	65	65	65	65	86	86	86	86	86	86
10CS661	65	65	65	65	65	65	86	86	86	86	86	86
10ISL67	65	65	65	65	65	65	95	95	95	95	95	95
10ISL68	65	65	65	65	65	65	96	96	96	96	96	96
VII Semester												
10CS71	65	65	65	65	65	65	87	87	87	87	87	87
10IS72	65	65	65	65	65	65	92	92	92	92	92	92
10CS73	65	65	65	65	65	65	90	90	90	90	90	90
10IS74	65	65	65	65	65	65	84	84	84	84	84	84
10CS753	65	65	65	65	65	65	79	79	79	79	79	79
10CS765	65	65	65	65	65	65	86	86	86	86	86	86
10CSL77	65	65	65	65	65	65	86	86	86	86	86	86
10CSL78	65	65	65	65	65	65	95	95	95	95	95	95
VIII Semester												
10IS81	65	65	65	65	65	65	92	92	92	92	92	92
10CS82	65	65	65	65	65	65	86	86	86	86	86	86
10IS833	65	65	65	65	65	65	93	93	93	93	93	93

10IS835	65	65	65	65	65	65	98	98	98	98	98	98
10IS843	65	65	65	65	65	65	96	96	96	96	96	96
10IS845	65	65	65	65	65	65	93	93	93	93	93	93
10IS85	65	65	65	65	65	65	98	98	98	98	98	98
10IS86	65	65	65	65	65	65	98	98	98	98	98	98

Target Vs. Attainment Levels

For subjects whose Internal assessment target set greater than or equal to 17 (≥ 17) in the internal assessment for a maximum marks of 25 in category-1	For subjects whose internal assessment target set greater than or equal to 17 (≥ 17) in the internal assessment for a maximum marks of 25 in category-2	For subjects whose internal assessment target set greater than or equal to 20 (≥ 20) in the internal assessment for a maximum marks of 25 in category-3
Attainment Level 1: 60% students scoring greater than or equal to the set attainment level.	Attainment Level 1: 65% students scoring greater than or equal to the set attainment level.	Attainment Level 1: 65% students scoring greater than or equal to the set attainment level.
Attainment Level 2: 65% students scoring greater than or equal to the set attainment level.	Attainment Level 2: 75% students scoring greater than or equal to the set attainment level.	Attainment Level 2: 75% students scoring greater than or equal to the set attainment level.
Attainment Level 3: 75% students scoring greater than or equal to the set attainment level.	Attainment Level 3: 85% students scoring greater than or equal to the set attainment level.	Attainment Level 3: 85% students scoring greater than or equal to the set attainment level.

Target set and Attainment Levels of COs for External Assessments-University Examination for Batch: 2013-2017

SUBJECT CATEGORY	SUBJECT NAME & CODE	TARGET SET (MARKS) Stated in terms of number of students scoring greater than or equal to the respective marks in the external assessment for a maximum mark of 100.	TARGET ATTAINMENT LEVEL (PERCENTAGE) Respective percentage of the students scoring greater than or equal to the respective marks in the external assessment is set as an attainment level and if the targets are achieved then all the course outcomes of the respective subject are attained for that year.
Basic sciences and humanities	Engineering Mathematics I, II, III & IV (10MAT11, 21, 31, 41)	≥ 35	75%
	Engineering Physics (10PHY12)		
	Engineering Chemistry (10CHE22)		
	Constitution of India & Professional Ethics (10CIP18)		
	Environmental Sciences (10CIV28)		
	Discrete Mathematics (10CS34)		
	Graph Theory and Combinatorics (10CS42)		

Associated engineering sciences	Elements of Civil Engineering (10CIV13)	≥35	70%
	Elements of Mechanical Engineering (10EME14)		
	Basic Electrical Engineering (10ELE15)		
	Computer Aided Engineering Drawing (10CAED24)		
	Basic Electronics (10ELN25)		
	Electronic Circuits(10CS32)		
	Micro Processor (10CS45)		
Professional Core Subjects	Computer Concepts & C Programming(10CCP23)	≥35	80%
	• Logic Design(10CS33) • Data Structures(10CS35) • Object Oriented Programming with C++(10CS36) • Design and Analysis of Algorithms(10CS43) • Unix and Shell Programming(10CS44) • Computer Organization(10CS45) • System Software(10CS52) • Database Management Systems(10CS54) • Computer Networks-I(10CS55) • Formal Languages and Automata Theory(10CS56) • Unix System and Programming(10CS62) • Object Oriented Modelling and Design(10CS71) • Information Systems(10IS72) • Programming the Web(10CS73) • Data ware house and Data Mining(10IS74) • Java AND J2EE(10IS753) • Storage Area Networks(10CS765) • Software Architectures(10IS81) • System Modelling and Simulation(10CS82) • User Interface and Design(10IS833) • Supply Chain Management(10IS843) • Information and Network Security(10IS835) • Clouds, Grids and Clusters(10IS845)		

Professional Core Subjects	• Software Engineering(10IS51) • Operating Systems(10CS53) • Management and Entrepreneurship(10AL61) • File Structures(10IS63) • Computer Networks-II(10CS64) • Software Testing(10IS65) • Operations Research(10CS661)	≥ 35	80%
Project Work	Project Work (10IS85)	Stated in terms of number of students scoring greater than or equal 80 marks in the external assessment for a maximum mark of 100.	85% of the students scoring greater than or equal to the 80 marks in the external assessment is set as an attainment level and if the targets are achieved then all the course outcomes are attained for that year.
Seminar	Seminar (10IS86)	-	-
Laboratories	• Workshop Lab (WSL16), • Engineering Physics Lab(10PHYL17), • Engineering Chemistry Lab (10CHEL27), • Computer Programming Lab (10CPL26), • Data Structures with C/C++ Lab (10CSL37), • Electronics Lab(10CSL38), • Design and Analysis of Algorithms(10CSL47), • Microprocessor Lab(10CSL48), • Database Applications Lab (10CSL57), • System Software and Operating Systems Lab (10CSL58), • File Structures Lab (10ISL67), • Software Testing Lab(10ISL68), • Computer Networks Lab (10CSL77), • Web Programming Lab (10CSL78)	Stated in terms of number of students scoring greater than or equal 20 marks in the external assessment for a maximum mark of 50.	90% of the students scoring greater than or equal to the 20 marks in the external assessment is set as an attainment level and if the targets are achieved then all the course outcomes are attained for that year.

Table -3.2.2.2: Target and Attainment Levels of COs using External Assessment for batch (2013-2017)

Course	EXTERNAL ASSESSMENTS (UNIVERSITY EXAMS)											
	Targeted Percentage of COs						Attainment Percentage of Cos					
	CO1	CO2	CO3	CO4	CO5	CO6	CO1	CO2	CO3	CO4	CO5	CO6
I Semester												
10MAT11	75	75	75	75	75	75	95	95	95	95	95	95
10PHY12	75	75	75	75	75	75	97	97	97	97	97	97
10CIV13	70	70	70	70	70	70	97	97	97	97	97	97
10EME14	70	70	70	70	70	70	100	100	100	100	100	100
10ELE15	70	70	70	70	70	70	93	93	93	93	93	93
10WSL16	90	90	90	90	90	90	100	100	100	100	100	100
10PHYL17	90	90	90	90	90	90	100	100	100	100	100	100
10CIP18	75	75	75	75	75	75	95	95	95	95	95	95
II Semester												
10MAT21	75	75	75	75	75	75	100	100	100	100	100	100
10CHE22	75	75	75	75	75	75	98	98	98	98	98	98
10CIP23	75	75	75	75	75	75	99	99	99	99	99	99
10CED24	70	70	70	70	70	70	99	100	100	100	100	100
10ELN25	70	70	70	70	70	70	97	97	97	97	97	97
10CPL26	90	90	90	90	90	90	100	100	100	100	100	100
10CHEL27	90	90	90	90	90	90	100	100	100	100	100	100
10CIV28	75	75	75	75	75	75	98	98	98	98	98	98
III Semester												
10MAT31	75	75	75	75	75	75	100	100	100	100	100	100
10CS32	70	70	70	70	70	70	77	75	75	75	75	75
10CS33	80	80	80	80	80	80	97	97.9	97.9	97.9	97.9	97.9
10CS34	80	80	80	80	80	80	93	94.7	94.7	94.7	94.7	94.7
10CS35	75	75	75	75	75	75	99	98.9	98.9	98.9	98.9	98.9
10CS36	80	80	80	80	80	80	98	97.9	97.9	97.9	97.9	97.9
10CSL37	90	90	90	90	90	90	100	100	100	100	100	100
10CSL38	90	90	90	90	90	90	100	100	100	100	100	100
IV Semester												
10MAT41	75	75	75	75	75	75	97	97	97	97	97	97
10CS42	75	75	75	75	75	75	92	92	92	92	92	92
10CS43	80	80	80	80	80	80	98	98	98	98	98	98
10CS44	80	80	80	80	80	80	96	96	96	96	96	96
10CS45	70	70	70	70	70	70	93	93	93	93	93	93
10CS46	80	80	80	80	80	80	99	99	99	99	99	99
10CSL47	90	90	90	90	90	90	99	99	99	99	99	99
10CSL48	90	90	90	90	90	90	99	99	99	99	99	99

V Semester												
10IS51	80	80	80	80	80	80	90	90	90	90	90	90
10CS52	80	80	80	80	80	80	100	100	100	100	100	100
10CS53	80	80	80	80	80	80	91	91	91	91	91	91
10CS54	80	80	80	80	80	80	100	100	100	100	100	100
10CS55	80	80	80	80	80	80	97	97	97	97	97	97
10CS56	80	80	80	80	80	80	98	98	98	98	98	98
10CSL57	90	90	90	90	90	90	100	100	100	100	100	100
10CSL58	90	90	90	90	90	90	100	100	100	100	100	100
VI Semester												
10CS61	80	80	80	80	80	80	100	100	100	100	100	100
10CS62	80	80	80	80	80	80	98	98	98	98	98	98
10IS63	80	80	80	80	80	80	100	100	100	100	100	100
10CS64	80	80	80	80	80	90	99	99	99	99	99	99
10IS65	80	80	80	80	80	80	97	97	97	97	97	97
10CS661	80	80	80	80	80	80	100	100	100	100	100	100
10ISL67	90	90	90	90	90	90	100	100	100	100	100	100
10ISL68	90	90	90	90	90	90	100	100	100	100	100	100
VII Semester												
10CS71	80	80	80	80	80	80	95	95	95	95	95	95
10IS72	80	80	80	80	80	80	100	100	100	100	100	100
10CS73	80	80	80	80	80	80	97	97	97	97	97	97
10IS74	80	80	80	80	80	80	96	96	96	96	96	96
10CS753	80	80	80	80	80	80	100	100	100	100	100	100
10CS765	80	80	80	80	80	80	99	99	99	99	99	99
10CSL77	90	90	90	90	90	90	100	100	100	100	100	100
10CSL78	90	90	90	90	90	90	100	100	100	100	100	100
VIII Semester												
10IS81	80	80	80	80	80	80	97	97	97	97	97	97
10IS82	80	80	80	80	80	80	100	100	100	100	100	100
10IS833	80	80	80	80	80	80	100	100	100	100	100	100
10IS835	80	80	80	80	80	80	99	99	99	99	99	99
10IS843	80	80	80	80	80	80	100	100	100	100	100	100
10IS845	80	80	80	80	80	80	100	100	100	100	100	100
10IS85	85	85	85	85	85	85	98	98	98	98	98	98

Attainment Levels vs. Targets for External Assessment

Assessment Category 1	Assessment Category 2	Assessment Category 3
Attainment Level 1: 75% students scoring the set attainment level in the final examination.	Attainment Level 1: 70% students scoring the set attainment level in the final examination.	Attainment Level 1: 80% students scoring the set attainment level in the final examination.
Attainment Level 2: 85% students scoring the set attainment level in the final examination.	Attainment Level 2: 80% students scoring the set attainment level in the final examination	Attainment Level 2: 85% students scoring the set attainment level in the final examination.

Attainment Level 3: 95% (and above) students scoring the set attainment level in the final examination.

Attainment Level 3: 90% (and above) students scoring the set attainment level in the final examination.

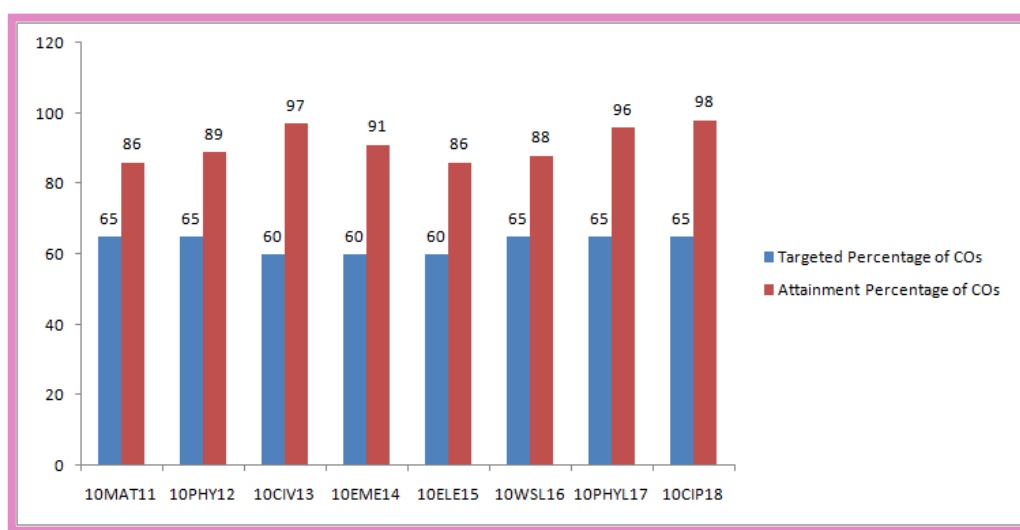
Attainment Level 3: 90% (and above) students scoring the set attainment level in the final examination.

CO ATTAINMENT GRAPHS:

INTERNAL ASSESSMENT:

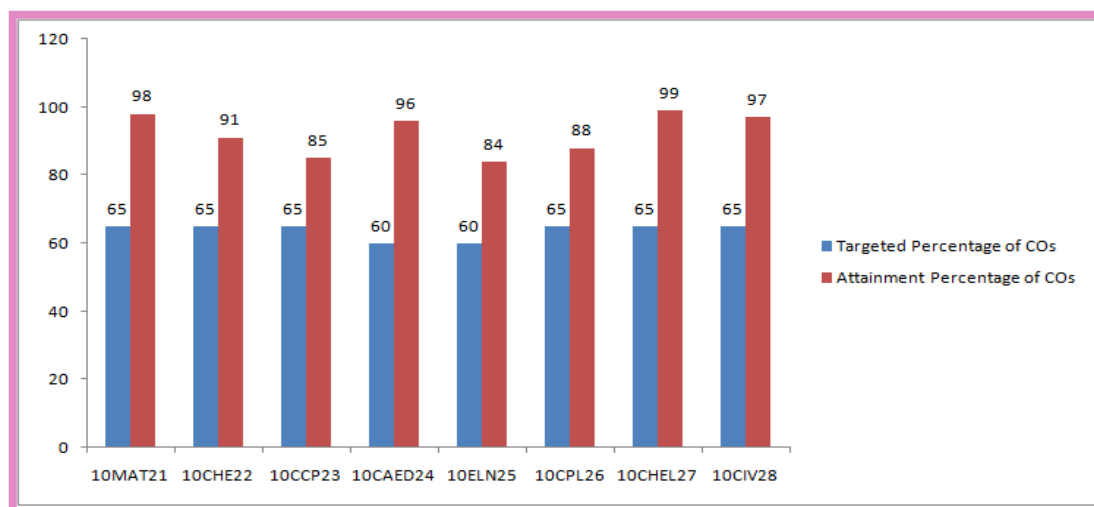
Semester-I

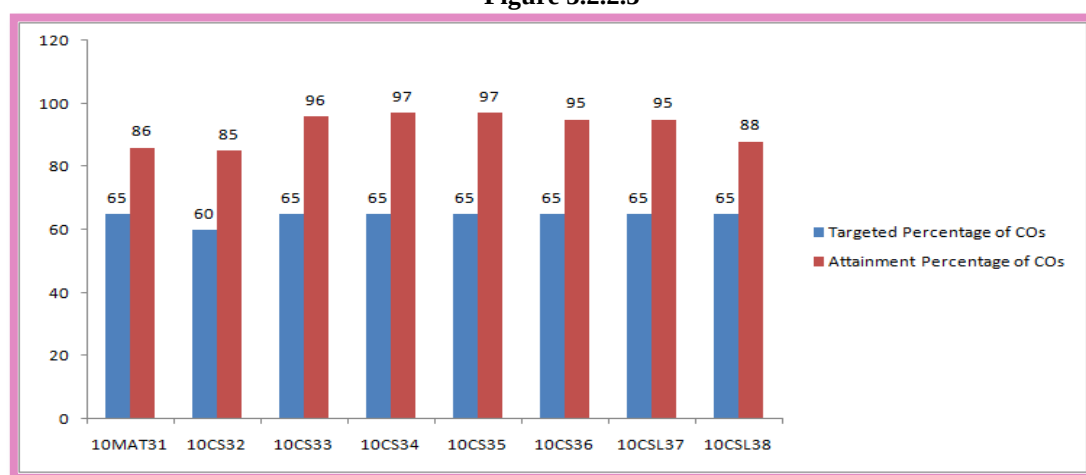
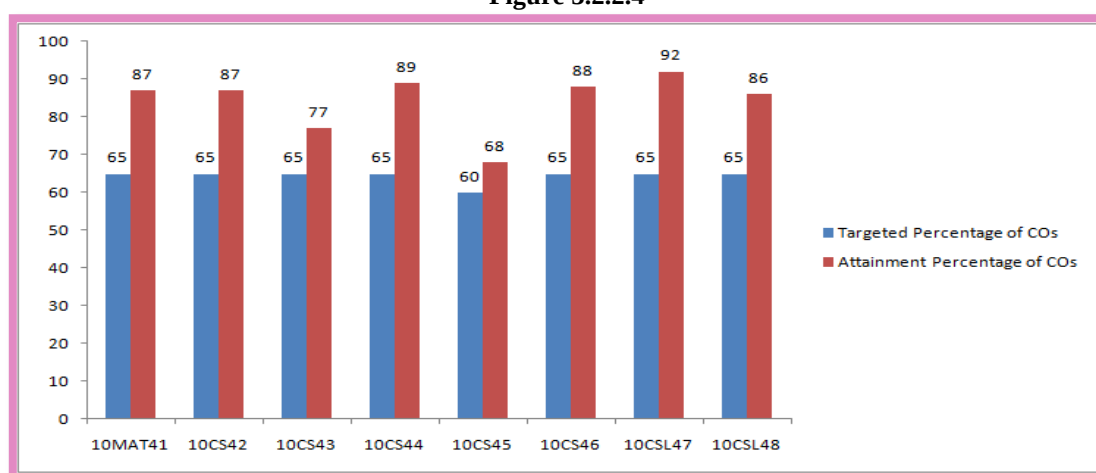
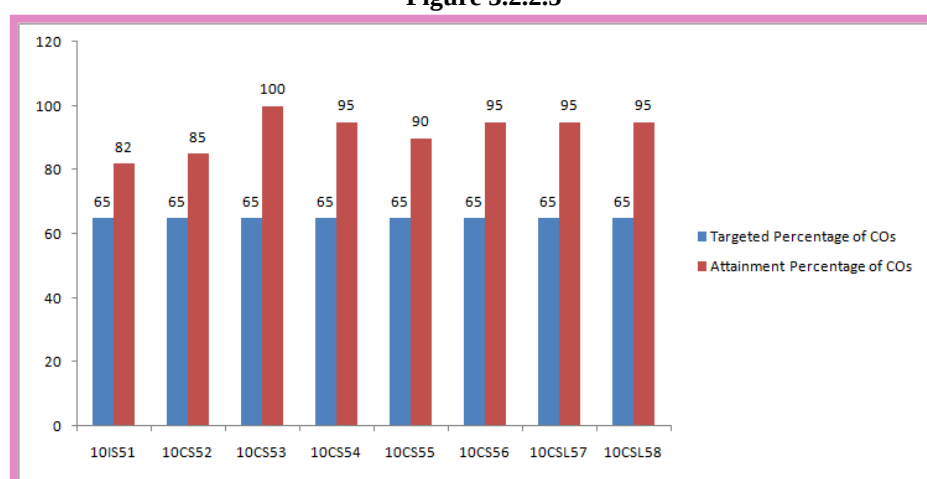
Figure 3.2.2.1

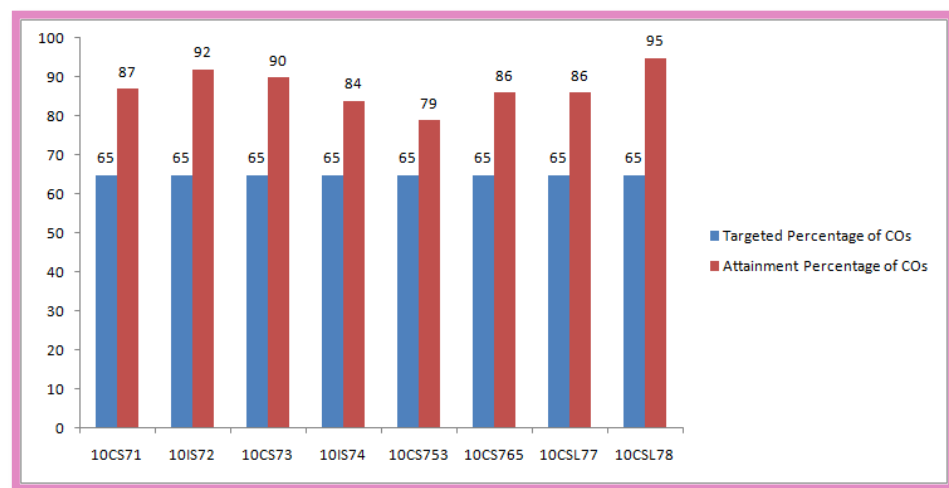
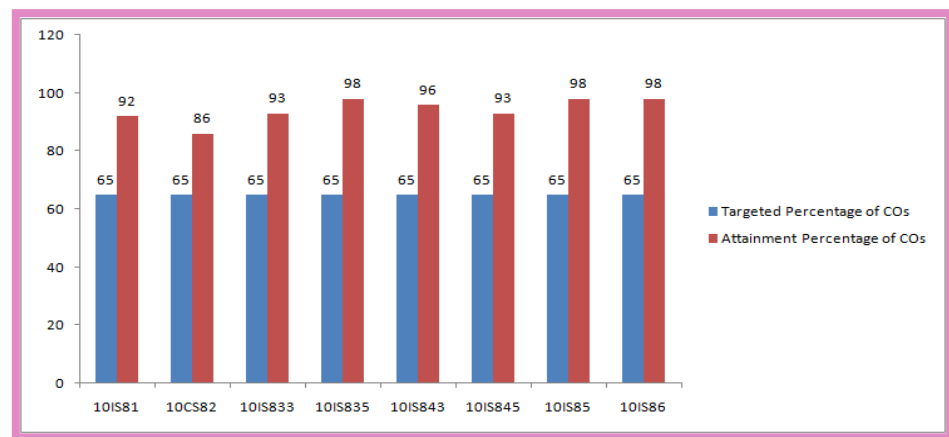


Semester-II

Figure 3.2.2.2

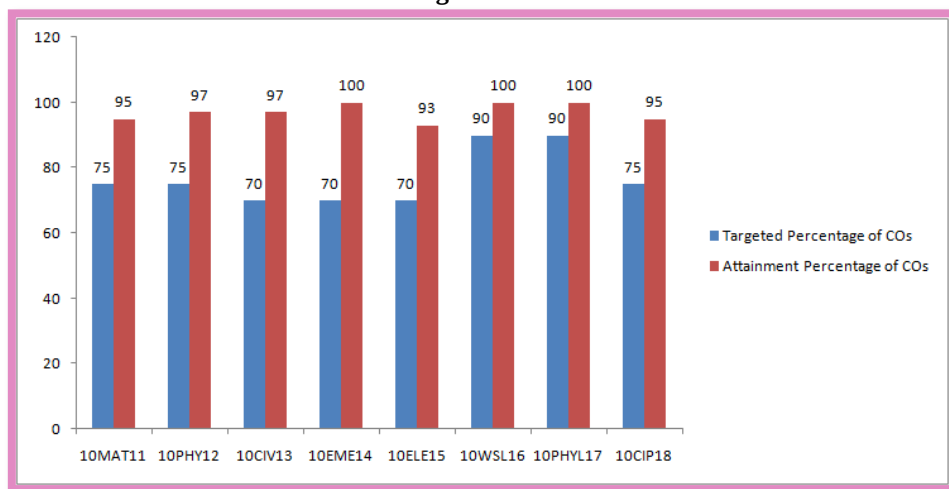


Semester-III**Figure 3.2.2.3****Semester-IV****Figure 3.2.2.4****Semester-V****Figure 3.2.2.5**

Semester-VI**Figure 3.2.2.6****Semester-VII****Figure 3.2.2.7****Semester-VIII****Figure 3.2.2.8**

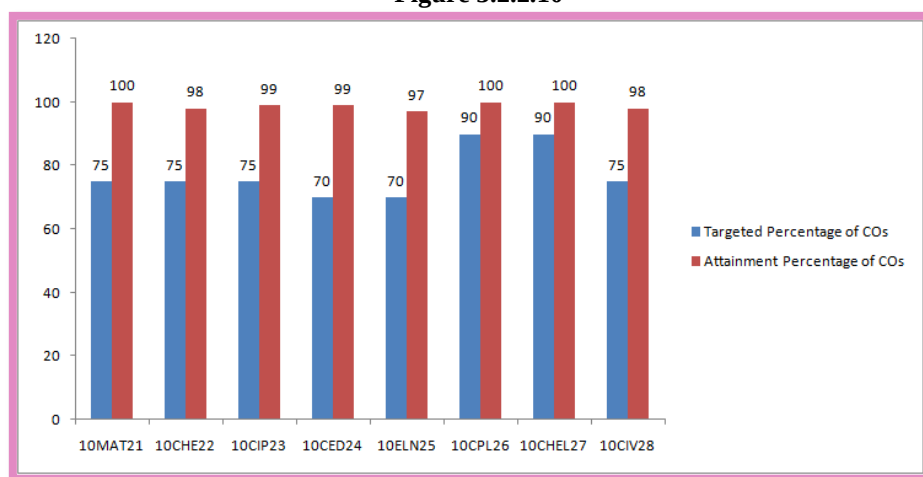
EXTERNAL ASSESSMENT: Semester-I

Figure 3.2.2.9



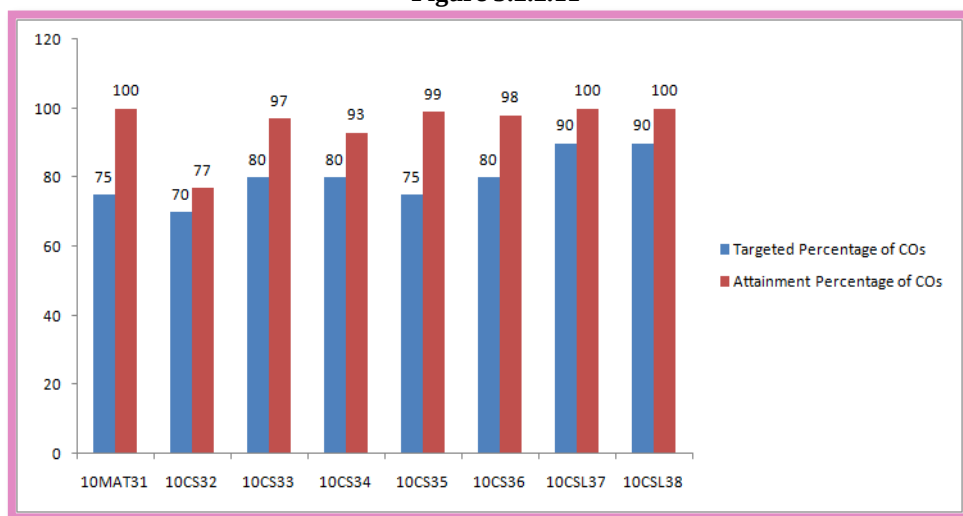
Semester-II

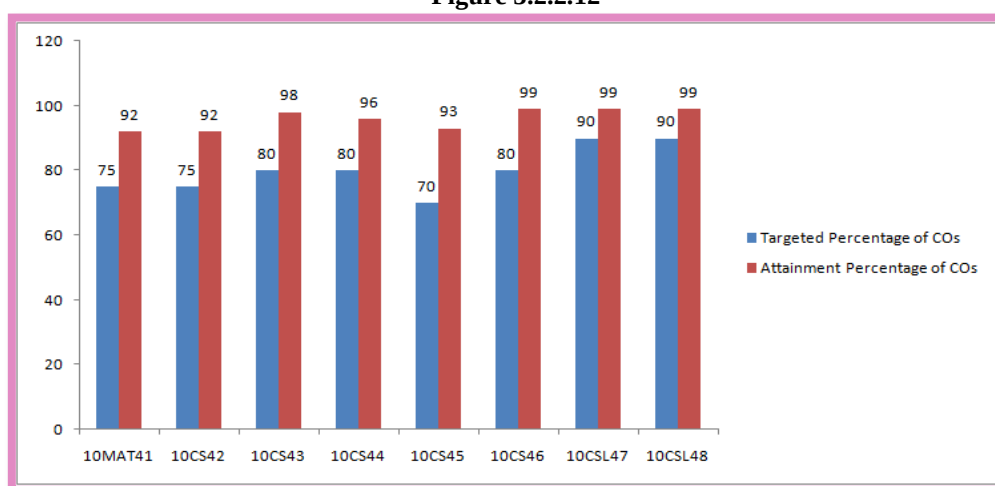
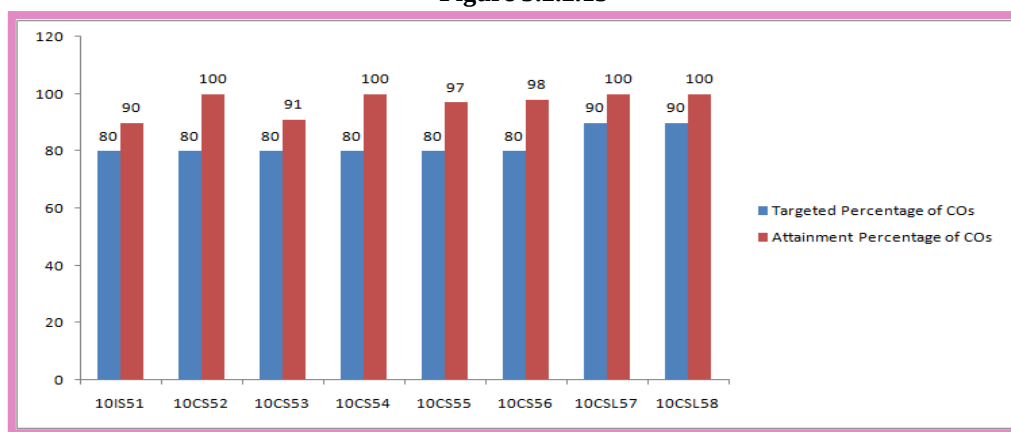
Figure 3.2.2.10



Semester-III

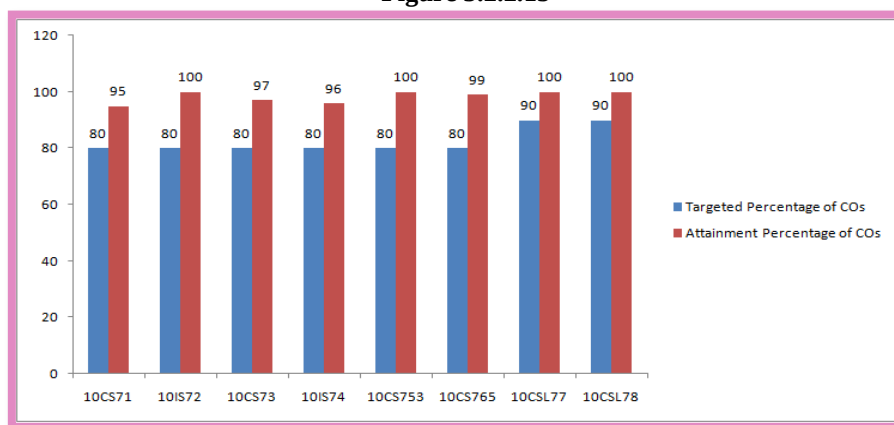
Figure 3.2.2.11



Semester-IV**Figure 3.2.2.12****Semester-V****Figure 3.2.2.13****Semester-VI****Figure 3.2.2.14**

Semester-VII

Figure 3.2.2.15



Semester-VIII

Figure 3.2.2.16



Course Outcomes Attainment Levels:

80% weight age to University examination and 20% Weightage to Internal assessment, the attainment calculations will be (80% of University level) + (20% of Internal level)

Table 3.2.2.3: Course Outcomes Attainment Levels (Batch: 2013-2017)

Course	EXTERNAL ASSESSMENTS (UNIVERSITY EXAMS)												
	Attainment Percentage of Cos –						Attainment Percentage of Cos –						CO
	Internal exams (College exams)						External exams (University exams)						attainme
	(A)						(B)						nt
	CO1	CO2	CO3	CO4	CO5	CO6	CO1	CO2	CO3	CO4	CO5	CO6	level
I Semester													
10MAT11	3	3	3	3	3	3	3	3	3	3	3	3	3
10PHY12	3	3	3	3	3	3	3	3	3	3	3	3	3
10CIV13	3	3	3	3	3	3	3	3	3	3	3	3	3
10EME14	3	3	3	3	3	3	3	3	3	3	3	3	3
10ELE15	3	3	3	3	3	3	3	3	3	3	3	3	3
10WSL16	3	3	3	3	3	3	3	3	3	3	3	3	3
10PHYL17	3	3	3	3	3	3	3	3	3	3	3	3	3
14CIP18	3	3	3	3	3	3	3	3	3	3	3	3	3

II Semester													
10MAT21	3	3	3	3	3	3	3	3	3	3	3	3	3
10CHE22	3	3	3	3	3	3	3	3	3	3	3	3	3
10CCP23	3	3	3	3	3	3	3	3	3	3	3	3	3
10CED24	3	3	3	3	3	3	3	3	3	3	3	3	3
10ELN25	3	3	3	3	3	3	3	3	3	3	3	3	3
10CPL26	3	3	3	3	3	3	3	3	3	3	3	3	3
10CHEL27	3	3	3	3	3	3	3	3	3	3	3	3	3
10CIV28	3	3	3	3	3	3	3	3	3	3	3	3	3
III Semester													
10MAT31	3	3	3	3	3	3	3	3	3	3	3	3	3
10CS32	3	3	3	3	3	3	1	1	1	1	1	1	1.4
10CS33	3	3	3	3	3	3	3	3	3	3	3	3	3
10CS34	3	3	3	3	3	3	3	3	3	3	3	3	3
10CS35	3	3	3	3	3	3	3	3	3	3	3	3	3
10CS36	3	3	3	3	3	3	3	3	3	3	3	3	3
10CSL37	3	3	3	3	3	3	3	3	3	3	3	3	3
10CSL38	3	3	3	3	3	3	3	3	3	3	3	3	3
IV Semester													
10MAT41	3	3	3	3	3	3	3	3	3	3	3	3	3
10CS42	3	3	3	3	3	3	3	3	3	3	3	3	3
10CS43	2	2	2	2	2	2	3	3	3	3	3	3	2.8
10CS44	3	3	3	3	3	3	3	3	3	3	3	3	3
10CS45	2	2	2	2	2	2	3	3	3	3	3	3	2.8
10CS46	3	3	3	3	3	3	3	3	3	3	3	3	3
10CSL48	3	3	3	3	3	3	3	3	3	3	3	3	3
V Semester													
10CS51	2	2	2	2	2	2	3	3	3	3	3	3	2.8
10CS52	3	3	3	3	3	3	3	3	3	3	3	3	3
10CS53	3	3	3	3	3	3	3	3	3	3	3	3	3
10CS54	3	3	3	3	3	3	3	3	3	3	3	3	3
10CS55	3	3	3	3	3	3	3	3	3	3	3	3	3
10CS56	3	3	3	3	3	3	3	3	3	3	3	3	3
10CSL57	3	3	3	3	3	3	3	3	3	3	3	3	3
10CSL58	3	3	3	3	3	3	3	3	3	3	3	3	3
VI Semester													
10AL61	3	3	3	3	3	3	3	3	3	3	3	3	3
10CS62	3	3	3	3	3	3	3	3	3	3	3	3	3
10CS63	3	3	3	3	3	3	3	3	3	3	3	3	3
10CS64	3	3	3	3	3	3	3	3	3	3	3	3	3
10CS65	3	3	3	3	3	3	3	3	3	3	3	3	3
10CS661	3	3	3	3	3	3	3	3	3	3	3	3	3
10ISL67	3	3	3	3	3	3	3	3	3	3	3	3	3
10ISL68	3	3	3	3	3	3	3	3	3	3	3	3	3
VII Semester													
10CS71	3	3	3	3	3	3	3	3	3	3	3	3	3
10CS72	3	3	3	3	3	3	3	3	3	3	3	3	3
10CS73	3	3	3	3	3	3	3	3	3	3	3	3	3

10CS74	3	3	3	3	3	3	3	3	3	3	3	3	3
10CS753	2	2	2	2	2	2	3	3	3	3	3	3	2
10CS765	3	3	3	3	3	3	3	3	3	3	3	3	3
10CSL77	3	3	3	3	3	3	3	3	3	3	3	3	3
10CSL78	3	3	3	3	3	3	3	3	3	3	3	3	3
VIII Semester													
10IS81	3	3	3	3	3	3	3	3	3	3	3	3	3
10IS82	3	3	3	3	3	3	3	3	3	3	3	3	3
10IS833	3	3	3	3	3	3	3	3	3	3	3	3	3
10IS835	3	3	3	3	3	3	3	3	3	3	3	3	3
10IS843	3	3	3	3	3	3	3	3	3	3	3	3	3
10IS845	3	3	3	3	3	3	3	3	3	3	3	3	3
10IS85	3	3	3	3	3	3	3	3	3	3	3	3	3
10IS86	3	3	3	3	3	3	-	-	-	-	-	-	3

3.3. Attainment of Program Outcomes and Program Specific Outcomes (50)

3.3.1. Describe Assessment Tools and Processes Used for Measuring the Attainment of Each of the Program Outcomes and Program Specific Outcomes (10)

(Describe the assessment tools and processes used to gather the data upon which the evaluation of each of the Program Outcomes and Program Specific Outcomes is based indicating the frequency with which these processes are carried out. Describe the assessment processes that demonstrate the degree to which the Program Outcomes and Program Specific Outcomes are attained and document the attainment levels).

Direct Assessment Tool:

To know the effectiveness of the delivery,

- Internal assessment (IA) is conducted on a regular basis for theory and laboratory subjects for 25 marks.
- The University will conduct examinations (external exam) every semester for theory and laboratory for 100 and 50 marks respectively.

Indirect Assessment Tools:

- Graduate Survey
- Employer Survey
- Alumni Feedback form.
(Available in Criteria-2)

ASSESSMENT PROCESS:**Table 3.3.1.1: PO 1 – Assessment Process**

Programme Outcome 1: Engineering knowledge: Graduates will demonstrate the knowledge of mathematics, science and Engineering fundamentals and computing to solve Information science and Engineering related problems.						
Courses Considered			Assessment Tool	Target Performance		Frequency of Assessment Process
Course Code	Course Name	COs		Internal Assessment	External Exams	
10MAT31	Engineering Mathematics – III	CO1-CO6	IA	60%	75%	Internals – Thrice in a semester & Externals – End of Semester
10CS32	Electronic Circuits	CO1-CO6	IA	60%	70%	"
10CS33	Logic Design	CO1-CO6	IA	65%	80%	"
10CS34	Discrete Mathematical Structures	CO1-CO6	IA	65%	80%	"
10CS35	Data Structures with C	CO1-CO6	IA	65%	75%	"
10CS36	Object Oriented Programming with C++	CO1-CO6	IA	65%	80%	"
10CSL37	Data Structures with C/C++ Lab	CO1-CO6	IA	65%	90%	"
10CSL38	Electronics Circuit & Logic Design Lab	CO1-CO6	IA	65%	90%	"
10MAT41	Engineering Mathematics – IV	CO1-CO6	IA	65%	75%	"
10CS42	Graph Theory & Combinatorics	CO1-CO6	IA	65%	75%	"
10CS43	Design and Analysis of Algorithms	CO1-CO6	IA	65%	80%	"
10CS44	Unix and Shell Programming	CO1-CO6	IA	65%	80%	"
10CS45	Microprocessors	CO1-CO6	IA	60%	70%	"
10CS46	Computer Organization	CO1-CO6	IA	65%	80%	"
10CSL47	Design and Analysis of Algorithms Lab	CO1-CO6	IA	65%	90%	"
10CSL48	Microprocessors Lab	CO1-CO6	IA	65%	90%	"
10IS51	Software Engineering	CO1-CO6	IA	65%	80%	"
10CS52	Systems Software	CO1-CO6	IA	65%	80%	"
10CS53	Operating Systems	CO1-CO6	IA	65%	80%	"
10CS54	Database Management Systems	CO1-CO6	IA	65%	80%	"
10CS55	Computer Networks – I	CO1-CO6	IA	65%	80%	"
10CS56	Formal Languages and Automata Theory	CO1-CO6	IA	65%	80%	"
10CSL57	Database Applications Lab	CO1-CO6	IA	65%	90%	"
10CSL58	Systems Software & OS Lab	CO1-CO6	IA	65%	90%	"
10AL61	Management & Entrepreneurship	CO1-CO6	IA	65%	80%	"
10CS62	UNIX System Programming	CO1-CO6	IA	65%	80%	"
10IS63	File Structure	CO1-CO6	IA	65%	80%	"
10CS64	Computer Networks – II	CO1-CO6	IA	65%	80%	"
10IS65	Software Testing	CO1 - CO6	IA	65%	80%	"
10CS661	Operation Research	CO1-CO6	IA	65%	80%	"
10ISL67	File Structures Lab	CO1-CO6	IA	65%	90%	"

10ISL68	Software Testing Lab	CO1-CO6	IA	65%	90%	"
10CS71	Object Oriented Modelling & Design	CO1-CO6	IA	65%	80%	"
10IS72	Information Systems	CO1-CO6	IA	65%	80%	"
10CS73	Programming the WEB	CO1-CO6	IA	65%	80%	"
10IS74	Data Warehousing and Data Mining	CO1-CO6	IA	65%	80%	"
10IS753	JAVA & J2EE	CO1-CO6	IA	65%	80%	"
10IS765	Storage Area Networks	CO1-CO6	IA	65%	80%	"
10CSL77	Networks Lab	CO1-CO6	IA	65%	90%	"
10CSL78	WEB Programming Lab	CO1-CO6	IA	65%	90%	"
10IS81	Software Architectures	CO1-CO6	IA	65%	80%	"
10CS82	System Modeling and Simulation	CO1-CO6	IA	65%	80%	"
10IS833	User Interface Design	CO1-CO6	IA	65%	80%	"
10IS835	Information and Network Security	CO1-CO6	IA	65%	80%	"
10IS843	Supply Chain Management	CO1-CO6	IA	65%	80%	"
10IS845	Clouds, Grids and Clusters	CO1-CO6	IA	65%	80%	"
10IS85	Project Work	CO1-CO6	IA	65%	90%	"
10IS86	Seminar	CO1-CO6	IA	65%	90%	"
			Graduate Exit Survey	90%		End of the Programme
			Alumni Feedback	60%		Annually
			Employer Feedback	70%		Annually

Table 3.3.1.2: PO 2 – Assessment Process

Programme Outcome 2: Problem Analysis: Graduates will demonstrate the ability to identify, formulate and solve engineering problems related to Computer Science and Engineering.						
Courses Considered			Assessment Tool	Target Performance		Frequency of Assessment Process
Course Code	Course Name	COs		Internal Assessment	External Exams	
10MAT31	Engineering Mathematics - III	CO1-CO6	IA	60%	75%	Internals – Thrice in a semester
10CS32	Electronic Circuits	CO1-CO6	IA	60%	70%	"
10CS33	Logic Design	CO1-CO6	IA	65%	80%	"
10CS34	Discrete Mathematical Structures	CO1-CO6	IA	65%	80%	"
10CS35	Data Structures with C	CO1-CO6	IA	65%	75%	"
10CS36	Object Oriented Programming with C++	CO1-CO6	IA	65%	80%	"
10CSL37	Data Structures with C/C++ Lab	CO1-CO6	IA	65%	90%	"
10CSL38	Electronics Circuit & Logic Design Lab	CO1-CO6	IA	65%	90%	"

10MAT41	Engineering Mathematics – IV	CO1-CO6	IA	65%	75%	"
10CS42	Graph Theory & Combinatorics	CO1-CO6	IA	65%	75%	"
10CS43	Design and Analysis of Algorithms	CO1-CO6	IA	65%	80%	"
10CS44	Unix and Shell Programming	CO1-CO6	IA	65%	80%	"
10CS45	Microprocessors	CO1-CO6	IA	60%	70%	"
10CS46	Computer Organization	CO1-CO6	IA	65%	80%	"
10CSL47	Design and Analysis of Algorithms Lab	CO1-CO6	IA	65%	90%	"
10CSL48	Microprocessors Lab	CO1-CO6	IA	65%	90%	"
10IS51	Software Engineering	CO1-CO6	IA	65%	80%	"
10CS52	Systems Software	CO1-CO6	IA	65%	80%	"
10CS53	Operating Systems	CO1-CO6	IA	65%	80%	"
10CS54	Database Management Systems	CO1-CO6	IA	65%	80%	"
10CS55	Computer Networks – I	CO1-CO6	IA	65%	80%	"
10CS56	Formal Languages and Automata Theory	CO1-CO6	IA	65%	80%	"
10CSL57	Database Applications Lab	CO1-CO6	IA	65%	90%	"
10CSL58	Systems Software & OS Lab	CO1-CO6	IA	65%	90%	"
10AL61	Management & Entrepreneurship	CO1-CO6	IA	65%	80%	"
10CS62	UNIX System Programming	CO1-CO6	IA	65%	80%	"
10IS63	File Structures	CO1-CO6	IA	65%	80%	"
10CS64	Computer Networks – II	CO1-CO6	IA	65%	80%	"
10IS65	Software Testing	CO1-CO6	IA	65%	80%	"
10CS661	Operation Research	CO1-CO6	IA	65%	80%	"
10ISL67	File Structures Lab	CO1-CO6	IA	65%	90%	"
10ISL68	Software Testing Lab	CO1-CO6	IA	65%	90%	"
10CS71	Object Oriented Modelling & Design	CO1-CO6	IA	65%	80%	"
10IS72	Information Systems	CO1-CO6	IA	65%	80%	"
10CS73	Programming the WEB	CO1-CO6	IA	65%	80%	"
10IS74	Data Warehousing and Data Mining	CO1-CO6	IA	65%	80%	"
10IS753	JAVA & J2EE	CO1-CO6	IA	65%	80%	"
10IS765	Storage Area Networks	CO1-CO6	IA	65%	80%	"
10CSL77	Networks Lab	CO1-CO6	IA	65%	90%	"
10CSL78	WEB Programming Lab	CO1-CO6	IA	65%	90%	"
10IS81	Software Architectures	CO1-CO6	IA	65%	80%	"
10CS82	System Modeling and Simulation	CO1-CO6	IA	65%	80%	"
10IS833	User Interface Design	CO1-CO6	IA	65%	80%	"
10IS835	Information and Network Security	CO1-CO6	IA	65%	80%	"
10IS843	Supply Chain Management	CO1-CO6	IA	65%	80%	"
10IS845	Clouds, Grids and Clusters	CO1-CO6	IA	65%	80%	"
10IS85	Project Work	CO1-CO6	IA	65%	90%	"
10IS86	Seminar	CO1-CO6	IA	65%	90%	"

	Graduate Exit Survey	90%	End of the Programme
	Alumni Feedback	60%	Annually
	Employer Feedback	70%	Annually

Table 3.3.1.3: PO 3 – Assessment Process

Programme Outcome 3: Design/Development of Solutions: Graduates will demonstrate the ability to design, analyze and interpret data and implement solutions for software based real life problems.						
Courses Considered			Assessment Tool	Target Performance		Frequency of Assessment Process
Course Code	Course Name	COs		Internal Assessment	External Exams	
10MAT31	Engineering Mathematics - III	CO1-CO6	IA	60%	75%	Internals – Thrice in a semester
10CS32	Electronic Circuits	CO1-CO6	IA	60%	70%	"
10CS33	Logic Design	CO1-CO6	IA	65%	80%	"
10CS34	Discrete Mathematical Structures	CO1-CO6	IA	65%	80%	"
10CS35	Data Structures with C	CO1-CO6	IA	65%	75%	"
10CS36	Object Oriented Programming with C++	CO1-CO6	IA	65%	80%	"
10CSL37	Data Structures with C/C++ Lab	CO1-CO6	IA	65%	90%	"
10CSL38	Electronics Circuit & Logic Design Lab	CO1-CO6	IA	65%	90%	"
10MAT41	Engineering Mathematics – IV	CO1-CO6	IA	65%	75%	"
10CS42	Graph Theory & Combinatorics	CO1-CO6	IA	65%	75%	"
10CS43	Design and Analysis of Algorithms	CO1-CO6	IA	65%	80%	"
10CS44	Unix and Shell Programming	CO1-CO6	IA	65%	80%	"
10CS45	Microprocessors	CO1-CO6	IA	60%	70%	"
10CS46	Computer Organization	CO1-CO6	IA	65%	80%	"
10CSL47	Design and Analysis of Algorithms Lab	CO1-CO6	IA	65%	90%	"
10CSL48	Microprocessors Lab	CO1-CO6	IA	65%	90%	"
10IS51	Software Engineering	CO1-CO6	IA	65%	80%	"
10CS52	Systems Software	CO1-CO6	IA	65%	80%	"
10CS53	Operating Systems	CO1-CO6	IA	65%	80%	"
10CS54	Database Management Systems	CO1-CO6	IA	65%	80%	"

10CS55	Computer Networks – I	CO1-CO6	IA	65%	80%	"
10CS56	Formal Languages and Automata Theory	CO1-CO6	IA	65%	80%	"
10CSL57	Database Applications Lab	CO1-CO6	IA	65%	90%	"
10CSL58	Systems Software & OS Lab	CO1-CO6	IA	65%	90%	"
10AL61	Management & Entrepreneurship	CO1-CO6	IA	65%	80%	"
10CS62	UNIX System Programming	CO1-CO6	IA	65%	80%	"
10IS63	File Structure	CO1-CO6	IA	65%	80%	"
10CS64	Computer Networks – II	CO1-CO6	IA	65%	80%	"
10IS65	Software Testing	CO1-CO6	IA	65%	80%	"
10CS661	Operation Research	CO1-CO6	IA	65%	80%	"
10ISL67	File Structures Lab	CO1-CO6	IA	65%	90%	"
10ISL68	Software Testing Lab	CO1-CO6	IA	65%	90%	"
10CS71	Object Oriented Modelling & Design	CO1-CO6	IA	65%	80%	"
10IS72	Information Systems	CO1-CO6	IA	65%	80%	"
10CS73	Programming the WEB	CO1-CO6	IA	65%	80%	"
10IS74	Data Warehousing and Data Mining	CO1-CO6	IA	65%	80%	"
10IS753	JAVA & J2EE	CO1-CO6	IA	65%	80%	"
10IS765	Storage Area Networks	CO1-CO6	IA	65%	80%	"
10CSL77	Networks Lab	CO1-CO6	IA	65%	90%	"
10CSL78	WEB Programming Lab	CO1-CO6	IA	65%	90%	"
10IS81	Software Architectures	CO1-CO6	IA	65%	80%	"
10CS82	System Modeling and Simulation	CO1-CO6	IA	65%	80%	"
10IS833	User Interface Design	CO1-CO6	IA	65%	80%	"
10IS835	Information and Network Security	CO1-CO6	IA	65%	80%	"
10IS843	Supply Chain Management	CO1-CO6	IA	65%	80%	"
10IS845	Clouds, Grids and Clusters	CO1-CO6	IA	65%	80%	"
10IS85	Project Work	CO1-CO6	IA	65%	90%	"
10IS86	Seminar	CO1-CO6	IA	65%	90%	"
			Graduate Exit Survey	90%		End of the Programme
			Alumni Feedback	60%		Annually
			Employer Feedback	70%		Annually

Table 3.3.1.4: PO 4 – Assessment Process

Programme Outcome 4: Investigations of Complex Problems: Graduates will demonstrate the ability to investigate and formulate solutions to complex computational problems in developing software solutions.						
Courses Considered			Assessment Tool	Target Performance		Frequency of Assessment Process
Course Code	Course Name	COs		Internal Assessment	External Exams	
10MAT31	Engineering Mathematics - III	CO1-CO6	IA	60%	75%	Internals – Thrice in a semester
10CS32	Electronic Circuits	CO1-CO6	IA	60%	70%	"
10CS33	Logic Design	CO1-CO6	IA	65%	80%	"
10CS34	Discrete Mathematical Structures	CO1-CO6	IA	65%	80%	"
10CS35	Data Structures with C	CO1-CO6	IA	65%	75%	"
10CS36	Object Oriented Programming with C++	CO1-CO6	IA	65%	80%	"
10CSL37	Data Structures with C/C++ Lab	CO1-CO6	IA	65%	90%	"
10CSL38	Electronics Circuit & Logic Design Lab	CO1-CO6	IA	65%	90%	"
10MAT41	Engineering Mathematics – IV	CO1-CO6	IA	65%	75%	"
10CS42	Graph Theory & Combinatorics	CO1-CO6	IA	65%	75%	"
10CS43	Design and Analysis of Algorithms	CO1-CO6	IA	65%	80%	"
10CS44	Unix and Shell Programming	CO1-CO6	IA	65%	80%	"
10CS45	Microprocessors	CO1-CO6	IA	60%	70%	"
10CS46	Computer Organization	CO1-CO6	IA	65%	80%	"
10CSL47	Design and Analysis of Algorithms Lab	CO1-CO6	IA	65%	90%	"
10CSL48	Microprocessors Lab	CO1-CO6	IA	65%	90%	"
10IS51	Software Engineering	CO1-CO6	IA	65%	80%	"
10CS52	Systems Software	CO1-CO6	IA	65%	80%	"
10CS53	Operating Systems	CO1-CO6	IA	65%	80%	"
10CS54	Database Management Systems	CO1-CO6	IA	65%	80%	"
10CS55	Computer Networks – I	CO1-CO6	IA	65%	80%	"
10CS56	Formal Languages and Automata Theory	CO1-CO6	IA	65%	80%	"
10CSL57	Database Applications Lab	CO1-CO6	IA	65%	90%	"
10CSL58	Systems Software & OS Lab	CO1-CO6	IA	65%	90%	"
10AL61	Management & Entrepreneurship	CO1-CO6	IA	65%	80%	"
10CS62	UNIX System Programming	CO1-CO6	IA	65%	80%	"
10IS63	File Structure	CO1-CO6	IA	65%	80%	"
10CS64	Computer Networks – II	CO1-CO6	IA	65%	80%	"
10IS65	Software Testing	CO1-CO6	IA	65%	80%	"
10CS661	Operation Research	CO1-CO6	IA	65%	80%	"
10ISL67	File Structures Lab	CO1-CO6	IA	65%	90%	"

10ISL68	Software Testing Lab	CO1-CO6	IA	65%	90%	"
10CS71	Object Oriented Modelling & Design	CO1-CO6	IA	65%	80%	"
10IS72	Information Systems	CO1-CO6	IA	65%	80%	"
10CS73	Programming the WEB	CO1-CO6	IA	65%	80%	"
10IS74	Data Warehousing and Data Mining	CO1-CO6	IA	65%	80%	"
10IS753	JAVA & J2EE	CO1-CO6	IA	65%	80%	"
10IS765	Storage Area Networks	CO1-CO6	IA	65%	80%	"
10CSL77	Networks Lab	CO1-CO6	IA	65%	90%	"
10CSL78	WEB Programming Lab	CO1-CO6	IA	65%	90%	"
10IS81	Software Architectures	CO1-CO6	IA	65%	80%	"
10CS82	System Modeling and Simulation	CO1-CO6	IA	65%	80%	"
10IS833	User Interface Design	CO1-CO6	IA	65%	80%	"
10IS835	Information and Network Security	CO1-CO6	IA	65%	80%	"
10IS843	Supply Chain Management	CO1-CO6	IA	65%	80%	"
10IS845	Clouds, Grids and Clusters	CO1-CO6	IA	65%	80%	"
10IS85	Project Work	CO1-CO6	IA	65%	90%	"
10IS86	Seminar	CO1-CO6	IA	65%	90%	"
			Graduate Exit Survey	90%		End of the Programme
			Alumni Feedback	60%		Annually
			Employer Feedback	70%		Annually

Table 3.3.1.5: PO 5 – Assessment Process

Programme Outcome 5: Modern Tool Usage: Graduates will demonstrate the use of modern engineering tools with the latest techniques, skills, software and equipment to analyze and solve the problems.						
Courses Considered			Assessment Tool	Target Performance		Frequency of Assessment Process
Course Code	Course Name	COs		Internal Assessment	External Exams	
10MAT31	Engineering Mathematics - III	CO1-CO6	IA	60%	75%	Internals – Thrice in a semester
10CS32	Electronic Circuits	CO1-CO6	IA	60%	70%	"
10CS33	Logic Design	CO1-CO6	IA	65%	80%	"
10CS34	Discrete Mathematical Structures	CO1-CO6	IA	65%	80%	"
10CS35	Data Structures with C	CO1-CO6	IA	65%	75%	"
10CS36	Object Oriented Programming with C++	CO1-CO6	IA	65%	80%	"
10CSL37	Data Structures with C/C++ Lab	CO1-CO6	IA	65%	90%	"
10CSL38	Electronics Circuit & Logic Design Lab	CO1-CO6	IA	65%	90%	"
10MAT41	Engineering Mathematics – IV	CO1-CO6	IA	65%	75%	"
10CS42	Graph Theory & Combinatorics	CO1-CO6	IA	65%	75%	"
10CS43	Design and Analysis of Algorithms	CO1-CO6	IA	65%	80%	"
10CS44	Unix and Shell Programming	CO1-CO6	IA	65%	80%	"
10CS45	Microprocessors	CO1-CO6	IA	60%	70%	"
10CS46	Computer Organization	CO1-CO6	IA	65%	80%	"
10CSL47	Design and Analysis of Algorithms Lab	CO1-CO6	IA	65%	90%	"
10CSL48	Microprocessors Lab	CO1-CO6	IA	65%	90%	"
10IS51	Software Engineering	CO1-CO6	IA	65%	80%	"
10CS52	Systems Software	CO1-CO6	IA	65%	80%	"
10CS53	Operating Systems	CO1-CO6	IA	65%	80%	"
10CS54	Database Management Systems	CO1-CO6	IA	65%	80%	"
10CS55	Computer Networks – I	CO1-CO6	IA	65%	80%	"
10CS56	Formal Languages and Automata Theory	CO1-CO6	IA	65%	80%	"
10CSL57	Database Applications Lab	CO1-CO6	IA	65%	90%	"
10CSL58	Systems Software & OS Lab	CO1-CO6	IA	65%	90%	"
10AL61	Management & Entrepreneurship	CO1-CO6	IA	65%	80%	"
10CS62	UNIX System Programming	CO1-CO6	IA	65%	80%	"
10IS63	File Structure	CO1-CO6	IA	65%	80%	"
10CS64	Computer Networks – II	CO1-CO6	IA	65%	80%	"
10IS65	Software Testing	CO1-CO6	IA	65%	80%	"
10CS661	Operation Research	CO1-CO6	IA	65%	80%	"
10ISL67	File Structures Lab	CO1-CO6	IA	65%	90%	"
10ISL68	Software Testing Lab	CO1-CO6	IA	65%	90%	"
10CS71	Object Oriented Modelling & Design	CO1-CO6	IA	65%	80%	"
10IS72	Information Systems	CO1-CO6	IA	65%	80%	"

10CS73	Programming the WEB	CO1-CO6	IA	65%	80%	"
10IS74	Data Warehousing and Data Mining	CO1-CO6	IA	65%	80%	"
10IS753	JAVA & J2EE	CO1-CO6	IA	65%	80%	"
10IS765	Storage Area Networks	CO1-CO6	IA	65%	80%	"
10CSL77	Networks Lab	CO1-CO6	IA	65%	90%	"
10CSL78	WEB Programming Lab	CO1-CO6	IA	65%	90%	"
10IS81	Software Architectures	CO1-CO6	IA	65%	80%	"
10CS82	System Modeling and Simulation	CO1-CO6	IA	65%	80%	"
10IS833	User Interface Design	CO1-CO6	IA	65%	80%	"
10IS835	Information and Network Security	CO1-CO6	IA	65%	80%	"
10IS843	Supply Chain Management	CO1-CO6	IA	65%	80%	"
10IS845	Clouds, Grids and Clusters	CO1-CO6	IA	65%	80%	"
10IS85	Project Work	CO1-CO6	IA	65%	90%	"
10IS86	Seminar	CO1-CO6	IA	65%	90%	"
			Graduate Exit Survey	90%		End of the Programme
			Alumni Feedback	60%		Annually
			Employer Feedback	70%		Annually

Table 3.3.1.6: PO 6 – Assessment Process

Programme Outcome 6: Engineering and Society: Graduates will profess the ethical, legal, professional and social norms of engineering practice						
Courses Considered			Assessment Tool	Target Performance		Frequency of Assessment Process
Course Code	Course Name	COs		Internal Assessment	External Exams	
10CS34	Discrete Mathematical Structures	CO1-CO6	IA	65%	80%	Internals – Thrice in a semester & Externals – End of Semester
10CS35	Data Structures with C	CO1-CO6	IA	65%	75%	"
10CS36	Object Oriented Programming with C++	CO1-CO6	IA	65%	80%	"
10CSL37	Data Structures with C/C++ Lab	CO1-CO6	IA	65%	90%	"
10CSL38	Electronics Circuit & Logic Design Lab	CO1-CO6	IA	65%	90%	"
10CS43	Design and Analysis of Algorithms	CO1-CO6	IA	65%	80%	"

10CS44	Unix and Shell Programming	CO1-CO6	IA	65%	80%	"
10CS45	Microprocessors	CO1-CO6	IA	60%	70%	"
10CSL47	Design and Analysis of Algorithms Lab	CO1-CO6	IA	65%	90%	"
10CSL48	Microprocessors Lab	CO1-CO6	IA	65%	90%	"
10IS51	Software Engineering	CO1-CO6	IA	65%	80%	"
10CS54	Database Management Systems	CO1-CO6	IA	65%	80%	"
10CS55	Computer Networks – I	CO1-CO6	IA	65%	80%	"
10CS56	Formal Languages and Automata Theory	CO1-CO6	IA	65%	80%	"
10CSL57	Database Applications Lab	CO1-CO6	IA	65%	90%	"
10CSL58	Systems Software & OS Lab	CO1-CO6	IA	65%	90%	"
10AL61	Management & Entrepreneurship	CO1-CO6	IA	65%	80%	"
10IS63	File Structure	CO1-CO6	IA	65%	80%	"
10CS64	Computer Networks – II	CO1-CO6	IA	65%	80%	"
10IS65	Software Testing	CO1-CO6	IA	65%	80%	"
10ISL67	File Structures Lab	CO1-CO6	IA	65%	90%	"
10ISL68	Software Testing Lab	CO1-CO6	IA	65%	90%	"
10IS72	Information Systems	CO1-CO6	IA	65%	80%	"
10CS73	Programming the WEB	CO1-CO6	IA	65%	80%	"
10IS74	Data Warehousing and Data Mining	CO1-CO6	IA	65%	80%	"
10IS753	JAVA & J2EE	CO1-CO6	IA	65%	80%	"
10IS765	Storage Area Networks	CO1-CO6	IA	65%	80%	"
10CSL77	Networks Lab	CO1-CO6	IA	65%	90%	"
10CSL78	WEB Programming Lab	CO1-CO6	IA	65%	90%	"
10IS81	Software Architectures	CO1-CO6	IA	65%	80%	"
10CS82	System Modeling and Simulation	CO1-CO6	IA	65%	80%	"
10IS833	User Interface Design	CO1-CO6	IA	65%	80%	"
10IS835	Information and Network Security	CO1-CO6	IA	65%	80%	"
10IS843	Supply Chain Management	CO1-CO6	IA	65%	80%	"
10IS845	Clouds, Grids and Clusters	CO1-CO6	IA	65%	80%	"
10IS85	Project Work	CO1-CO6	IA	65%	90%	"
10IS86	Seminar	CO1-CO6	IA	65%	90%	"
			Graduate Exit Survey	90%		End of the Programme
			Alumni Feedback	60%		Annually
			Employer Feedback	70%		Annually

Table 3.3.1.7: PO 7 – Assessment Process

Programme Outcome 7: Environment and Sustainability: Graduates will be educated to understand the impact of engineering solutions in global, economic, environmental and societal contexts.						
Courses Considered			Assessment Tool	Target Performance		Frequency of Assessment Process
Course Code	Course Name	Cos		Internal Assessment	External Exams	
10CS32	Electronic Circuits	CO1-CO6	IA	60%	70%	Internals – Thrice in a semester & Externals – End of Semester
10CS34	Discrete Mathematical Structures	CO1-CO6	IA	65%	80%	"
10CS35	Data Structures with C	CO1-CO6	IA	65%	75%	"
10CS36	Object Oriented Programming with C++	CO1-CO6	IA	65%	80%	"
10CSL37	Data Structures with C/C++ Lab	CO1-CO6	IA	65%	90%	"
10CSL38	Electronics Circuit & Logic Design Lab	CO1-CO6	IA	65%	90%	"
10CS43	Design and Analysis of Algorithms	CO1-CO6	IA	65%	80%	"
10CS44	Unix and Shell Programming	CO1-CO6	IA	65%	80%	"
10CS45	Microprocessors	CO1-CO6	IA	60%	70%	"
10CSL47	Design and Analysis of Algorithms Lab	CO1-CO6	IA	65%	90%	"
10CSL48	Microprocessors Lab	CO1-CO6	IA	65%	90%	"
10IS51	Software Engineering	CO1-CO6	IA	65%	80%	"
10CS52	Systems Software	CO1-CO6	IA	65%	80%	"
10CS53	Operating Systems	CO1-CO6	IA	65%	80%	"
10CS54	Database Management Systems	CO1-CO6	IA	65%	80%	"
10CS55	Computer Networks – I	CO1-CO6	IA	65%	80%	"
10CSL57	Database Applications Lab	CO1-CO6	IA	65%	90%	"
10CSL58	Systems Software & OS Lab	CO1-CO6	IA	65%	90%	"
10AL61	Management & Entrepreneurship	CO1-CO6	IA	65%	80%	"
10CS62	UNIX System Programming	CO1-CO6	IA	65%	80%	"
10IS63	File Structure	CO1-CO6	IA	65%	80%	"
10CS64	Computer Networks – II	CO1-CO6	IA	65%	80%	"
10IS65	Software Testing	CO1-CO6	IA	65%	80%	"
10ISL67	File Structures Lab	CO1-CO6	IA	65%	90%	"
10ISL68	Software Testing Lab	CO1-CO6	IA	65%	90%	"
10IS72	Information Systems	CO1-CO6	IA	65%	80%	"
10CS73	Programming the WEB	CO1-CO6	IA	65%	80%	"
10IS74	Data Warehousing and Data Mining	CO1-CO6	IA	65%	80%	"
10IS753	JAVA & J2EE	CO1-CO6	IA	65%	80%	"

10IS765	Storage Area Networks	CO1-CO6	IA	65%	80%	"
10CSL77	Networks Lab	CO1-CO6	IA	65%	90%	"
10CSL78	WEB Programming Lab	CO1-CO6	IA	65%	90%	"
10IS81	Software Architectures	CO1-CO6	IA	65%	80%	"
10CS82	System Modeling and Simulation	CO1-CO6	IA	65%	80%	"
10IS833	User Interface Design	CO1-CO6	IA	65%	80%	"
10IS835	Information and Network Security	CO1-CO6	IA	65%	80%	"
10IS843	Supply Chain Management	CO1-CO6	IA	65%	80%	"
10IS845	Clouds, Grids and Clusters	CO1-CO6	IA	65%	80%	"
10IS85	Project Work	CO1-CO6	IA	65%	90%	"
10IS86	Seminar	CO1-CO6	IA	65%	90%	"
			Graduate Exit Survey	90%		End of the Programme
			Alumni Feedback	60%		Annually
			Employer Feedback	70%		Annually

Table 3.3.1.8: PO 8 – Assessment Process

Programme Outcome 8: Ethics: Graduates to follow professional ethics and a positive code of conduct to foster human welfare.						
Courses Considered			Assessment Tool	Target Performance		Frequency of Assessment Process
Course Code	Course Name	COs		Internal Assessment	External Exams	
10CS33	Logic Design	CO1-CO6	IA	65%	80%	Internals – Thrice in a semester & Externals – End of Semester
10CS34	Discrete Mathematical Structures	CO1-CO6	IA	65%	80%	"
10CS35	Data Structures with C	CO1-CO6	IA	65%	75%	"
10CS36	Object Oriented Programming with C++	CO1-CO6	IA	65%	80%	"
10CSL37	Data Structures with C/C++ Lab	CO1-CO6	IA	65%	90%	"
10CSL38	Electronics Circuit & Logic Design lab	CO1-CO6	IA	65%	90%	"
10CS43	Design and Analysis of Algorithms	CO1-CO6	IA	65%	80%	"
10CS44	Unix and Shell Programming	CO1-CO6	IA	65%	80%	"
10CS45	Microprocessors	CO1-CO6	IA	60%	70%	"

10CSL47	Design and Analysis of Algorithms Lab	CO1-CO6	IA	65%	90%	"
10CSL48	Microprocessors Lab	CO1-CO6	IA	65%	90%	"
10IS51	Software Engineering	CO1-CO6	IA	65%	80%	"
10CS52	Systems Software	CO1-CO6	IA	65%	80%	"
10CS53	Operating Systems	CO1-CO6	IA	65%	80%	"
10CS54	Database Management Systems	CO1-CO6	IA	65%	80%	"
10CS55	Computer Networks – I	CO1-CO6	IA	65%	80%	"
10CS56	Formal Languages and Automata Theory	CO1-CO6	IA	65%	80%	"
10CSL57	Database Applications Lab	CO1-CO6	IA	65%	90%	"
10CSL58	Systems Software & OS Lab	CO1-CO6	IA	65%	90%	"
10AL61	Management & Entrepreneurship	CO1-CO6	IA	65%	80%	"
10CS62	UNIX System Programming	CO1-CO6	IA	65%	80%	"
10IS63	File Structure	CO1-CO6	IA	65%	80%	"
10CS64	Computer Networks – II	CO1-CO6	IA	65%	80%	"
10CS65	Software Testing	CO1-CO6	IA	65%	80%	"
10ISL67	File Structures Lab	CO1-CO6	IA	65%	90%	"
10ISL68	Software Testing Lab	CO1-CO6	IA	65%	90%	"
10IS72	Information Systems	CO1-CO6	IA	65%	80%	"
10CS73	Programming the WEB	CO1-CO6	IA	65%	80%	"
10IS74	Data Warehousing and Data Mining	CO1-CO6	IA	65%	80%	"
10IS753	JAVA & J2EE	CO1-CO6	IA	65%	80%	"
10IS765	Storage Area Networks	CO1-CO6	IA	65%	80%	"
10CSL77	Networks Lab	CO1-CO6	IA	65%	90%	"
10CSL78	WEB Programming Lab	CO1-CO6	IA	65%	90%	"
10IS81	Software Architectures	CO1-CO6	IA	65%	80%	"
10CS82	System Modeling and Simulation	CO1-CO6	IA	65%	80%	"
10IS833	User Interface Design	CO1-CO6	IA	65%	80%	"
10IS835	Information and Network Security	CO1-CO6	IA	65%	80%	"
10IS843	Supply Chain Management	CO1-CO6	IA	65%	80%	"
10IS845	Clouds, Grids and Clusters	CO1-CO6	IA	65%	80%	"
10IS85	Project Work	CO1-CO6	IA	65%	90%	"
10IS86	Seminar	CO1-CO6	IA	65%	90%	"
			Graduate Exit Survey	90%		End of the Programme
			Alumni Feedback	60%		Annually
			Employer Feedback	70%		Annually

Table 3.3.1.9: PO 9 – Assessment Process

Programme Outcome 9: Individual and Team Work: Graduates will demonstrate the ability to work both as an individual and in teams related to computer science and engineering, or other interdisciplinary areas exhibiting effective leadership qualities.						
Courses Considered			Assessment Tool	Target Performance		Frequency of Assessment Process
Course Code	Course Name	COs		Internal Assessment	External Exams	
10MAT31	Engineering Mathematics - III	CO1-CO6	IA	60%	75%	Internals – Thrice in a semester
10CS33	Logic Design	CO1-CO6	IA	65%	80%	"
10CS34	Discrete Mathematical Structures	CO1-CO6	IA	65%	80%	"
10CS35	Data Structures with C	CO1-CO6	IA	65%	75%	"
10CS36	Object Oriented Programming with C++	CO1-CO6	IA	65%	80%	"
10CSL37	Data Structures with C/C++ Lab	CO1-CO6	IA	65%	90%	"
10CSL38	Electronics Circuit & Logic Design Lab	CO1-CO6	IA	65%	90%	"
10MAT41	Engineering Mathematics – IV	CO1-CO6	IA	65%	75%	"
10CS42	Graph Theory & Combinatorics	CO1-CO6	IA	65%	75%	"
10CS43	Design and Analysis of Algorithms	CO1-CO6	IA	65%	80%	"
10CS44	Unix and Shell Programming	CO1-CO6	IA	65%	80%	"
10CS45	Microprocessors	CO1-CO6	IA	60%	70%	"
10CSL47	Design and Analysis of Algorithms Lab	CO1-CO6	IA	65%	90%	"
10CSL48	Microprocessors Lab	CO1-CO6	IA	65%	90%	"
10IS51	Software Engineering	CO1-CO6	IA	65%	80%	"
10CS52	Systems Software	CO1-CO6	IA	65%	80%	"
10CS53	Operating Systems	CO1-CO6	IA	65%	80%	"
10CS54	Database Management Systems	CO1-CO6	IA	65%	80%	"
10CS55	Computer Networks – I	CO1-CO6	IA	65%	80%	"
10CSL57	Database Applications Lab	CO1-CO6	IA	65%	90%	"
10CSL58	Systems Software & OS Lab	CO1-CO6	IA	65%	90%	"
10AL61	Management & Entrepreneurship	CO1-CO6	IA	65%	80%	"
10CS62	UNIX System Programming	CO1-CO6	IA	65%	80%	"
10IS63	File Structure	CO1-CO6	IA	65%	80%	"
10CS64	Computer Networks – II	CO1-CO6	IA	65%	80%	"
10IS65	Software Testing	CO1-CO6	IA	65%	80%	"
10ISL67	File Structures Lab	CO1-CO6	IA	65%	90%	"
10ISL68	Software Testing Lab	CO1-CO6	IA	65%	90%	"
10IS72	Information Systems	CO1-CO6	IA	65%	80%	"
10CS73	Programming the WEB	CO1-CO6	IA	65%	80%	"

10IS74	Data Warehousing and Data Mining	CO1-CO6	IA	65%	80%	"
10IS753	JAVA & J2EE	CO1-CO6	IA	65%	80%	"
10IS765	Storage Area Networks	CO1-CO6	IA	65%	80%	"
10CSL77	Networks Lab	CO1-CO6	IA	65%	90%	"
10CSL78	WEB Programming Lab	CO1-CO6	IA	65%	90%	"
10IS81	Software Architectures	CO1-CO6	IA	65%	80%	"
10CS82	System Modeling and Simulation	CO1-CO6	IA	65%	80%	"
10IS833	User Interface Design	CO1-CO6	IA	65%	80%	"
10IS835	Information and Network Security	CO1-CO6	IA	65%	80%	"
10IS843	Supply Chain Management	CO1-CO6	IA	65%	80%	"
10IS845	Clouds, Grids and Clusters	CO1-CO6	IA	65%	80%	"
10IS85	Project Work	CO1-CO6	IA	65%	90%	"
10IS86	Seminar	CO1-CO6	IA	65%	90%	"
			Graduate Exit Survey	90%		End of the Programme
			Alumni Feedback	60%		Annually
			Employer Feedback	70%		Annually

Table 3.3.1.10: PO 10 – Assessment Process

Programme Outcome 10: Communication: Graduates will communicate effectively both in verbal and non-verbal form.						
Courses Considered			Assessment Tool	Target Performance		Frequency of Assessment Process
Course Code	Course Name	COs		Internal Assessment	External Exams	
10MAT31	Engineering Mathematics - III	CO1-CO6	IA	60%	75%	Internals – Thrice in a semester
10CS34	Discrete Mathematical Structures	CO1-CO6	IA	65%	80%	"
10CS35	Data Structures with C	CO1-CO6	IA	65%	75%	"
10CS36	Object Oriented Programming with C++	CO1-CO6	IA	65%	80%	"
10CSL37	Data Structures with C/C++ Lab	CO1-CO6	IA	65%	90%	"
10CSL38	Electronics Circuit & Logic Design Lab	CO1-CO6	IA	65%	90%	"
10MAT41	Engineering Mathematics – IV	CO1-CO6	IA	65%	75%	"

10CS42	Graph Theory & Combinatorics	CO1-CO6	IA	65%	75%	"
10CS43	Design and Analysis of Algorithms	CO1-CO6	IA	65%	80%	"
10CS44	Unix and Shell Programming	CO1-CO6	IA	65%	80%	"
10CS46	Computer Organization	CO1-CO6	IA	65%	80%	"
10CSL47	Design and Analysis of Algorithms Lab	CO1-CO6	IA	65%	90%	"
10IS51	Software Engineering	CO1-CO6	IA	65%	80%	"
10CS52	Systems Software	CO1-CO6	IA	65%	80%	"
10CS53	Operating Systems	CO1-CO6	IA	65%	80%	"
10CS54	Database Management Systems	CO1-CO6	IA	65%	80%	"
10CS55	Computer Networks – I	CO1-CO6	IA	65%	80%	"
10CS56	Formal Languages and Automata Theory	CO1-CO6	IA	65%	80%	"
10CSL57	Database Applications Lab	CO1-CO6	IA	65%	90%	"
10CSL58	Systems Software & OS Lab	CO1-CO6	IA	65%	90%	"
10AL61	Management & Entrepreneurship	CO1-CO6	IA	65%	80%	"
10CS62	UNIX System Programming	CO1-CO6	IA	65%	80%	"
10IS63	File Structure	CO1-CO6	IA	65%	80%	"
10CS64	Computer Networks – II	CO1-CO6	IA	65%	80%	"
10IS65	Software Testing	CO1-CO6	IA	65%	80%	"
10ISL67	File Structures Lab	CO1-CO6	IA	65%	90%	"
10ISL68	Software Testing Lab	CO1-CO6	IA	65%	90%	"
10CS71	Object Oriented Modelling & Design	CO1-CO6	IA	65%	80%	"
10IS72	Information System	CO1-CO6	IA	65%	80%	"
10CS73	Programming the WEB	CO1-CO6	IA	65%	80%	"
10IS74	Data Warehousing and Data Mining	CO1-CO6	IA	65%	80%	"
10IS753	JAVA & J2EE	CO1-CO6	IA	65%	80%	"
10IS765	Storage Area Networks	CO1-CO6	IA	65%	80%	"
10CSL77	Networks Lab	CO1-CO6	IA	65%	90%	"
10CSL78	WEB Programming Lab	CO1-CO6	IA	65%	90%	"
10IS81	Software Architectures	CO1-CO6	IA	65%	80%	"
10CS82	System Modeling and Simulation	CO1-CO6	IA	65%	80%	"
10IS833	User Interface Design	CO1-CO6	IA	65%	80%	"
10IS845	Clouds, Grids and Clusters	CO1-CO6	IA	65%	80%	"
10IS85	Project Work	CO1-CO6	IA	65%	90%	"
10IS86	Seminar	CO1-CO6	IA	65%	90%	"

	Graduate Exit Survey	90%	End of the Programme
	Alumni Feedback	60%	Annually
	Employer Feedback	70%	Annually

Table 3.3.1.11: PO 11 – Assessment Process

Programme Outcome 11: Project Management and Finance: Graduates will demonstrate the ability to apply engineering and management principles to manage projects and their financial aspects.						
Courses Considered			Assessment Tool	Target Performance		Frequency of Assessment Process
Course Code	Course Name	COs		Internal Assessment	External Exams	
10CS34	Discrete Mathematical Structures	CO1-CO6	IA	65%	80%	Internals – Thrice in a semester & Externals – End of Semester
10CS35	Data Structures with C	CO1-CO6	IA	65%	75%	"
10CS36	Object Oriented Programming with C++	CO1-CO6	IA	65%	80%	"
10CSL37	Data Structures with C/C++ Lab	CO1-CO6	IA	65%	90%	"
10CSL38	Electronics Circuit & Logic Design Lab	CO1-CO6	IA	65%	90%	"
10CS43	Design and Analysis of Algorithms	CO1-CO6	IA	65%	80%	"
10CS45	Microprocessors	CO1-CO6	IA	60%	70%	"
10CS46	Computer Organization	CO1-CO6	IA	65%	80%	"
10CSL47	Design and Analysis of Algorithms Lab	CO1-CO6	IA	65%	90%	"
10IS51	Software Engineering	CO1-CO6	IA	65%	80%	"
10CS52	Systems Software	CO1-CO6	IA	65%	80%	"
10CS53	Operating Systems	CO1-CO6	IA	65%	80%	"
10CS54	Database Management Systems	CO1-CO6	IA	65%	80%	"
10CS55	Computer Networks – I	CO1-CO6	IA	65%	80%	"
10CSL57	Database Applications Lab	CO1-CO6	IA	65%	90%	"
10CSL58	Systems Software & OS Lab	CO1-CO6	IA	65%	90%	"

10AL61	Management & Entrepreneurship	CO1-CO6	IA	65%	80%	"
10CS62	UNIX System Programming	CO1-CO6	IA	65%	80%	"
10IS63	File Structure	CO1-CO6	IA	65%	80%	"
10CS64	Computer Networks – II	CO1-CO6	IA	65%	80%	"
10CS65	Software Testing	CO1-CO6	IA	65%	80%	"
10IS72	Information System	CO1-CO6	IA	65%	80%	"
10CS73	Programming the WEB	CO1-CO6	IA	65%	80%	"
10IS74	Data Warehousing and Data Mining	CO1-CO6	IA	65%	80%	"
10IS753	JAVA & J2EE	CO1-CO6	IA	65%	80%	"
10IS765	Storage Area Networks	CO1-CO6	IA	65%	80%	"
10CSL77	Networks Lab	CO1-CO6	IA	65%	90%	"
10CSL78	WEB Programming Lab	CO1-CO6	IA	65%	90%	"
10IS81	Software Architectures	CO1-CO6	IA	65%	80%	"
10CS82	System Modeling and Simulation	CO1-CO6	IA	65%	80%	"
10IS833	User Interface Design	CO1-CO6	IA	65%	80%	"
10IS845	Clouds, Grids and Clusters	CO1-CO6	IA	65%	80%	"
10IS85	Project Work	CO1-CO6	IA	65%	90%	"
10IS86	Seminar	CO1-CO6	IA	65%	90%	"
			Graduate Exit Survey	90%		End of the Programme
			Alumni Feedback	60%		Annually
			Employer Feedback	70%		Annually

Table 3.3.1.12: PO 12 – Assessment Process

Programme Outcome 12: Life-Long Learning: Graduates will demonstrate the ability and desire towards life-long learning for professional development.						
Courses Considered			Assessment Tool	Target Performance		Frequency of Assessment Process
Course Code	Course Name	COs		Internal Assessment	External Exams	
10MAT31	Engineering Mathematics - III	CO1-CO6	IA	60%	75%	Internals – Thrice in a semester
10CS32	Electronic Circuits	CO1-CO6	IA	60%	70%	"
10CS33	Logic Design	CO1-CO6	IA	65%	80%	"
10CS34	Discrete Mathematical Structures	CO1-CO6	IA	65%	80%	"

10CS35	Data Structures with C	CO1-CO6	IA	65%	75%	"
10CS36	Object Oriented Programming with C++	CO1-CO6	IA	65%	80%	"
10CSL37	Data Structures with C/C++ Lab	CO1-CO6	IA	65%	90%	"
10CSL38	Electronics Circuit & Logic Design Lab	CO1-CO6	IA	65%	90%	"
10MAT41	Engineering Mathematics – IV	CO1-CO6	IA	65%	75%	"
10CS42	Graph Theory & Combinatorics	CO1-CO6	IA	65%	75%	"
10CS43	Design and Analysis of Algorithms	CO1-CO6	IA	65%	80%	"
10CS44	Unix and Shell Programming	CO1-CO6	IA	65%	80%	"
10CS45	Microprocessors	CO1-CO6	IA	60%	70%	"
10CS46	Computer Organization	CO1-CO6	IA	65%	80%	"
10CSL47	Design and Analysis of Algorithms Lab	CO1-CO6	IA	65%	90%	"
10CSL48	Microprocessors Lab	CO1-CO6	IA	65%	90%	"
10IS51	Software Engineering	CO1-CO6	IA	65%	80%	"
10CS52	Systems Software	CO1-CO6	IA	65%	80%	"
10CS53	Operating Systems	CO1-CO6	IA	65%	80%	"
10CS54	Database Management Systems	CO1-CO6	IA	65%	80%	"
10CS55	Computer Networks – I	CO1-CO6	IA	65%	80%	"
10CS56	Formal Languages and Automata Theory	CO1-CO6	IA	65%	80%	"
10CSL57	Database Applications Lab	CO1-CO6	IA	65%	90%	"
10CSL58	Systems Software & OS Lab	CO1-CO6	IA	65%	90%	"
10AL61	Management & Entrepreneurship	CO1-CO6	IA	65%	80%	"
10CS62	UNIX System Programming	CO1-CO6	IA	65%	80%	"
10IS63	File Structure	CO1-CO6	IA	65%	80%	"
10CS64	Computer Networks – II	CO1-CO6	IA	65%	80%	"
10IS65	Software Testing	CO1-CO6	IA	65%	80%	"
10CS661	Operation Research	CO1-CO6	IA	65%	80%	"
10ISL67	File Structures Lab	CO1-CO6	IA	65%	90%	"
10ISL68	Software Testing Lab	CO1-CO6	IA	65%	90%	"
10CS71	Object Oriented Modelling & Design	CO1-CO6	IA	65%	80%	"
10IS72	Information Systems	CO1-CO6	IA	65%	80%	"
10CS73	Programming the WEB	CO1-CO6	IA	65%	80%	"
10IS74	Data Warehousing and Data Mining	CO1-CO6	IA	65%	80%	"
10IS753	JAVA & J2EE	CO1-CO6	IA	65%	80%	"
10IS765	Storage Area Networks	CO1-CO6	IA	65%	80%	"

10CSL77	Networks Lab	CO1-CO6	IA	65%	90%	"
10CSL78	WEB Programming Lab	CO1-CO6	IA	65%	90%	"
10IS81	Software Architectures	CO1-CO6	IA	65%	80%	"
10CS82	System Modeling and Simulation	CO1-CO6	IA	65%	80%	"
10IS833	User Interface Design	CO1-CO6	IA	65%	80%	"
10IS835	Information and Network Security	CO1-CO6	IA	65%	80%	"
10IS843	Supply Chain Management	CO1-CO6	IA	65%	80%	"
10IS845	Clouds, Grids and Clusters	CO1-CO6	IA	65%	80%	"
10IS85	Project Work	CO1-CO6	IA	65%	90%	"
10IS86	Seminar	CO1-CO6	IA	65%	90%	"
			Graduate Exit Survey	90%		End of the Programme
			Alumni Feedback	60%		Annually
			Employer Feedback	70%		Annually

Table 3.3.1.13: PSO 1 – Assessment Process

Programme Specific Outcome 1: The ability to understand, analyze and develop computer programs in the areas related to algorithms, system software, multimedia, web design, big data analytics and networking for efficient design of computer based systems of varying complexity.						
Courses Considered			Assessment Tool	Target Performance		Frequency of Assessment Process
Course Code	Course Name	COs		Internal Assessment	External Exams	
10MAT31	Engineering Mathematics - III	CO1-CO6	IA	60%	75%	Internals – Thrice in a semester
10CS32	Electronic Circuits	CO1-CO6	IA	60%	70%	"
10CS33	Logic Design	CO1-CO6	IA	65%	80%	"
10CS34	Discrete Mathematical Structures	CO1-CO6	IA	65%	80%	"
10CS35	Data Structures with C	CO1-CO6	IA	65%	75%	"
10CS36	Object Oriented Programming with C++	CO1-CO6	IA	65%	80%	"
10CSL37	Data Structures with C/C++ Lab	CO1-CO6	IA	65%	90%	"
10CSL38	Electronics Circuit & Logic Design Lab	CO1-CO6	IA	65%	90%	"
10MAT41	Engineering Mathematics – IV	CO1-CO6	IA	65%	75%	"

10CS42	Graph Theory & Combinatorics	CO1-CO6	IA	65%	75%	"
10CS43	Design and Analysis of Algorithms	CO1-CO6	IA	65%	80%	"
10CS44	Unix and Shell Programming	CO1-CO6	IA	65%	80%	"
10CS45	Microprocessors	CO1-CO6	IA	60%	70%	"
10CS46	Computer Organization	CO1-CO6	IA	65%	80%	"
10CSL47	Design and Analysis of Algorithms Lab	CO1-CO6	IA	65%	90%	"
10CSL48	Microprocessors Lab	CO1-CO6	IA	65%	90%	"
10IS51	Software Engineering	CO1-CO6	IA	65%	80%	"
10CS52	Systems Software	CO1-CO6	IA	65%	80%	"
10CS53	Operating Systems	CO1-CO6	IA	65%	80%	"
10CS54	Database Management Systems	CO1-CO6	IA	65%	80%	"
10CS55	Computer Networks – I	CO1-CO6	IA	65%	80%	"
10CS56	Formal Languages and Automata Theory	CO1-CO6	IA	65%	80%	"
10CSL57	Database Applications Lab	CO1-CO6	IA	65%	90%	"
10CSL58	Systems Software & OS Lab	CO1-CO6	IA	65%	90%	"
10AL61	Management & Entrepreneurship	CO1-CO6	IA	65%	80%	"
10CS62	UNIX System Programming	CO1-CO6	IA	65%	80%	"
10IS63	File Structure	CO1-CO6	IA	65%	80%	"
10CS64	Computer Networks – II	CO1-CO6	IA	65%	80%	"
10IS65	Software Testing	CO1-CO6	IA	65%	80%	"
10CS661	Operation Research	CO1-CO6	IA	65%	80%	"
10ISL67	File Structures Lab	CO1-CO6	IA	65%	90%	"
10ISL68	Software Testing Lab	CO1-CO6	IA	65%	90%	"
10CS71	Object Oriented Modelling & Design	CO1-CO6	IA	65%	80%	"
10IS72	Information System	CO1-CO6	IA	65%	80%	"
10CS73	Programming the WEB	CO1-CO6	IA	65%	80%	"
10IS74	Data Warehousing and Data Mining	CO1-CO6	IA	65%	80%	"
10IS753	JAVA & J2EE	CO1-CO6	IA	65%	80%	"
10IS765	Storage Area Networks	CO1-CO6	IA	65%	80%	"
10CSL77	Networks Lab	CO1-CO6	IA	65%	90%	"
10CSL78	WEB Programming Lab	CO1-CO6	IA	65%	90%	"
10IS81	Software Architectures	CO1-CO6	IA	65%	80%	"
10CS82	System Modeling and Simulation	CO1-CO6	IA	65%	80%	"
10IS833	User Interface Design	CO1-CO6	IA	65%	80%	"
10IS835	Information and Network Security	CO1-CO6	IA	65%	80%	"
10IS843	Supply Chain Management	CO1-CO6	IA	65%	80%	"
10IS845	Clouds, Grids and Clusters	CO1-CO6	IA	65%	80%	"
10IS85	Project Work	CO1-CO6	IA	65%	90%	"
10IS86	Seminar	CO1-CO6	IA	65%	90%	"

	Graduate Exit Survey	90%	End of the Programme
	Alumni Feedback	60%	Annually
	Employer Feedback	70%	Annually

Table 3.3.1.14: PSO 2 – Assessment Process

Programme Specific Outcome 2: The ability to apply standard practices and strategies in software project development using innovative ideas and open ended programming environment with skills in teams and professional ethics to deliver a quality product for business success.						
Courses Considered			Assessment Tool	Target Performance		Frequency of Assessment Process
Course Code	Course Name	COs		Internal Assessment	External Exams	
10MAT31	Engineering Mathematics - III	CO1-CO6	IA	60%	75%	Internals – Thrice in a semester
10CS32	Electronic Circuits	CO1-CO6	IA	60%	70%	"
10CS33	Logic Design	CO1-CO6	IA	65%	80%	"
10CS34	Discrete Mathematical Structures	CO1-CO6	IA	65%	80%	"
10CS35	Data Structures with C	CO1-CO6	IA	65%	75%	"
10CS36	Object Oriented Programming with C++	CO1-CO6	IA	65%	80%	"
10CSL37	Data Structures with C/C++ Lab	CO1-CO6	IA	65%	90%	"
10CSL38	Electronics Circuit & Logic Design Lab	CO1-CO6	IA	65%	90%	"
10MAT41	Engineering Mathematics – IV	CO1-CO6	IA	65%	75%	"
10CS42	Graph Theory & Combinatorics	CO1-CO6	IA	65%	75%	"
10CS43	Design and Analysis of Algorithms	CO1-CO6	IA	65%	80%	"
10CS44	Unix and Shell Programming	CO1-CO6	IA	65%	80%	"
10CS45	Microprocessors	CO1-CO6	IA	60%	70%	"
10CS46	Computer Organization	CO1-CO6	IA	65%	80%	"
10CSL47	Design and Analysis of Algorithms Lab	CO1-CO6	IA	65%	90%	"
10CSL48	Microprocessors Lab	CO1-CO6	IA	65%	90%	"
10IS51	Software Engineering	CO1-CO6	IA	65%	80%	"
10CS52	Systems Software	CO1-CO6	IA	65%	80%	"
10CS53	Operating Systems	CO1-CO6	IA	65%	80%	"
10CS54	Database Management Systems	CO1-CO6	IA	65%	80%	"
10CS55	Computer Networks – I	CO1-CO6	IA	65%	80%	"

10CS56	Formal Languages and Automata Theory	CO1-CO6	IA	65%	80%	"
10CSL57	Database Applications Lab	CO1-CO6	IA	65%	90%	"
10CSL58	Systems Software & OS Lab	CO1-CO6	IA	65%	90%	"
10AL61	Management & Entrepreneurship	CO1-CO6	IA	65%	80%	"
10CS62	UNIX System Programming	CO1-CO6	IA	65%	80%	"
10IS63	File Structure	CO1-CO6	IA	65%	80%	"
10CS64	Computer Networks – II	CO1-CO6	IA	65%	80%	"
10IS65	Software Testing	CO1-CO6	IA	65%	80%	"
10CS661	Operation Research	CO1-CO6	IA	65%	80%	"
10ISL67	File Structures Lab	CO1-CO6	IA	65%	90%	"
10ISL68	Software Testing Lab	CO1-CO6	IA	65%	90%	"
10CS71	Object Oriented Modelling & Design	CO1-CO6	IA	65%	80%	"
10IS72	Information System	CO1-CO6	IA	65%	80%	"
10CS73	Programming the WEB	CO1-CO6	IA	65%	80%	"
10IS74	Data Warehousing and Data Mining	CO1-CO6	IA	65%	80%	"
10IS753	JAVA & J2EE	CO1-CO6	IA	65%	80%	"
10IS765	Storage Area Networks	CO1-CO6	IA	65%	80%	"
10CSL77	Networks Lab	CO1-CO6	IA	65%	90%	"
10CSL78	WEB Programming Lab	CO1-CO6	IA	65%	90%	"
10IS81	Software Architectures	CO1-CO6	IA	65%	80%	"
10CS82	System Modeling and Simulation	CO1-CO6	IA	65%	80%	"
10IS833	User Interface Design	CO1-CO6	IA	65%	80%	"
10IS835	Information and Network Security	CO1-CO6	IA	65%	80%	"
10IS843	Supply Chain Management	CO1-CO6	IA	65%	80%	"
10IS845	Clouds, Grids and Clusters	CO1-CO6	IA	65%	80%	"
10IS85	Project Work	CO1-CO6	IA	65%	90%	"
10IS86	Seminar	CO1-CO6	IA	65%	90%	"
			Graduate Exit Survey	90%		End of the Programme
			Alumni Feedback	60%		Annually
			Employer Feedback	70%		Annually

3.3.2. Provide Results of Evaluation of Each PO & PSO (40)

Program shall set Program Outcome attainment levels for all POs & PSOs.

(The attainment levels by direct (student performance) and indirect (surveys) are to be presented through Program level Course –PO & PSO matrix as indicated).

Note: Similar table is to be prepared for PSOs

C101, C102 are indicative courses in the first year. Similarly, C409 is final year course. First numeric digit indicates year of study and remaining two digits indicate course nos. in the respective year of study.

Direct attainment level of a PO & PSO is determined by taking average across all courses addressing that PO and/or PSO. Fractional numbers may be used for example 1.55.

Indirect attainment level of PO & PSO is determined based on the student exit surveys, employer surveys, co-curricular activities, extracurricular activities etc.

Example: It is assumed that a particular PO has been mapped to four courses C201, C302, C303 and C401.

The attainment level for each of the four courses will be as per the examples shown in 3.2.2.

PO attainment level will be based on attainment levels of direct assessment and indirect assessment.

For affiliated, non-autonomous colleges, it is assumed that while deciding on overall attainment level 80% weightage may be given to direct assessment and 20% weightage to indirect assessment through surveys from students (largely), employers (to some extent). Program may have different weightage with appropriate justification.

Assuming following actual attainment levels:

Direct Assessment

C201 –High (3) C302 – Medium (2) C303 – Low (1) C401 – High (3)

Attainment level will be summation of levels divided by no. of courses $3+2+1+3/4= 9/4=2.25$

Indirect Assessment

Surveys, Analysis, customized to an average value as per levels 1, 2 & 3. Assumed level - 2

4. PO Attainment level will be 80% of direct assessment + 20% of indirect assessment i.e.

$$1.8 + 0.4 = 2.2.$$

Note: Similarly for PSOs

Table 3.3.2.1. PO ATTAINMENT POINTS:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
I Semester												
10MAT11	2.67	2.83	2.00	2.00	2.00	-	-	-	1.50	1.50	-	1.50
10 PHY12	3.00	3.00	3.00	1.00	-	-	1.00	-	2.32	1.00	-	2.00
10 CIV13	3.00	2.83	2.67	3.00	2.00	2.00	3.00	2.00	2.00	1.00	3.00	1.00
10EME14	2.50	2.17	2.17	2.17	2.17	0.33	0.67	3.00	-	-	-	2.17
10 ELE15	3.00	3.00	2.00	-	1.00	1.00	1.00	-	-	-	-	2.00
10WSL16	2.87	2.00	3.00	2.17	-	1.00	1.00	-	2.50	1.17	0.17	1.50
10PHYL17	3.00	2.20	2.20	1.00	-	-	1.00	-	3.00	1.00	-	2.00
10 CIP18	-	-	-	-	-	1.00	1.00	3.00	1.00	2.00	-	1.00
II Semester												
10MAT21	2.66	2.83	2.00	2.00	2.00	-	-	-	1.50	1.50	-	1.50
10CHE22	2.83	2.83	3.00	2.16	2.00	0.33	1.00	1.33	1.66	-	-	2.00
10CCP23	1.67	1.83	1.67	2.17	1.83	2.33	2.00	1.40	1.67	-	-	2.00
10CED24	3.00	2.00	2.00	2.00	2.83	1.00	1.00	-	-	-	-	2.00
10ELN25	3.00	2.83	2.00	1.00	1.00	1.60	1.50	1.00	2.17	1.00	1.20	2.00
10CPL26	1.33	1.50	1.83	2.00	1.50	2.20	1.50	-	2.00	-	-	1.40
10CHEL27	3.00	3.00	2.00	2.00	1.00	-	1.00	2.00	2.00	-	-	2.00
10CIV28	1.16	1.50	2.00	1.75	1.67	2.00	1.80	1.25	1.50	2.00	2.00	2.00
III Semester												
10MAT31	2.67	2.83	2.00	2.00	2.00	-	-	-	1.50	1.50	-	1.50
10CS32	1.07	1.07	0.99	1.07	0.92	-	0.92	-	-	-	-	0.69
10CS33	2.60	2.50	2.50	2.33	1.83	-	-	1.00	1.83	-	-	2.00
10CS34	3.00	2.83	2.50	2.50	2.00	1.50	2.17	2.50	2.00	2.00	2.17	1.00
10CS35	2.83	2.50	2.33	2.50	1.50	1.50	1.50	1.00	2.00	2.00	2.00	2.50
10CS36	3.00	3.00	3.00	2.50	1.50	2.00	1.50	2.00	2.00	2.00	2.00	2.50
10CSL37	2.83	2.60	2.60	2.50	1.50	2.00	2.00	2.00	1.00	2.00	2.00	2.50
10CSL38	2.00	2.50	2.00	2.50	2.00	2.00	2.00	2.00	2.00	-	-	2.00
IV Semester												
10MAT41	2.83	2.50	2.67	2.33	2.33	-	-	-	1.50	1.83	-	1.33
10CS42	2.83	2.50	2.67	2.33	2.33	-	-	-	1.50	1.83	-	1.33
10CS43	2.63	2.63	2.33	2.33	1.86	1.86	1.70	1.86	2.33	1.86	1.86	2.33
10CS44	2.83	2.60	2.50	2.16	1.66	1.50	1.83	1.00	2.00	2.00	2.00	2.00
10CS45	2.33	2.33	2.33	1.86	1.86	1.86	-	1.86	1.86	-	0.93	1.24
10CS46	2.50	2.50	2.16	2.00	2.00	-	1.00	-	-	2.00	1.00	2.00
10CSL47	2.50	2.60	2.70	2.50	2.00	2.00	1.83	2.00	2.50	2.00	2.00	2.50
10CSL48	2.50	2.50	2.50	2.50	2.00	2.00	2.33	2.00	2.00	-	-	2.00
V Semester												
10IS51	2.32	2.32	2.16	1.86	1.70	2.30	2.32	2.32	2.32	2.32	2.32	2.32
10CS52	2.66	2.60	2.50	2.00	2.00	-	2.00	2.00	0.83	2.00	1.50	2.00
10CS53	2.50	2.50	2.50	2.50	2.00	-	2.00	2.00	1.00	2.00	1.00	2.00
10CS54	3.00	3.00	3.00	2.50	2.50	2.50	2.00	2.00	2.00	2.30	2.00	2.50
10CS55	2.00	2.33	3.00	2.30	2.50	2.50	2.50	2.00	2.00	2.00	2.00	2.50
10CS56	2.83	2.83	3.00	2.33	2.50	2.00	-	2.00	-	2.00	-	2.00
10CSL57	3.00	3.00	3.00	2.50	2.50	2.50	2.50	2.50	2.00	2.00	2.00	2.50
10CSL58	2.50	2.50	2.16	2.50	2.50	2.50	2.50	2.50	2.00	2.00	2.00	2.50
VI Semester												
10AL61	2.20	2.20	2.67	2.67	2.00	3.00	2.67	3.00	3.00	2.00	3.00	2.00
10CS62	2.83	2.66	2.33	2.33	2.00	-	1.00	2.00	1.16	2.00	1.00	2.00
10IS63	2.83	2.66	2.83	2.50	2.00	2.33	2.00	2.33	2.00	1.83	2.00	2.00

10CS64	2.83	2.83	3.00	2.50	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
10IS65	2.83	2.66	2.50	2.50	2.00	2.00	2.00	2.00	2.50	2.00	2.00	2.00
10CS661	3.00	2.66	2.33	1.16	-	-	-	-	-	-	-	1.00
10ISL67	2.66	2.66	2.50	2.50	2.00	2.00	2.50	2.00	2.00	1.83	-	2.00
10CSL68	2.50	2.83	2.33	2.50	2.00	2.00	2.50	2.00	2.00	2.33	-	2.50
VII Semester												
10CS71	2.83	2.33	3.00	2.00	1.50	-	-	-	-	2.00	-	2.50
10CS72	2.66	2.50	2.16	2.33	1.50	2.30	1.83	2.30	2.00	2.50	2.00	2.50
10CS73	2.66	2.66	2.33	2.33	2.66	2.00	2.00	2.00	2.16	2.33	1.66	2.50
10CS74	2.83	2.33	2.00	2.33	2.50	2.00	1.16	2.00	1.00	2.00	1.16	2.50
10CS753	2.33	2.17	2.17	1.86	2.33	1.86	1.86	1.86	1.86	2.33	1.86	2.33
10CS765	3.00	2.00	2.50	1.83	2.00	2.30	1.30	2.30	2.00	2.50	2.00	2.50
10CSL77	2.50	2.33	2.16	2.50	2.00	2.30	2.50	2.30	2.00	2.00	2.00	2.50
10CSL78	2.66	2.66	2.70	2.50	2.50	2.30	2.50	2.30	2.00	2.00	1.00	2.50
VIII Semester												
10IS81	2.66	2.50	2.50	2.50	2.16	2.00	2.33	2.50	2.50	2.00	2.00	2.50
10CS82	2.50	2.50	2.33	2.33	2.00	2.16	2.16	2.16	2.16	2.16	2.00	2.33
10IS833	2.16	2.16	2.66	2.00	1.83	2.16	2.16	2.16	2.00	1.83	2.00	2.50
10CS835	2.00	2.00	2.50	2.00	1.00	2.00	2.50	2.00	2.50	-	-	2.50
10CS843	1.33	1.83	2.50	2.33	1.66	2.00	1.83	2.00	0.33	-	-	2.00
10IS845	2.33	1.83	1.83	1.16	2.16	2.00	1.83	2.30	2.30	1.33	1.66	2.33
10IS85	3.00	3.00	3.00	3.00	3.00	2.50	2.50	2.50	2.50	2.50	2.50	3.00
10IS86	3.00	3.00	3.00	3.00	3.00	2.50	2.50	2.50	2.50	2.50	2.50	3.00
Points received (X)	162.5	153.3	149.4	132.4	113.2	90.5	96.2	97.5	104.9	91.2	64.9	128.3
No.of mapped subjects (Y)	63	63	63	62	59	48	54	49	56	49	37	64

TABLE 3.3.2.2: POs ATTAINMENT LEVELS

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Direct Attainment (X/Y)	162.5/63=2.58	153.3/63=2.43	149.4/63=2.37	132.4/62=2.13	113.2/59=1.92	90.5/48=1.88	96.2/54=1.78	97.5/49=1.99	104.9/56=1.87	91.2/49=1.86	64.9/38=1.70	128.3/64=2.0
Weightage (80%) – A	2.58*0.8=2.06	2.43*0.8=1.94	2.37*0.8=1.89	2.13*0.8=1.70	1.92*0.8=1.53	1.88*0.8=1.5	1.78*0.8=1.42	1.99*0.8=1.59	1.87*0.8=1.49	1.86*0.8=1.49	1.70*0.8=1.4	2.0*0.8=1.60
Indirect Attainment	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Weightage (20%) – B	3.0*0.2=0.6	3.0*0.2=0.6	3.0*0.2=0.6	3.0*0.2=0.6	3.0*0.2=0.6	3.0*0.2=0.6	3.0*0.2=0.6	3.0*0.2=0.6	3.0*0.2=0.6	3.0*0.2=0.6	3.0*0.2=0.6	3.0*0.2=0.6
Attainment level (A+B)	2.06+0.6=2.66	1.94+0.6=2.54	1.89+0.6=2.49	1.70+0.6=2.30	1.53+0.6=2.13	1.50+0.6=2.10	1.42+0.6=2.02	1.59+0.6=2.19	1.49+0.6=2.09	1.49+0.6=2.09	1.40+0.6=2.0	1.60+0.6=2.20

Table 3.3.2.3 : PSOs ATTAINMENT POINTS

Course	PSO1	PSO2
I-SEMESTER		
10MAT11	-	-
10PHY12/22	-	-
10CIV13/23	1	-
10EME14/24	3	3
10ELE15/25	2.33	1.33
10WSL16/26	3	3
10PHYL17/27	-	-
10CIP18/28	-	-
II-SEMESTER		
10MAT21	-	-
10CHE12/22	-	-
10CCP13/23	3	2
10CAED14/24	3	3
10ELN15/25	2	2
10CCPL16/26	3	2
10CHEL17/27	-	-
10CIV18/28	1	-
III-SEMESTER		
10MAT31	1	1
10CS32	0.46	0.46
10CS33	2	2
10CS34	2	1
10CS35	3	2
10CS36	3	2
10CSL37	3	2
10CSL38	2	2
IV-SEMESTER		
10MAT41	1	1
10CS42	1	1
10CS43	2.8	1.86
10CS44	2.33	2
10CS45	1.86	1.86
10CS46	2	2
10CSL47	3	2.5
10CSL48	2	2.5
V-SEMESTER		
10IS51	2.79	2.79
10CS52	3	2.5
10CS53	3	2.5
10CS54	3	2.33
10CS55	3	2.33

10CS56	3	2
10CSL57	3	2.5
10CSL58	3	2.5
VI-SEMESTER		
10AL61	2.33	2.5
10CS62	3	2.5
10IS63	3	2.5
10CS64	3	2
10IS65	2	2.83
10CS661	2	2
10ISL67	2.83	2.5
10CSL68	2.5	2.5
VII-SEMESTER		
10CS71	2	2.5
10CS72	2.33	2.5
10CS73	3	2.5
10CS74	2.16	2
10CS753	2.79	2.32
10CS765	2	2.5
10CSL77	3	2
10CSL78	3	2.83
VIII-SEMESTER		
10IS81	2	2.83
10CS82	2	2.5
10IS833	1.33	2.3
10CS835	1.83	1.83
10CS843	1.66	1.66
10IS845	1.33	2.33
10IS85	3	3
10IS86	3	3
Points received	131.6	117.8
No. of mapped	57	55

TABLE 3.3.2.4 :PSOs ATTAINMENT LEVELS

	PSO1	PSO2
Direct Attainment	$131.6/57 = 2.30$	$117.8/55 = 2.14$
Weightage (80%) – A	$2.30*0.8 = 1.84$	$2.14*0.8 = 1.71$
Indirect Attainment	3.0	3.0
Weightage (20%) – B	$3*0.2 = 0.6$	$3*0.2 = 0.6$
Attainment level – A+B	$1.84+ 0.6=2.45$	$1.71+ 0.6= 2.31$

CRITERION 4: STUDENT'S PERFORMANCE**150****Table 4a: Admission details for past 6 years**

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	CAY (2016- 17)	CAY m1 (2015- 16)	CAY m2 (2014 - 15)	CAY m3 (2013- 14)	CAY m4 (2012- 13)	CAY m5 (2011- 12)
Sanctioned intake of the program (N)	120+ 6*	120+ 6*	120 + 6*	120 + 6*	120 + 6*	120+ 6*
Total number of students admitted in first year minus number of students migrated to other programs/institutions plus no. of students migrated to this program (N1)	126	126	126	126	126	126
Number of students admitted in 2 nd year in the same batch via lateral entry (N2)	4	1	3	0	2	9
Separate division students, if applicable (N3)	NA	NA	NA	NA	NA	NA
Total number of students admitted in the program (N1+N2+N3)	130	127	129	126	128	135

- ✚ CAY - Current Academic Year
- ✚ CAYm1- Current Academic Year minus 1= Current Assessment Year
- ✚ CAYm2 - Current Academic Year minus 2 = Current Assessment Year minus 1
- ✚ LYG – Last Year Graduate
- ✚ LYGm1 – Last Year Graduate minus 1
- ✚ LYGm2 – Last Year Graduate minus 2
- ✚ 6* - Super Numeric Quota (SNQ)
- ✚ NA – Not Applicable

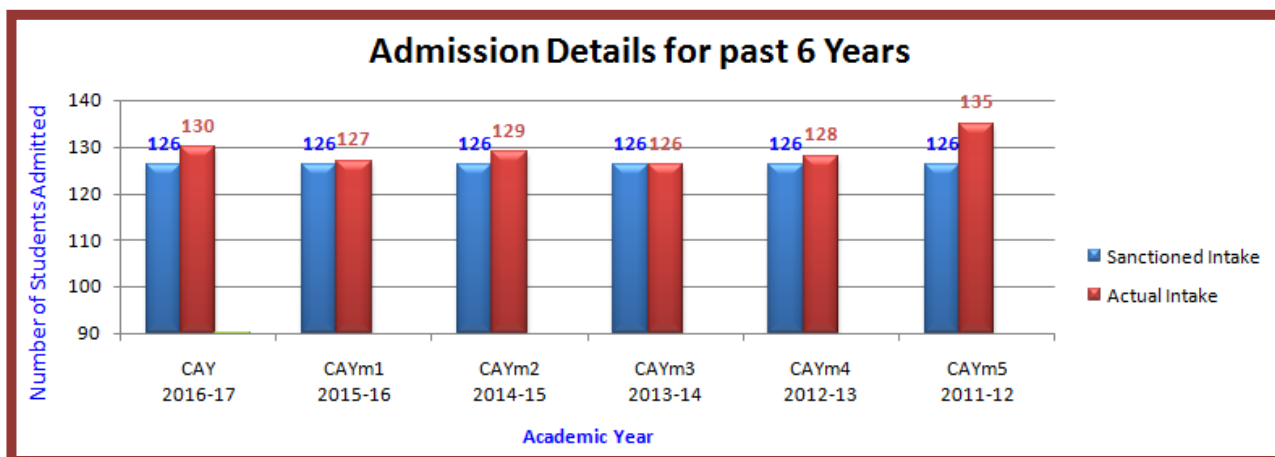
**Fig. 4a: Admission details for past 6 years**

Table 4b: Number of students successfully graduated without backlogs

Year of Entry	N1+N2+N3 (As defined above)	Number of students who have successfully graduated without backlogs in any semester / year of study (Without Backlog means no compartment or failures in any semester / year of study)			
		I Year	II Year	III Year	IV Year
2017 (CAY)	126				
2016 (CAYm1)	130	102			
2015 (CAYm2)	127	104	95		
2014 (CAYm3)	129	62	54	48	
2013 (CAYm4) (LYG)	126	86	64	61	60
2012 (CAYm5) (LYGm1)	128	72	60	56	56
2011 (CAYm6) (LYGm2)	135	83	54	52	51

Table 4c : Number of students graduated successfully with backlog in stipulated period of study

Year of Entry	N1+N2+N3 (As defined above)	Number of students who have successfully graduated (Students with backlog in stipulated period of study)			
		I Year	II Year	III Year	IV Year
2017 (CAY)	126				
2016 (CAYm1)	130	117			
2015 (CAYm2)	127	119	118		
2014 (CAYm3)	129	104	92	91	
2013 (CAYm4) (LYG)	126	112	99	94	92
2012 (CAYm5) (LYGm1)	128	109	102	97	97
2011 (CAYm6) (LYGm2)	135	120	108	106	106

4.1 Enrollment Ratio (20)

$$\text{Enrollment Ratio} = N1/N$$

Table 4.1: Enrollment Ratio for past 3 Years

ITEM	CAY (2016-17)	CAYm1 (2015-16)	CAYm2 (2014-15)
Sanctioned Intake of the program (N)	126	126	126
Total number of students admitted in first year minus number of students migrated to other programs/institutions plus no. of students migrated to this program (N1)	126	126	126
Enrollment Ratio (N1 / N)	1.0	1.0	1.0
Average Enrollment Ratio	1.0		

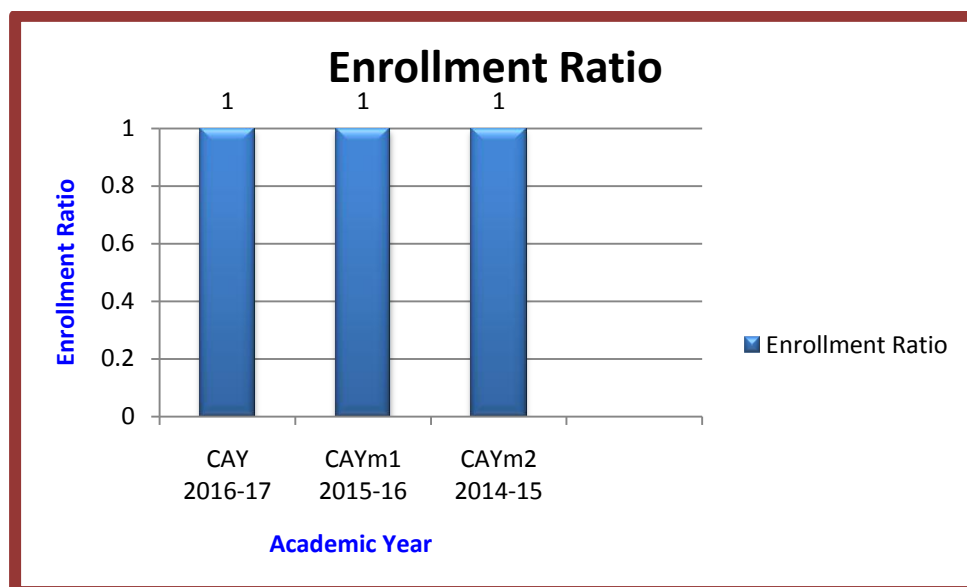


Fig. 4.1.1: Enrollment Ratio

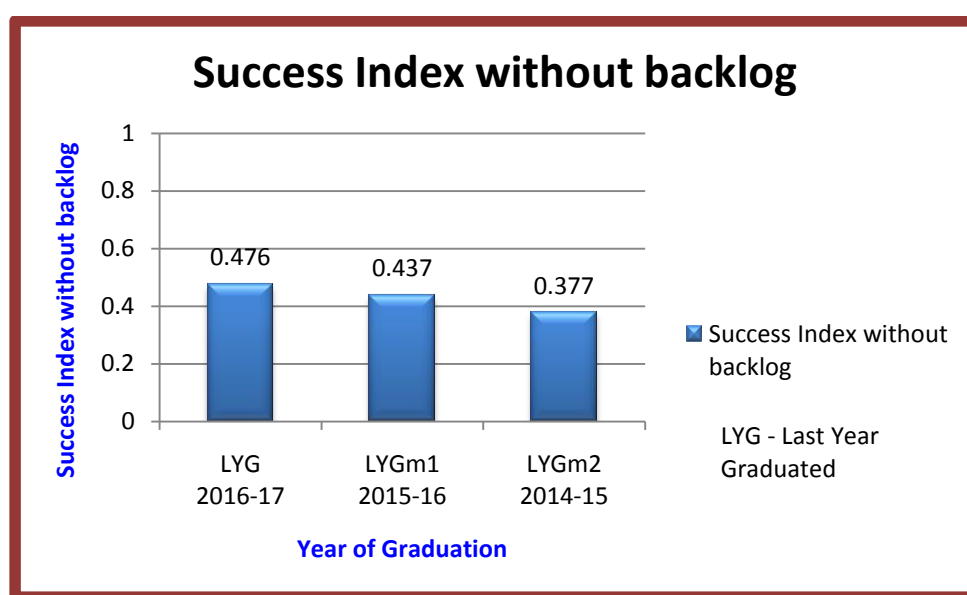
4.2. Success Rate in the Stipulated Period Of The Program (40)

4.2.1: Success Rate without backlogs in any Semester / Year of Study (25)

- ✚ SI = (Number of students who have graduated from the program without backlog) / (Number of students admitted in the first year of that batch and admitted in 2nd year via lateral entry and separate division if applicable)
- ✚ Average SI = Mean of success Index (SI) for past three batches
- ✚ Success rate without backlogs in any year of study = 25 × Average SI

Table 4.2.1: Success Rate without backlogs

Item	2016-17 LYG (CAYm4)	2015-16 LYGm2 (CAYm5)	2014-15 LYGm2 (CAYm6)
Number of students admitted in the First Year + admitted in 2 nd year via lateral entry division, if applicable	126	128	135
Number of students who have graduated without backlogs in the stipulated period	60	56	51
Success Index (SI)	0.4761	0.4375	0.37778
Average SI	0.4304		

**Fig. 4.2.1: Success Rate without backlogs**

Average SI = 0.4304

4.2.2: Success rate with backlogs in stipulated period of study (15)

- ✚ SI = (Number of students who have graduated from the program with backlog in the stipulated period) / (Number of students admitted in the first year of that batch and admitted in 2nd year via lateral entry and separate division if applicable)
- ✚ Average SI = Mean of success Index (SI) for past three batches
- ✚ Success rate = 15 × Average SI

Table 4.2.2: Success rate with backlogs in stipulated period

Item	2016-17 LYG (CAYm4)	2015-16 LYGm2 (CAYm5)	2014-15 LYGm2 (CAYm6)
Number of students admitted in the First Year + admitted in 2 nd year via lateral entry division, if applicable	126	128	135
Number of students who have graduated with backlogs in the stipulated period	92	97	106
Success Index (SI)	0.73015	0.75781	0.78518
Average SI	0.7577		

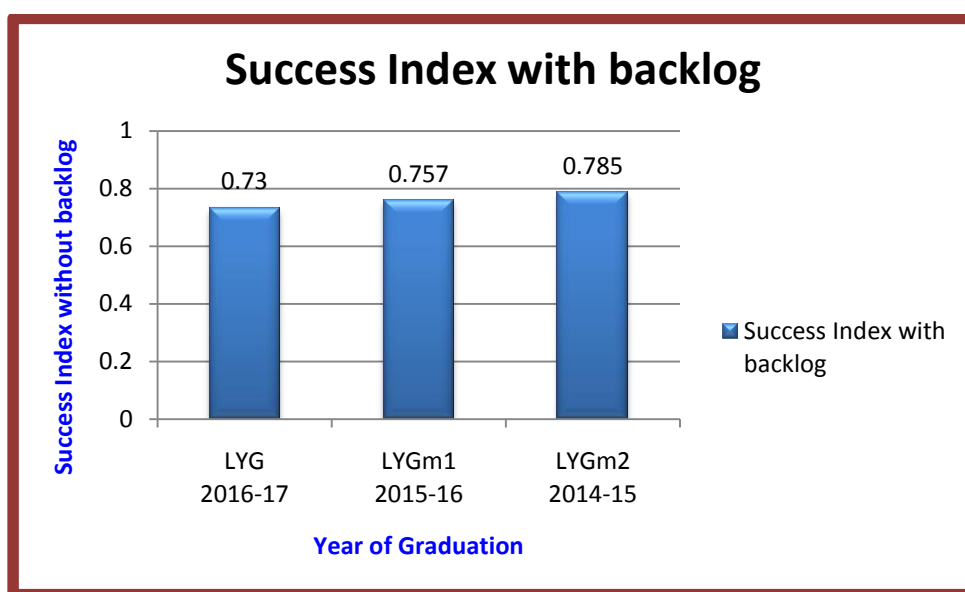


Fig. 4.2.2: Success index with backlogs in stipulated period

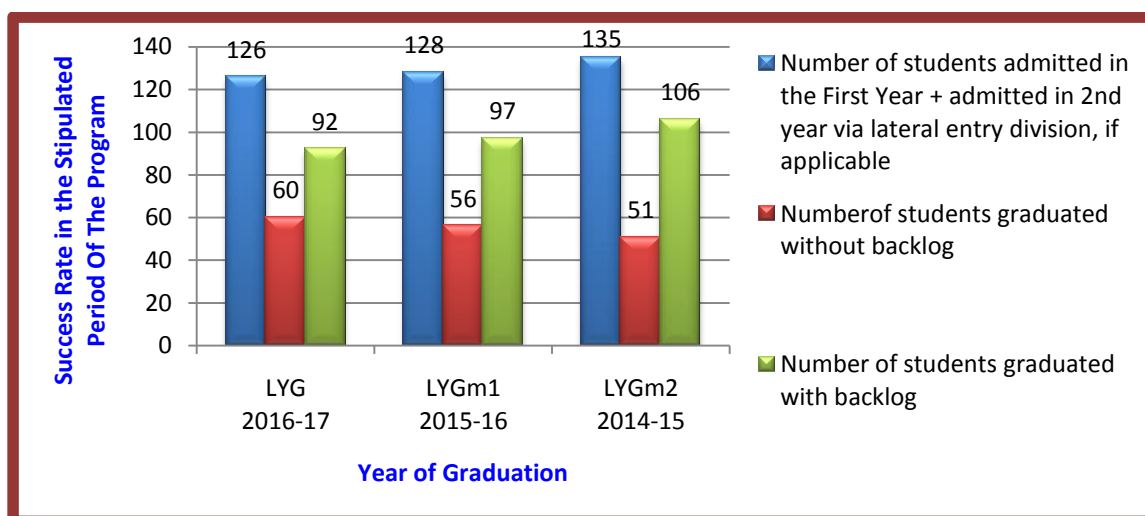


Fig. 4.2.3: Success rate in the stipulated period of the program

4.3 : Academic Performance in Third Year (15)

- ✚ Academic Performance = 1.5 * Average API (Academic Performance Index)
- ✚ $API = ((\text{Mean of 3}^{\text{rd}} \text{ Year Grade Point Average of all successful Students on a 10 point scale}) \text{ or } (\text{Mean of the percentage of marks of all successful students in Third Year}/10)) \times (\text{number of successful students}/\text{number of students appeared in the examination})$
- ✚ Successful students are those who are permitted to proceed to the final year.

Table 4.3: Academic Performance in Third Year

Academic Performance	Year of Entry 2015-16 (2013 - 17 Batch)	Year of Entry 2014-15 (2012 -16 Batch)	Year of Entry 2013-14 (2011 -15 Batch)
Mean of CGPA or Mean percentage of all successful students /10 (X)	6.4786	6.4685	6.8456
Total No. of successful students (Y)	94	97	106
Total No of students appeared for examination (Z)	99	102	108
$API = X * (Y / Z)$	6.1513	6.1514	6.7188
Average API	6.3405		

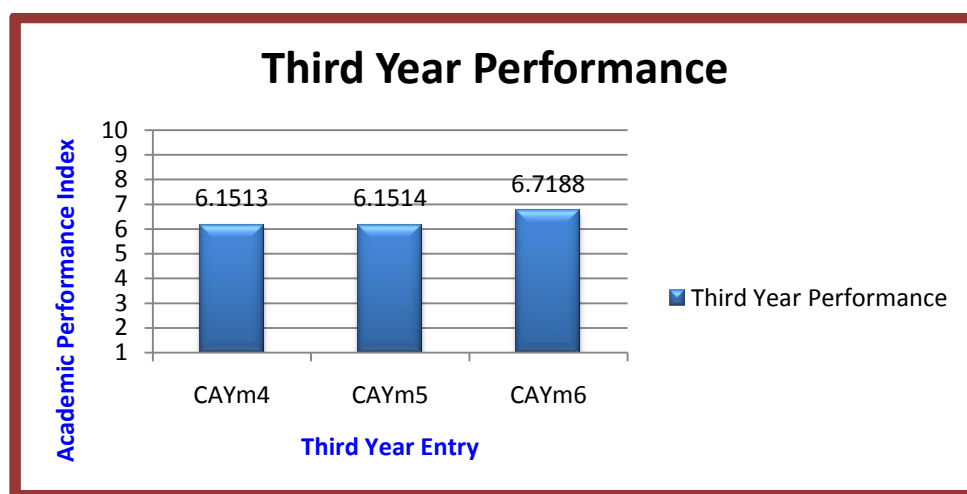


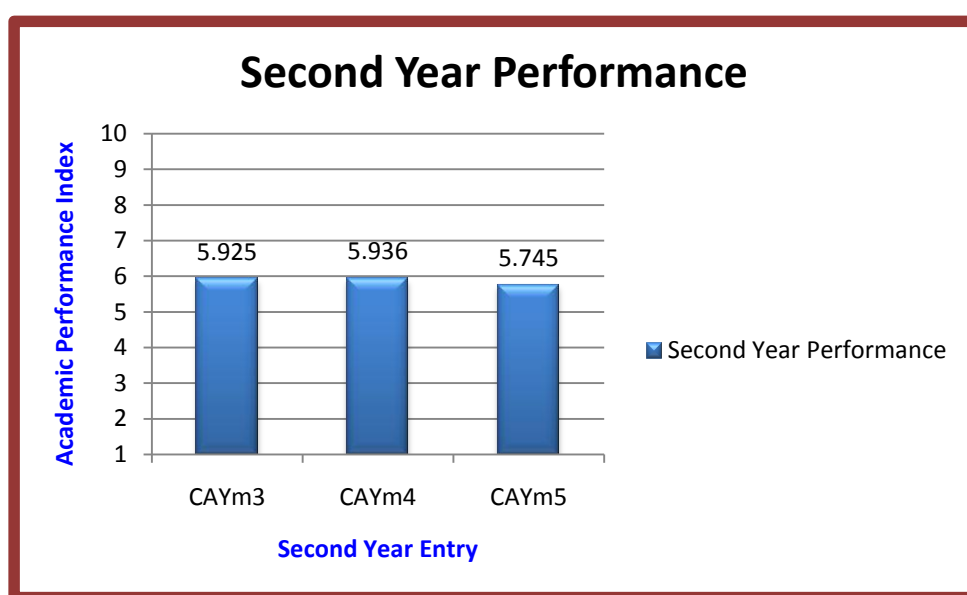
Fig. 4.3: Academic Performance Index (API)

4.4 : Academic Performance in Second Year (15)

- ✚ Academic Performance Level = 1.5 * Average API (Academic Performance Index)
- ✚ $API = ((\text{Mean of 2}^{\text{nd}} \text{ Year Grade Point Average of all successful Students on a 10 point scale}) \text{ or } (\text{Mean of the percentage of marks of all successful students in Second Year}/10)) \times (\text{number of successful students}/\text{number of students appeared in the examination})$
- ✚ Successful students are those who are permitted to proceed to the Third year.

Table 4.4: Academic Performance in Second Year

Academic Performance	Year of Entry 2014-15 (2013 - 17 Batch)	Year of Entry 2013-14 (2012 – 16 Batch)	Year of Entry 2012-13 (2011 - 15 Batch)
Mean of CGPA or Mean percentage of all successful students /10 (X)	6.644	6.344	6.3
Total No. of successful students (Y)	99	102	108
Total No of students appeared for examination (Z)	111	109	118
API= X * (Y / Z)	5.925	5.936	5.745
Average API = (AP1+AP2+AP3) / 3	5.865		

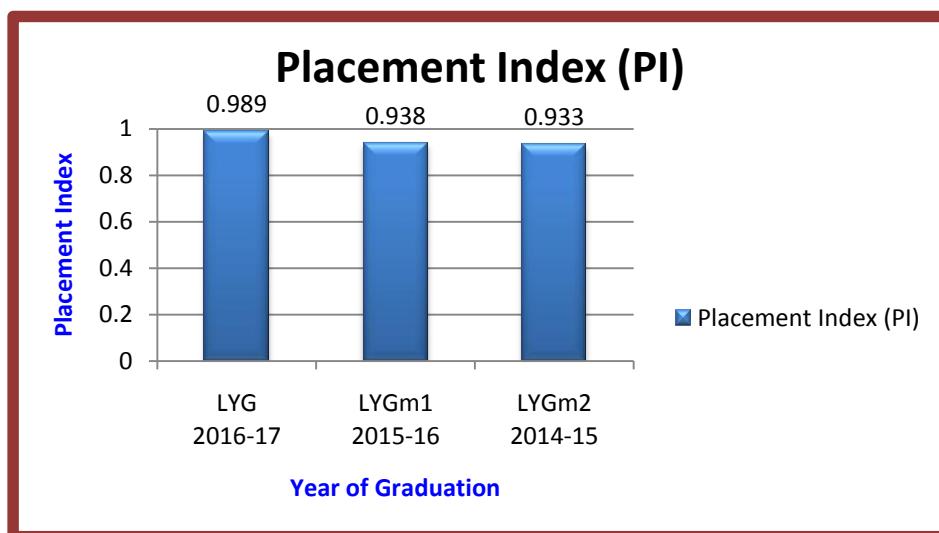
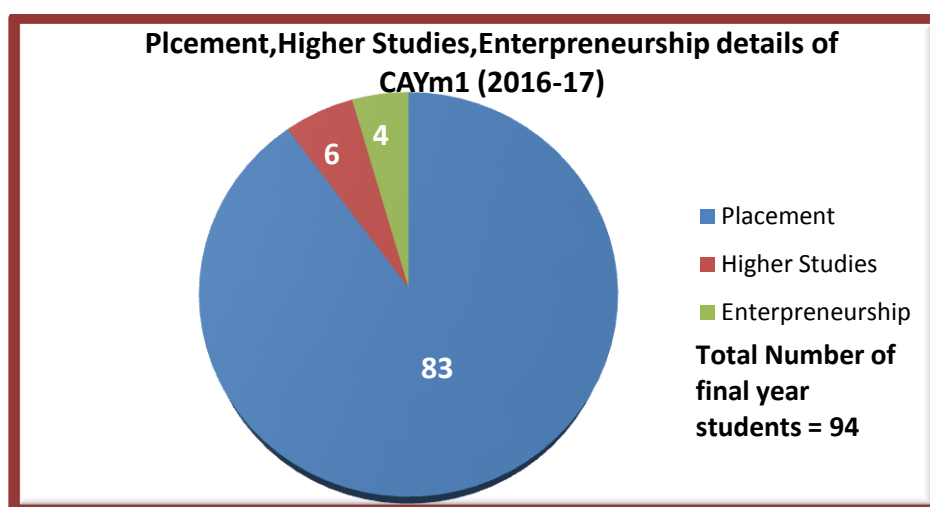
**Fig. 4.4: Academic Performance in Second Year**

4.5 : Placement, Higher Studies and Entrepreneurship (40)

- ✚ Assessment Points = $40 \times \text{average of three years of } [(X + Y + Z) / N]$ where, X = Number of students placed in companies or Government sector through on/off campus recruitment
- ✚ Y = Number of students admitted to higher studies with valid qualifying scores (GATE or equivalent State or National level tests, GRE, GMAT etc.)
- ✚ Z = No. of students turned entrepreneur in engineering/technology
- ✚ N = Total number of final year students

Table 4.5 : Placement, Higher Studies and Entrepreneurship for Past Three Years

Item	2016-17 CAYm1	2015-16 CAYm2	2014-15 CAYm3
Total No. of Final Year Students (N)	94	97	106
No. of students placed in companies or Government Sector (X)	83	86	92
No. of students admitted to higher studies with valid qualifying scores (GATE or equivalent State or National Level Tests, GRE, GMAT etc.) (Y)	6	3	6
No of students turned entrepreneur in engineering/technology (Z)	4	2	1
X + Y + Z	93	91	99
Placement Index : (X + Y + Z) / N	0.9893	0.9381	0.9339
Average placement = (P1 + P2 + P3) / 3	0.9537		

**Figure 4.5.1: Placement Index****Fig. 4.5.2 : Placement,Higher Studies, Entrepreneurship details - CAYm1 (2016-17)**

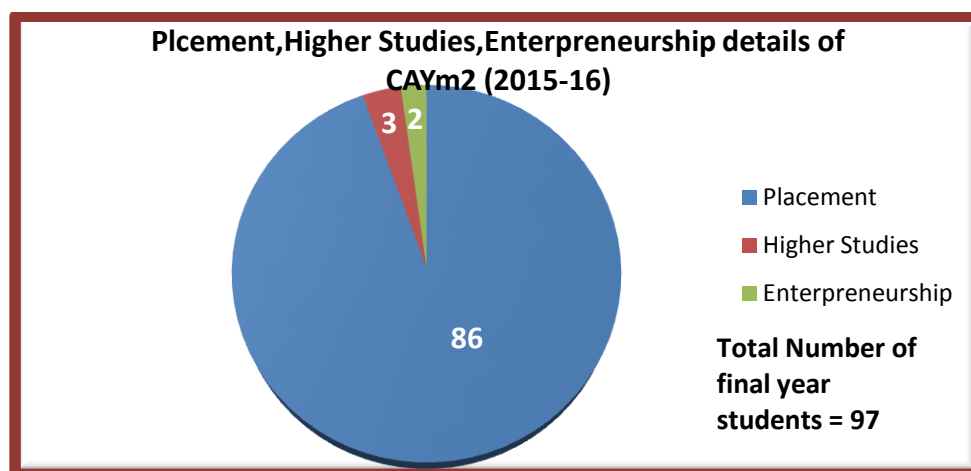


Fig. 4.5.3 : Placement, Higher Studies, Entrepreneurship details - CAYm2 (2015-16)

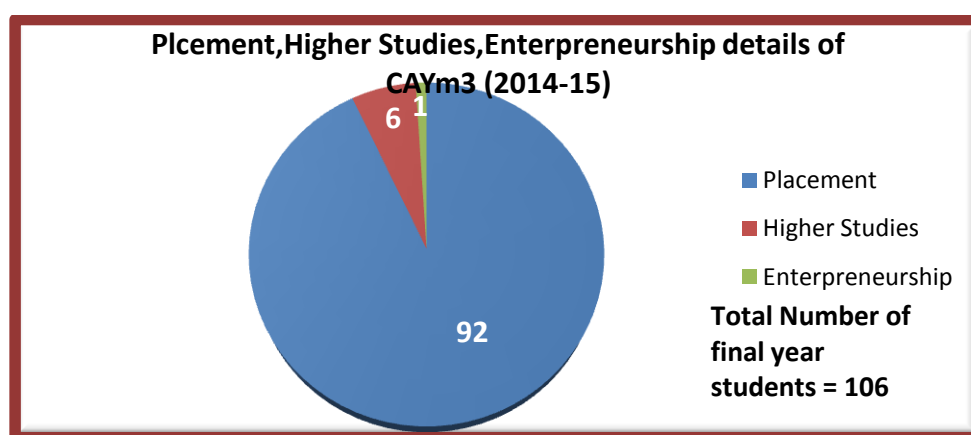


Fig. 4.5.4 : Placement, Higher Studies, Entrepreneurship details - CAYm3 (2014-15)

4.6. Professional Activities (20)

4.6.1. Professional Societies / Chapters and Organizing Engineering Events (5)

Table 4.6.1.1: List of Professional Societies

Sl. No.	Professional Societies	Acronym
1	Computer Society of India	CSI
2	Indian Society for Technical Education	ISTE
3	Data Science Association	DSA
4	Institute of Engineers India	IEI
5	Free Software Movement Karnataka	FSMK
6	International Association of Engineers	IAENG
7	International Computer Science and Engineering Society	ICSSES
8	Engineering Design and Analysis Forum	EDAF
9	National Design and Research Forum	NDRF
10	Vmware IT Academy	VITA

Table 4.6.1.2: Engineering Events Conducted CAYm2 (2015-16)

Sl. No	Professional Societies	Event Name	Chief Guest / Resource Persons	Event Outcome	No. of Participants	Date
1	IAENG	Technical session and demonstration on “Share, Discuss and organize educational content for life”	Ms. Namrata Sharma, Community Manager, Scholate, Bengaluru	Relating Educational aspects to the life	108	13.08.2015
2	ISE, NHCE	Workshop on “Making Professionals Powerful”	Mr. Venkat Ramana Reddy, Key person for DBRC.	Improvement in personality skills Participants	86	03.09.2015
3	ISE, NHCE	Technical session on “Campus to Corporate”	Ms. Shalini P, Software Engineer, Society General, Bengaluru	Current trends in corporate, challenges and success factors	101	23.09.2015
4	ISE, NHCE	Workshop on “MATLAB”	1. Prof.Rajeshwari S 2. Prof.Nitty Sarah Alex, 3. Prof.Rafega Beham A.,	Fundamental data analysis using MATLAB	67	7.11.2015
5	CSI	Technical session on “Innovation & Value Creation	Mr. Veerendra Vasumathy, Innovation Manager, Schnieder Electric, Bengaluru	Advance knowledge in dynamic programming	210	25.02.2016
6	ISE, NHCE	Workshop on “C# .NET”	Mr. Mrutunjay Kumar, Senior Engineer - India IT, Quintiles Research Pvt. Ltd., Bengaluru	Developing console based applications using C#	112	27.2.2016
7	ICSES	Technical talk on “Advanced Networking”	Mr. Ramar Balakrishnan, Technical leader, Cisco software, Bengaluru	Routing Techniques, Issues , new protocols	101	12.03.2016

8	ISE, NHCE	Training on “CISCO Certified Network Associate”	Mr. Vaidraju, Managing Director, Scaltech, Bangalore	Fundamental knowledge in Networking and design of networks using simulators	25	13.02.2016 to 27.03.2016
9	FSMK	Training on “Oracle Java Certificate”	Mr Vaidraju, Managing Director, Scaltech, Bangalore	Practical knowledge of Java & J2EE that helps in final year projects	31	13.02.2016 to 27.03.2016
10	IAENG	Expert Lecture on “Logistics and Supply Chain Management”	Prof. Ananth N, Managing Director, Maniams Marketing Services Pvt. Ltd.	Strategies in Supply Chain Management	112	31.03.2016
11	ISE, NHCE	Workshop on Cloud Computing	Mr. Abhishek Soni, IFC3, IIT Hyderabad, Inferio, Scitech council	Hands on experience on cloud infrastructure and its issues	38	1.4. 2016 to 2.4.2016
12	CSI	Workshop on Android application development	Mr Shishir Umesh, Mr Sumanth Reddy, Students of 6 th sem, Dept. of ISE, NHCE	Developed android applications for college events	67	25.4.2016
13	IEI	National Conference & Project Exhibition “TECHORIZON-2016”	Dr. Annadorai, Director, ISRO Satellite Centre (ISAC), Bangalore	Exposure to students projects	116	21.05.2016

Table 4.6.1.3: Engineering Events Conducted in CAYm1 (2016-17)

Sl. No	Name of the Professio	Event Name	Chief Guest / Resource Persons	Event outcome	No. of Participa	Date
1	ISTE, ICSES	Seminar on SAP Hana Cloud	1) Mr. Srinivas, Professor, R.V. College of Engg. 2) Ms Rashmi – Asst. Prof., R.V. College of Engg. 3) Ms Shobha, Asst. Prof., P.E.S.IT	Fundamentals of cloud computing and SAP Hana cloud	142	16.9.2016

2	IAENG	Workshop on “Technology challenges and Applications in IoT”	1) Mr.Haribabu, Principal Technical Officer 2) Mr.Tulasi Dwarakanath, Project Engineer. IOT Group, CDAC, Bengaluru	Fundamental challenges of IoT that gives scope for research	170	24.9.2016
3	CSI	Workshop on “Introduction to SOLID principles of Object Oriented Design and Programming” under CSI Chpater,NHCE	Mr.Dattatreya S Vellal, Software Development Engineer, Amazon Development Center India, Bengaluru	Applications of Object Oriented Programming	118	5.11.2016
4	ISE, NHCE	Training on “Python Developer Program”	Mrs. Rashmi Kumbugowdana, IT professional, IIHT – Marathalli	Applying python language for academic projects	27	26.08.2016 to 05.11.2016
5	FSMK	Workshop on Hybrid Mobile App Development using Apache Cordova	Mr Ramkumar Armugam-Head - Model Exams, Madurai	Open source mobile application development	84	26-10-2016
6	DSA	Workshop on R tool	Mr.Nagamallikarjuna, Senior architect(Big Data Analyst),Cloudera, Bengaluru	Applying R techniques to sample datasets	89	16.3.2017
7	VITA	OPEN BADGE DAY ASSESSMENT	Mr. Ranjan Manish, Head – IIC,NHCE.	Students certified for Virtualization Essentials training course certification	118	28.4.2017
8	ISE, NHCE	Workshop on “Game console Interface development on iOS platform”	Mr. Allamaprabhu S Sotti, Senior Software Engineer, Snapdeal, Bengaluru	Developing iOS game console	97	10.5.2017

9	VITA	VM-MACH FAIR	Vmware IT academy student club	Student competition includes Simple minds, Matter of fact, Train the trainer	80	13.5.2017
10	DSA	National Symposium on Data Science	1. Mr. Amit Bakshi, Program Manager Analytics, IBM India Pvt. Ltd. 2. Mr. Mukundan Annamalai, Delivery Manager, Infosys 3. Mr. Nagamallikarjuna, Architect, Cloudera *1,2,3 – from Bengaluru	Research scope in Data science, using R in applications, Introducing Hadoop for solving Big Data problems	90	16.12. 2017
11	ISE, NHCE	TECHSPRK – App. Guess, Tech Quiz, Pick & Speak, Folder Hunt	Student club I – SWET(G) event	Student competition gives creative thinking	150	23.01.2017
12	ISE, NHCE	TECHUNT – Brain Storming, Tech Debate, Creativity, Techbuzz	Student club I – SCRUM event	Student competition gives creative thinking	90	21.04 2017
13	IAENG	Student's Club Activity Program	Student clubs I- SCRUM, I-SWET(G), I-CSEH activities	Demo of robot, drone, virtual reality, IoT devices and peer learning	232	27.9.2017
14	i-scrum student club	Seminar on Writing Research Papers	Dr Jitendranath Mungara, Prof. & HOD – ISE, NHCE	Student publication with quality topics	94	23.2.2017
15	ICSES, DSA, IAENG	National Conference on Innovation and Research in Information Technology (IRIT)-2017	Dr. Mandar Mutalik Desai, Senior Managing Consultant, Cognitive Computing, IBM India Pvt. Ltd., Bengaluru	Student / faculty publications in journals	210	18.5.2017

16	DSA	Expert lecture on “Overview of data management platform tools”	Mr. Sreekantha T, Vice President, Platform Data Engineering and Analytics.	Creates new platform opportunities for the innovators ready to build products	86	08.04.2017
17	ISE, NHCE	Training program “Cisco Certified Network Associate”	Mrs Sunitha Aminagad, Technical Manager Jetking Sadashivanagar, Bengaluru	Fundamental knowledge in Networking and design of networks using simulators	49	18.02.2017 to 18.04.2017
18	IEI, ISTE, NDRF, EDAF	National Level Project Exhibition “TECHORIZO N-2017”	Mr.Vikas Reddy, Head of Amazon Robotic Lauch EU & Japana London,UK & Luxember,Germany	Exposure to student’s projects	116	27.05.2017

Table 4.6.1.4: Engineering Events Conducted in CAY (2017-18)

Sl. No.	Name of the Professional Societies	Event Name	Chief Guest / Resource Persons	Event Outcome	No. of Participants	Date
1	ICSES	Expert lecture on Overview of SaaS and Cloud Computing Essentials	Mr.Karthikeyan Narayan, Advisory Software Developer, IBM India Pvt. Ltd,	Fundamentals of Cloud computing & its challenges	117	19.8.2017
2	ISE, NHCE	Expert Talk on “Cloud Computing Security”	Mrs. Ananthamalar Ramarathinam , Principal consultant, Global Data Center Networks, Mercedes Benz R & D India	Identification of issues related to security in cloud computing	111	09.09.2017
3	CSI, IAENG	Workshop on “Ethical Hacking & Cyber Security”	I3-indya Technologies, New Delhi, Mr. Ooppss,Certified ethical hacker.	Hands on ethical hacking techniques	104	15-16, September 2017
4	ISE, NHCE	Expert Talk on “IoT Revolution:A Sneak Peak”	Mrs. Thiripura Sundari, Project Manager, HCL technologies	To Know about the IoT field	107	10.10.2017

5	FSMK	Expert Talk on Concepts on Software Testing	Mrs. Hridya Krishna Kumar, Test Lead, Volvo, Bengaluru	Fundamentals of testing , Black box and white box testing	38	28.10.2017
6	ICSES	Guest Lecture on “Advanced SQL concepts”	Mrs. Sushma V, Technical Architect, FIS Technologies	Managing simple datasets	118	28.10.2017
7	ISE, NHCE	Guest Lecture on Trees and Graphs	Mr.Rajasekhar Medapati, Senior software Engineer, JDA Software	Knowledge of apache kafka,hadoop	113	11.11.2017
8	DSA	Seminar on “Machine Learning - Industry Use Cases And Getting Started With Implementation In Python”	Mr. Badrish Agarwal, Founder and CTO, Uolo Technology	Understand the field of machine learning and challenges of it w.r.t. industry perspective	98	14.11.2017
9	VITA	Expert talk on Basic vSphere Networking	Mr.Athish Gupta, Software Engineer, Networking & security Unit at VMware	Creating virtual network, virtual storage etc.	52	16.11.2017
10	CSI	Expert lecture on Conversation on UI and Chatbots”	Mr Antony Willet, Senior Tech Lead , LG Soft Pvt.Ltd	Students will be able to apply the UI and chatbots in their mini projects	115	17.11.2017
11	ISE, NHCE	Training on Android Application development	Ether Global Services Pvt. Ltd.	Developing android applications	49	17.09.2017 to 16.12.2017
12	ISE, NHCE	Technical Event “Code - Lingus”	i-SWET (G) Student Club	Enhancing Coding skills	70	06.02.2018
13	VITA	Technical Event “Hyperwise”	VMware IT academy Student Club	Exploring Creative thinking w.r.t Virtualization concepts	86	09.02.2018
14	IAENG	Seminar on “Quantum Cryptography”	i-CSEH Student Club	Knowledge of quantum Crptography	102	10.02.2018

15	ICSES	Seminar on “Vedic Mathematics and its sutras in Digital Systems”	i-SCRUM Student Club	Advantages of Vedic Mathematics in Digital Systems	210	24.02.2018
16	DSA	Workshop on Technology Challenges in Big Data using Apache Spark	Mr.Inelu Nagamallikarjuna, Architect, Widas Mr.Shreekanth T, Vice President, Investment Bank	Knowledge of Data Science and Spark	126	26.02.2018



Fig. 4.6.1.1: Workshop on “Ethical Hacking & Cyber Security” from 15 to 16, September 2017



Fig. 4.6.1.2: Inauguration of Club Activity Program on 27.09.2017

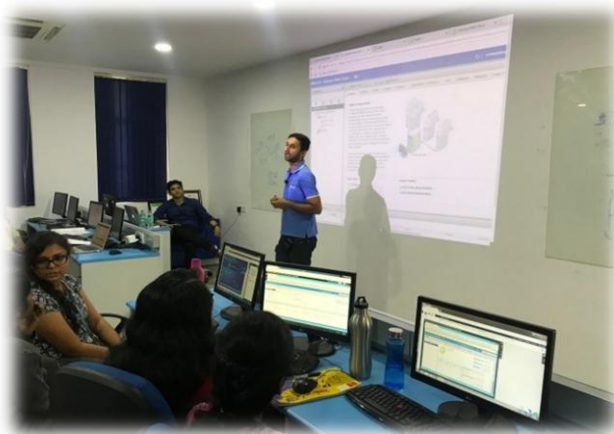


Fig. 4.6.1.3 : Mr.Prashant Shetty ,delivering the fundamentals of vSphere Networking on 16.11.2017



Fig. 4.6.1.4 : Prof. Raghavendra Prasad delivering seminar Vedic Mathematics on 24.02.2018

4.6.2 Publication of Technical Magazines, Newsletters, etc (5)

Table 4.6.2.1 : List of publication of Technical Magazines, Newsletters in CAYm2 (2015-16)

Sl. No	Name of the Magazine, News letter	Periodicity	Editorial Board	Publisher	Publication Details
1	i-News (News Letter)	Half Yearly	1.Prof.Vishwanath Y 2.Prof.Priti Badar 3.Prof.Kavitha K K 4.Ms.Vishwitha N 5.Mr. Akash S	Dept. of ISE, NHCE	Volume -1, Issue - 1
2	i-News (News Letter)	Half Yearly	1.Prof.Vishwanath Y 2.Prof. Priti Badar 3.Prof.Kavitha K K 4.Mr.Shishir Umesh 5.Mr. Sumanth Reddy	Dept. of ISE, NHCE	Volume -1, Issue - 2
3	InfoTech-Patrica (Technical magazine)	Half Yearly	1.Prof.Gangadhar Immadi 2.Prof.Swati B 3.Mr.Anto Malvin 4.Mr.Venkat Surendra	Dept. of ISE, NHCE	Volume -1, Issue 1
4	InfoTech-Patrica (Technical magazine)	Half Yearly	1.Prof.Vandana C P 2.Prof. Shobha S 3.Ms.Sushma D S 4.Ms.Vishwitha N	Dept. of ISE, NHCE	Volume -1, Issue 2
5	National Conference & Project Exhibition “TECHORIZON - 2016”	Yearly	HOD’s of all Department, NHCE	NHCE	ISBN: 978-81-9257555-0-4

Table 4.6.2.2 : List of publication of Technical Magazines, Newsletters in CAYm2 (2016-17)

Sl. No	Name of the Magazine, News letter	Periodicity	Editorial Board	Publisher	Publication Details
1	i-News (News Letter)	Half Yearly	1.Dr. Jitendranath Mungara, 2.Dr. Vishwanath Y, 3.Prof.Gangadhar Immadi 4.Ms Payal Jain, 5.Mr.Ijaz Nizami	Department of ISE, NHCE	Volume -2, Issue - 1
2	i-News (News Letter)	Half Yearly	1.Dr. Jitendranath Mungara, 2.Dr.Vishwanath Y 3.Prof.Gangadhar Immadi, 4.Ms Payal Jain, 5.Mr.Rajshekhar Hotti	Department of ISE, NHCE	Volume -2, Issue - 2

3	InfoTech-Patrica (Technical magazine)	Half Yearly	1.Prof.Rajeshwari S 2.Prof.Mounica B	Department of ISE, NHCE	Volume -2, Issue 1
4	InfoTech-Patrica (Technical magazine)	Half Yearly	1.Prof.Swathi B 2.Prof.Shwetha K S 3.Ms Payal Jain,	Department of ISE, NHCE	Volume -2, Issue 2
5	National Level Project Exhibition “TECHORIZON - 2017”	Yearly	HOD's of all Department, NHCE	NHCE	ISBN: 978-93-84893-67-5
6	National Conference on Innovation and Research in Information Technology (IRIT)-2017 Proceedings	Yearly	1.Prof.Gangadhar Immadi 2.Prof.Vikas B O 3.Ms Payal Jain 4.Mr Deepak Bhat 5.Mr Akshay	Department of ISE, NHCE	IRIT-17

Table 4.6.2.3 : List of publication of Technical Magazines, Newsletters in CAY (2017-18)

Sl. No.	Name of the Magazine, News letter	Periodicity	Editorial Board	Publisher	Publication Details
1	i-News (News Letter)	Half Yearly	1.Dr.Jitendranath Mungara, 2.Prof.Gangadhar Immadi, 3.Prof. Vikas B O 4. Mr.Gagan & Ms.Harshita S	Department of ISE, NHCE	Volume -3, Issue - 1
2	InfoTech-Patrica (Technical magazine)	Half Yearly	1.Dr.Vishwanath Y 2.Mr.Jushua, 3.Mr.Akshansha Jain	Department of ISE, NHCE	Volume -3, Issue 1



Workshop on Ethical Hacking and Cyber Security



The workshop was initiated by Mrs. Shobha Shanmugam (Asst. Prof. ISE Dept., ICSEH club Workshop Coordinator), who had analyzed numerous number of websites and organizations to get hold of the organization that delivers its best in the stipulated field. Without any delay she approached Dr. Jithendranath Mangaraj (HOD, ISE dept) to secure the permission to organize it within the department, where as the HOD who found the proposal very interesting and prominent decided to organize the workshop at intra-collegiate level. Which notion let them to approach Dr. Manjunatha (Principal, NHCE), who was very impressed with the idea and not only gave his consent to organize it in intra-collegiate level rather inter-collegiate level. The process was long and tedious but with their constant support the workshop was finally approved by our honorable chairman Dr. Mohan Manghnani.

To go ahead professors Mrs. Shobha Shanmugam (Asst. Prof. ISE Dept.), Mrs. Mounica B (Asst. Prof. ISE Dept.), Mrs. Preethi J (Asst. Prof. ISE Dept) formed a unit to support and work on the backend requirements of the workshop. As ICSEH is a student oriented club, efficient working student committee was formed to work on the same.

Expert talk
Cloud Computing

Saturday,
19th August 2017
Conducted an expert talk on "Cloud Computing Essentials" by Mr. Karthikeyan Narayanan, Advisory Software Developer, IBM India Pvt. Ltd.

Cloud Computing Essentials



The expert speaker Mr. Karthikeyan Narayanan started his talk by giving introduction about cloud computing. He started with the challenges the IT industry would face, if cloud computing wouldn't have existed and the problems, the industry would have faced.

Cloud Computing and Security

Saturday, 9th September 2017
Conducted by Mrs. Ananthamalar Ramarathnam, Principal Consultant, Global Data Centre Networks, Mercedes Benz R&D India.



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WORKSHOP
Ethical Hacking and Cyber Security

The department organised a two day inter college workshop on "Ethical Hacking and Cyber Security" on 15th & 16th September 2017. Resource person: I3India Technologies.

IoT Revolution: A Sneak Peak

The department of Information Science and Engineering has conducted Guest talk on the topic "IoT Revolution: A Sneak Peak" for the 3rd semester students on 10th October 2017 under the supervision of ISE Head of the department Dr. Jithendranath Mangaraj at ISE department class room. The expert speaker Mrs. Thiripura Sundari, Project Manager, HCL technologies, was invited to conduct the same.



Mrs. Thiripura Sundari gave brief introduction on components of IoT implementation. Sensors, Networks, Standards, Intelligent actions and analysis

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Fig. 4.6.2.1: Sample pages of i- News Letter Volume 3, Issue 1

Table 4.6.2.4: Students paper publications in CAYm2 (2015-16)

SI No	USN No.	Name	Title of the Paper	Journal with ISSN No.
1.	1NH12IS016	Ashwini A	Survey on Attendance Management System Using Face Recognition	IJIRCCE ISSN(Online): 2320-9801 ISSN (Print): 2320-9798 Vol.3, Issue 11, November 2015
	1NH12IS026	Neshwa Salih		
2.	1NH12IS017	Ashwini Rao	Machine Learning in Soil Classification and Crop Detection	IJSRD ISSN (online): 2321-0613 Vol.4, Issue 1, January 2016
	1NH12IS040	Janhavi U		
	1NH12IS005	Abhishek Gowda		
	1NH12IS057	N Manjunatha		
3.	1NH12IS114	Sushmitha R	Map Reduce based Analysis of Live Website Traffic integrated with improved Performance for Small files using Hadoop	IJSRD ISSN (online): 2321-0613 Vol.4, Issue 1, January 2016
	1NH12IS122	Vaibhavi Shekar		
4.	1NH12IS011	Akshay K	A Survey on Online Bus Pass Generation System using Aztec code	IJIRCCE ISSN(Online): 2320-9801 ISSN (Print): 2320-9798 Vol.4, Issue 2, February 2016
	1NH12IS003	Abhisek		
	1NH12IS047	Keerthana D		
	1NH12IS056	Manjula K		
5.	1NH12IS032	Deepthi K Bhat	Flat care Household Administrator	IJCSMC ISSN: 2320-088X Vol.5, Issue 2, February 2016
	1NH12IS095	Sameena A Taqui		
6.	1NH12IS081	Prashant.V	A need of time: Android Security	IJRDO ISSN: 2456-1843
	1NH12IS069	Nagendra Devadiga		
7.	1NH12IS085	Purushothaman G.R	A Novel Two Step Random Coloured Grid Process: Graphical Password Authentication System	IJCNCs ISSN(Online): 2308-9830 ISSN (Print): 2410-0595 Vol.4, Issue 2, February 2016

8.	1NH12IS010	Akash S	A Survey on Vehicle Document Check System	IJIRCCE ISSN(Online): 2320-9801 ISSN (Print): 2320-9798 Vol.4, Issue 2 , February 2016
	1NH12IS018	Aswin J.M		
	1NH12IS014	Anto Melvin K.F		
	1NH12IS015	Arkaprabho Roy		
9.	1NH12IS024	Bhuvitha R	CCOS Detection and Security in Wireless Sensor Network	IJRTER ISSN: 2455-1457 Vol.2, Issue3 , March 2016
	1NH12IS098	Sandeep R		
	1NH12IS096	Sameer S Nayak		
10.	1NH12IS020	B L Gopinath	Mobile Cloud Computing With A Private Authentication Scheme	IJRTER ISSN: 2455-1457 Vol.2, Issue3 , March 2016
	1NH12IS027	C U Kushalappa		
	1NH12IS034	Dilip Kumar H		
11.	1NH12IS115	Susmetha KC	Background Models For Tracking Objects Under Water	IJCSMC ISSN: 2320–088X Vol.5, Issue 3, March 2016
12.	1NH12IS029	Chandana	A Survey on Customer-Vendor Interaction in Services Marketplace	IJIRCCE ISSN(Online): 2320-9801 ISSN (Print): 2320-9798 Vol.4, Issue 3, March 2016
	1NH12IS080	Prajjwala		
	1NH11IS036	Sachin		
	1NH11IS073	Deepak Cherian		
13.	1NH12IS012	Amrita S Menon	Dynamic Resolving of Edge Detection Techniques for an Image	IJIRCCE ISSN(Online): 2320-9801 ISSN (Print): 2320-9798 Vol.4, Issue 3, March 2016
	1NH12IS016	Ashwini A		
	1NH12IS023	Bhavya Shree B		
	1NH12IS026	C NeshwaSalih		
14.	1NH12IS007	Aishwarya D	Survey paper on Smart Parking System based on Internet of Things	IJRTER ISSN: 2455-1457 Vol.2, Issue 3, March 2016
	1NH12IS030	Debarupa Rakshit		
15.	1NH12IS019	Avinash B	An Effective Authentication Scheme for Distributed Mobile Cloud Computing Services Using a Single Private Key	IJCSMC ISSN: 2320–088X Vol.5, Issue 4, April 2016

16.	1NH12IS046	KeerthiPriya C	Study on Techniques to Defend Against Social Network Sybils	IJRDO ISSN: 2456-1843 Vol.2, Issue 4, April 2016
	1NH12IS074	Nikitha P		
17.	1NH12IS065	Mohammed Jabir	Survey On Secure Distributed De-duplication Systems with Improved Reliability	IJCRCST ISSN: 2395-5325 Vol.2, Issue 4, April 2016
	1NH12IS061	J Megha Shree		
18.	1NH11IS044	Kavya Ravindren	Privacy Preserving Using Public Auditing and Detection of Packet Drop Attacks in Wireless Ad Hoc Networks	IJMCS ISSN: 2320-7868 Vol.4, Issue 2, April 2016
	1NH11IS031	Elizabeth		
19.	1NH12IS102	Saurabh Kumar	Survey On Security Of Big Data Outsourcing In Cloud	IJCRCST ISSN: 2395-5325 Vol.2, Issue 4, April 2016
	1NH12IS103	Shahan Sayeed		
	1NH12IS105	Shariq Hussain		
	1NH12IS107	Shubham Saraf		

Table 4.6.2.5: Students paper Publications in CAYm1 (2016-17)

Sl. No.	USN	Name	Title of the Paper	Journal with ISSN No.
1.	1NH13IS089	S Akshya	A Study on the Contributing Technologies of Ambient Intelligence	IJIRCCE ISSN(Online) : 2320-9801 ISSN (Print) : 2320-9798 Vol.4, Issue 8, August 2016
	1NH13IS106	Sivaranjani J		
2.	1NH13IS089	S Akshya	A Study on General Ambient Architecture	IJIRCCE ISSN(Online) : 2320-9801 ISSN (Print) : 2320-9798 Vol.4, Issue 10, October 2016
	1NH13IS106	Sivaranjani J		
3.	1NH14IS029	Deekshita. S	Scenario And Risk Management In A Project	IJAR ISSN: 2320-5407 Vol.4, Issue 12, December 2016
	1NH14IS040	Harshita		
4.	1NH13IS118	Supriya P	Survey on Inclusive Analysis of Incomplete Datasets	IJSRCSEIT ISSN : 2456-3307 Vol.2, Issue 2, February 2017
	1NH13IS114	Suma M		

5.	1NH13IS073	P.Maheshwaran,	A Review on Requirement Engineering in Rapid Application Development	IJSRCSEIT ISSN : 2456-3307 Vol.2, Issue 3, 7March 2017
	1NH13IS084	Rahul Kumar		
6.	1NH13IS117	Supreethkumar S	Review on Different Techniques for Open Road Tolling System Using Pattern Recognition	IJSRCSEIT ISSN : 2456-3307 Vol.2, Issue 3, March 2017
	1NH13IS121	Bidya Chandra Singh		
7.	1NH13IS120	Taffazul Imam	Access Control Framework for API Enabled Devices	IJSRCSEIT ISSN : 2456-3307 Vol.2, Issue 3, March 2017
	1NH13IS103	Shubham Dubey		
	1NH13IS116	Suman Thapa		
	1NH13IS078	Pradip Thapa		
8.	1NH13IS120	Taffazul Imam	Security Issues in Home Automation	IJSRCSEIT ISSN : 2456-3307 Vol.2, Issue 3, March 2017
	1NH13IS103	Shubham Dubey		
9.	1NH13IS116	Suman Thapa,	Web of Things	IJSRCSEIT ISSN : 2456-3307 Vol.2, Issue 3, March 2017
	1NH13IS078	PradipThapa		
10.	1NH13IS005	Aditya Srivastava,	Clustering of large datasets using Hadoop Ecosystem	IJSRCSEIT ISSN : 2456-3307 Vol.2, Issue 3, March 2017
	1NH13IS060	Md. Faisal Alam		
11.	1NH13IS075	Pallavi S,	Sentiment Analysis of Top Colleges in India Using Twitter Data	IJSRCSEIT ISSN : 2456-3307 Vol.2, Issue 3, March 2017
	1NH13IS083	Rachana C		
	1NH13IS085	Ramya K V		
	1NH13IS124	Vidyashree		
12.	1NH13IS095	Saranya Krishna	Traffic Management Using Big Data Analytic Tool	IJSRCSEIT ISSN : 2456-3307 Vol.2, Issue 3, March 2017
	1NH13IS098	Sharanya K S		
13.	1NH13IS008	Aishwarya M R	Data Classification by KNN using Mapreduce In Hadoop	IJSRCSEIT ISSN : 2456-3307 Vol.2, Issue 3, March 2017
	1NH13IS028	Debaswini		
14.	1NH13IS022	Bharati	An Iot Based System for Water Quality	IJSRCSEIT ISSN : 2456-3307
	1NH13IS057	M. Shilpa		

	1NH13IS071	Harsha Menda P	Monitoring	Vol.2, Issue 3, March 2017
	1NH13IS001	Aaina		
15.	1NH13IS043	K M Harshitha	A Survey on Street Light Monitoring and Control	IJSRCSEIT ISSN : 2456-3307 Vol.2, Issue 3, March 2017
	1NH13IS055	Lakhitha		
	1NH13IS056	LubnaTaranum		
	1NH13IS058	Mamatha		
16.	1NH13IS081	Prasanna	Review on TV Channel Program Recommendation Techniques	IJIRCCE ISSN(Online) : 2320- 9801 ISSN (Print) : 2320-9798 Vol.5, Issue 3, March 2017
	1NH13IS097	Shantanu Singh		
17.	1NH13IS076	Pavithra K	Survey on Recommendation System Techniques	IJIRCCE ISSN(Online) : 2320- 9801 ISSN (Print) : 2320-9798 Vol.5, Issue 4, April 2017
	1NH13IS102	Shradha V U		
18.	1NH13IS123	Venkatesh N	Review on Medical Image Classification	IJIRCCE ISSN(Online) : 2320- 9801 ISSN (Print) : 2320-9798 Vol.5, Issue 4, April 2017
19.	1NH13IS031	Farheen Sultana	A Study on Data Encryption Using AES and RSA	IJIRCCE ISSN(Online) : 2320- 9801 ISSN (Print) : 2320-9798 Vol.5, Issue 4, April 2017
	1NH12IS025	Bikiran Choudhury		
20.	1NH13IS013	Anamika	Library Management system based on IoT	IJRDO ISSN: 2456-1843 Vol.3, Issue 4, April 2017
	1NH13IS017	Anubhuti Gupta		
21.	1NH13IS067	Nimith Shetty M	Survey on Malware Detection in Cloud Computing Infrastructures	IJIRCCE ISSN(Online) : 2320- 9801 ISSN (Print) : 2320-9798 Vol.5, Issue 5, May 2017
	1NH13IS045	Kaushik C Reddy		
22.	1NH13IS099	Shishir Umesh	Recognising and Handling Malware Propagation in Large Scale Networks	IJIRCCE ISSN(Online) : 2320- 9801 ISSN (Print) : 2320-9798 Vol.5, Issue 5, May 2017
	1NH13IS087	Rashmi Priya		
	1NH13IS100	Shobitha G		

23.	1NH13IS016	Anoop P	Survey On Bridge And Flyover Condition Monitoring System	IJRCM ISSN: 234-5197 Vol.4, Issue 5, May 2017
	1NH13IS036	Halesh PM		
24.	1NH13IS112	Subiksha N	Clustering of Datasets Using K-Means Algorithm in SPARK	IJIRCCE ISSN(Online) : 2320-9801 ISSN (Print) : 2320-9798 Vol.5, Issue 5, May 2017
	1NH13IS074	Pallavi R Reddy		
25.	1NH13IS063	Meghana V	Amalgamation of Cryptographic Techniques for Secured Data Transmission	IJIRCCE ISSN(Online) : 2320-9801 ISSN (Print) : 2320-9798 Vol.5, Issue 5, May 2017
	1NH13IS007	Aishwarya B		
26.	1NH13IS096	Shaik Mohammed Sajid	Survey of Healthcare at Household Using Wearable Devices on Cloud	IJIRCCE ISSN(Online) : 2320-9801 ISSN (Print) : 2320-9798 Vol.5, Issue 5, May 2017
27.	1NH13IS073	Mahesharan P	Real Time Monitoring of Change in Temperature with CO2 using IOT	IJIRCCE ISSN(Online) : 2320-9801 ISSN (Print) : 2320-9798 Vol.5, Issue 5, May 2017
	1NH13IS089	S Akshya		
	1NH13IS096	Shaik M Sajid		
	1NH13IS127	Vishal Petkar		
28.	1NH13IS089	S Akshya	A Technical Review on Health Monitoring System at Household Using IOT	IJIRCCE ISSN(Online) : 2320-9801 ISSN (Print) : 2320-9798 Vol.5, Issue 5, May 2017
	1NH13IS127	Vishal Petkar		
29.	1NH13IS087	Rashmi Priya	Recognizing and Handling the Malware Propagation in Large Scale Networks	IJIRCCE ISSN(Online) : 2320-9801 ISSN (Print) : 2320-9798 Vol.5, Special Issue 5, June 2017
	1NH13IS099	Shishir Umesh		
30.	1NH13IS093	Samyuktha Prabhu,	A Survey on Automation Testing	IJIRCCE ISSN(Online) : 2320-9801 ISSN (Print) : 2320-9798 Vol.5, Special Issue 5, June 2017

31.	1NH13IS012	Akshatha K R	Effective Method of Detecting and Tracking of Moving Objects for a Video Surveillance System	IJIRCCE ISSN(Online) : 2320-9801 ISSN (Print) : 2320-9798 Vol.5, Special Issue 5, June 2017
	1NH13IS037	Harshitha M		
32.	1NH13IS077	Prachi Sahu	A Survey on Traffic Management Using Bigdata Analytic Tool	IJIRCCE ISSN(Online) : 2320-9801 ISSN (Print) : 2320-9798 Vol.5, Special Issue 5, June 2017
	1NH13IS088	Roja M H		
33.	1NH14IS121	Vidhyashree G	DNA Computing and its Applications	IJIRCCE ISSN(Online) : 2320-9801 ISSN (Print) : 2320-9798 Vol.5, Special Issue 5, June 2017
	1NH14IS075	Priyanka G		
34.	1NH14IS119	Vaishnavi M	Ambient Intelligence and Its Applications	IJIRCCE ISSN(Online) : 2320-9801 ISSN (Print) : 2320-9798 Vol.5, Special Issue 5, June 2017
	1NH14IS095	Roshnee		
	1NH14IS115	Roja		
	1NH14IS089	Rashmi I		
35.	1NH14IS108	Somesh Balani	A Survey on Overview of Mobile Computing	IJIRCCE ISSN(Online) : 2320-9801 ISSN (Print) : 2320-9798 Vol.5, Special Issue 5, June 2017
	1NH14IS111	Suraj Prakash		
	1NH14IS081	Raj Pratap		
	1NH14IS091	Ravi Kumar SK		
36.	1NH13IS015	Annapoorna P S	Survey on K-Nearest Neighbour Joins for Big Data on MapReduce	IJIRCCE ISSN(Online) : 2320-9801 ISSN (Print) : 2320-9798 Vol.5, Special Issue 5, June 2017
	1NH13IS047	K Aafreen		
37.	1NH13IS027	Chinmayi K A	A Technical Review on Background Subtraction and Object Tracking on the Detection of Objects	IJIRCCE ISSN(Online) : 2320-9801 ISSN (Print) : 2320-9798 Vol.5, Special Issue 5, June 2017
	1NH13IS065	Nagadevika H J		
38.	1NH13IS090	Sridevi.S	A Survey on MINIX 3 OS with Dynamic Timeout Choice	IJIRCCE ISSN(Online) : 2320-9801 ISSN (Print) : 2320-9798 Vol.5, Special Issue 5, June 2017
	1NH13IS091	Sai Bhargavi.P		

39.	1NH14IS119	Vaishnavi M	Sensors and Their Working in Ambient Intelligence	IJIRCCE ISSN(Online) : 2320-9801 ISSN (Print) : 2320-9798 Vol.5, Special Issue 5, June 2017
	1NH14IS095	Roshnee		
	1NH14IS115	Roja		
	1NH14IS089	Rashmi I		
40.	1NH13IS106	Sivaranjani J	A Survey on E-Prescription System	IJIRCCE ISSN(Online) : 2320-9801 ISSN (Print) : 2320-9798 Vol.5, Special Issue 5, June 2017
41.	1NH13IS117	Supreeth kumar	Open Road Tolling Using Pattern Recognition	IJIRCCE ISSN(Online) : 2320-9801 ISSN (Print) : 2320-9798 Vol.5, Special Issue 5, June 2017
	1NH13IS121	Th Bidya Chandra		
	1NH13IS123	Venkatesh N		
	1NH12IS112	SumaiyaTasneem		
42.	1NH13IS024	Bhavana.U	Advancement of Agile Technology in Mobile Application Development and Validating Non-Functional Requirements	IJIRCCE ISSN(Online) : 2320-9801 ISSN (Print) : 2320-9798 Vol.5, Special Issue 5, June 2017
43.	1NH12IS078	Gagana Vijayarshini	FiDooP-DP: Data partitioning in frequent itemset mining on HaDooP clusters	IJIRCCE ISSN(Online) : 2320-9801 ISSN (Print) : 2320-9798 Vol.5, Special Issue 5, June 2017
	1NH13IS052	Krithika V.Rao		
44.	1NH13IS081	Prasanna	A Time Based Personalized Retail Recommender Strategy Using Data Mining	IJIRCCE ISSN(Online) : 2320-9801 ISSN (Print) : 2320-9798 Vol.5, Special Issue 5, June 2017
	1NH13IS097	Shantanu Singh		
	1NH13IS111	Srinadh Dasaka		
	1NH13IS125	Vinaya B		
45.	1NH13IS012	Akshatha K R	A Novel Method of Detecting and Tracking of Moving Objects for Video Surveillance System	IJIRCCE ISSN(Online) : 2320-9801 ISSN (Print) : 2320-9798 Vol.5, Special Issue 5, June 2017
	1NH13IS027	Chinmayi K A		
	1NH13IS037	Harshitha M		
	1NH13IS065	Nagadevika H J		
46.	1NH14IS023	Blessy Thomas	A Survey on Wireless Networks used in IoT Applications	IJIRCCE ISSN(Online) : 2320-9801 ISSN (Print) : 2320-9798 Vol.5, Special Issue 5, June 2017
	1NH14IS018	Ashika A		

47.	1NH14IS023	Blessy Thomas	Swarm Intelligence in Strategy Games	IJIRCCE ISSN(Online) : 2320-9801 ISSN (Print) : 2320-9798 Vol.5, Special Issue 5, June 2017
	1NH14IS018	Ashika A		
48.	1NH13IS108	Sonia Singh	Inclusive Analysis of Incomplete Datasets Using 1kNN Search	IJIRCCE ISSN(Online) : 2320-9801 ISSN (Print) : 2320-9798 Vol.5, Special Issue 5, June 2017
	1NH13IS113	Sujithra K S		
49.	1NH13IS004	Aditya D Y	Secured Health Record Maintenance And House-Hold Device Control Operations Using Iot	IJRCM ISSN: 234-5197 Vol.4, Issue 6, June 2017
	1NH13IS009	Ajeey Dinakar		
50.	1NH13IS116	Sumanth Reddy	Association Rule based Recommendation system using Big Data	IRJET e-ISSN: 2395 -0056 p-ISSN: 2395-0072 Vol.4, Issue 6, June 2017
	1NH13IS086	M Ranjith		
51.	1NH13IS043	K M Harshith	Automatic Street Light Control, Fault Detection and Traffic Density Control	IJIRCCE ISSN(Online) : 2320-9801 ISSN (Print) : 2320-9798 Vol.5, Special Issue 5, June 2017
	1NH13IS055	Lakhitha		
	1NH13IS056	LubnaTaranum		
	1NH13IS058	Mamatha		
52.	1NH14IS061	M D Naushad	A Study on Digital Jewelry: Components and Methodology	IJIRCCE ISSN(Online) : 2320-9801 ISSN (Print) : 2320-9798 Vol.5, Special Issue 5, June 2017
	1NH14IS069	Nishant Kumar		
	1NH14IS080	Rabubieyya		
	1NH14IS098	Rupendra Pratap		

4.6.3. Participation in Inter-Institute Events by Students of the Program of Study (10)

Table 4.6.3.1: Student Achievements in CAYm2 (2015-16)

Sl. No .	Name of the Student	Sem.	Event Details	Institute	Level (Institute/State/National/International)	Place	Prize / award
1	Shishir Umesh	IV	Idea Contest 2015, Think India Transform India	Welingkar Education School	Inter-State, Regional round	Bangalore	II
2	Shishir Umesh	IV	Hackathon Event: Hacker Earth and GDG Bangalore	BLR DROID and GDG Bangalore	Regional	Bengaluru	Exceptional Performance
3	Shishir Umesh	II	GOOGLE Student Ambassador Program: HTML and Web Development Workshop	GOOGLE Developer group, Bangalore	State	Bengaluru	Excellent Performance
4	Shishir Umesh	IV	ElectroGreen-2015, 5 th National Technical Fest.	NHCE	Institute	Bengaluru	II
5	Pallavi Reddy	V	Sargam-15, Contemporary Dance	NHCE	Institute	Bengaluru	I
6	Chaitra Rao	IV	Electro Green-15, 5 th National Technical Fest, IEEE Event	NHCE	Institute	Bengaluru	II

Table 4.6.3.2: Student Achievements CAYm1 (2016-17)

Sl. No .	Name of the Student	Sem.	Event Details	Institute	Level (Institute/State/National/International)	Place	Prize / award
1	Payal Jain	V	Certificate of Appreciation from The GATE Academy (For being Winner of Tech Quiz)	NHCE	Institute	Bangalore	50% Scholarship Appreciation
2	Roshni	V	Certificate of Appreciation from The GATE Academy (For	NHCE	Institute	Bangalore	50% Scholarship Appreciation

			being Winner of Tech Quiz)				
3	Rakshitha M	V	Certificate of Appreciation from The GATE Academy (For being Winner of Tech Quiz)	NHCE	Institute	Bangalore	50% Scholarship Appreciation
4	Ashika A	V	National level annual tech symposium, Phase Shift 2016(IOT Workshop)	BMS College of Engineering, Bengaluru	National	Bangalore	Participation / completion
5	Payal Jain	V	Electro Green-2016, 6 th National Technical Fest	NHCE	Institute	Bangalore	I
6	Roshni	V	Electro Green-2016, 6 th National Technical Fest	NHCE	Institute	Bangalore	I
7	Rakshita M	V	Electro Green-2016, 6 th National Technical Fest, IEEE Event	NHCE	Institute	Bangalore	I
8	Kavyashree S	IV	National level annual tech symposium, Phase Shift 2016(IOT Workshop)	BMS College of Engineering, Bengaluru	National	Bangalore	Participation / completion
9	Harshita R	IV	National level annual tech symposium, Phase Shift 2016(IOT Workshop)	BMS College of Engineering, Bengaluru	National	Bangalore	Participation / Completion
10	Deekshita Srinivas	VI	March National Conference	AIIESEC	National	Silvasa, Gujarat,	NA
11	Mr.Ijaz Nijami	V	Internship at Global Community Development Program	AIESIC	International	Sunshine Summer camp Novosibirsk, Russia	Participation
12	Maheshwaran P	VIII	Adobe education leader seminar – 2017	Hyatt regency, HUAHIN, Thailand	International	HUAHIN, Thailand	Speaker / Participation

Table 4.6.3.3: Students Achievements CAY (2017-18)

Sl. No .	Name of the Student	Sem.	Event Details	Institute	Level (Institute/State/ National/International)	Place	Prize / award
1	Anirudh P	VI	Hackathon, SAP Next Gen	NHCE	National	Bangalore	I
2	Aishwarya B	VI	Hackathon, SAP Next Gen	NHCE	National	Bangalore	I
3	Antorika	VI	Hackathon, SAP Next Gen	NHCE	National	Bangalore	I
4	Anirudh P	VI	Smart India Hackathon	PM's Smart India Hackathon Event	National	Varanasi	Selected for final round
5	Roshan Gupta	VI	Smart India Hackathon	PM's Smart India Hackathon Event	National	Varanasi	Selected for final round
6	Antorika	VI	Smart India Hackathon	PM's Smart India Hackathon Event	National	Varanasi	Selected for final round
7	Aishwarya B	VI	Smart India Hackathon	PM's Smart India Hackathon Event	National	Varanasi	Selected for final round
8	Roshan Gaup	VI	Yukthi 3.0 Technical Symposium	Department of MCA, NHCE	State	Bangalore	II
9	Ms. Antorika	VI	Yukthi 3.0 Technical Symposium	Department of MCA, NHCE	State	Bangalore	II
10	Ms. Bhavya G	VI	Yukthi 3.0 Technical Symposium	Department of MCA, NHCE	State	Bangalore	II

11	Budil Vyas	VI	Yukthi 3.0 Technical Symposium	Department of MCA, NHCE	State	Bangalore	II
12	Aditi	VI	Yukthi 3.0 Technical Symposium	Department of MCA, NHCE	State	Bangalore	II
13	Arnav	VI	Yukthi 3.0 Technical Symposium	Department of MCA, NHCE	State	Bangalore	II
14	Bharath R	V	Cutting edge Space Technologies, Seminar	IEEE RAS ASEB, Amrita School of Engineering Bangalore	State	Bangalore	Participation
15	Arjun Bikaram Thapa	V	Digital Marketing Workshop	Elanco office	State	Bangalore	Participation
16	Budhil Vyas	V	Popularization of Remote Sensing based Maps and Geospatial Information	ISRS& ISRO	State	Bangalore	Participation
17	Roshan Gupta	V	Popularization of Remote Sensing based Maps and Geospatial Information	ISRS& ISRO	State	Bangalore	Participation

Academic Achievements:**University Rank Holders :****Table 4.6.3.2: List of University Rank Holders**

Sl.No.	Name	USN	Rank	Convocation	Photo
1.	Shivangi Uniyal	1NH11IS097	2	05 th May 2016	
2.	Sushma D S	1NH12IS113	2	21 st January 2017	



Fig. 4.6.3.1: VTU Rank Certificate of Ms. Shivangi Uniyal



Fig. 4.6.3.2: VTU Rank Certificate of Ms. Sushma D S

International Conference / Seminar / Internship in Western Universities:

1. **Deekshita S** of 6th sem, participated in the Policy and Institutional Research Project from January 21st, 2017 to March 5th, 2017 and research publications. NHEI Management provided financial support for the internship.



Fig. 4.6.3.3: Ms. Deekshita S, Research Internship Certificate at Harvard University



Fig. 4.6.3.4: Glimpses of Ms. Deekshita S, at Harvard University

2. **Mr. Maheshwaran P** of 8th Semester attended as a speaker for Adobe education leader seminar – 2017 from 28-30 June 2017 at Hyatt regency, Huahin, Thailand.



Fig. 4.6.3.5: Glimpses of Mr. Maheshwaran at Adobe Education leader seminar

3. **Mr. Ijaz Nijami** of 5th semester participated in 6 weeks internship program under Global Community Development program, Sunshine – Russian Summer camps at Novosibirsk, Russia from July 15th 2016 to August 31st 2016.



Fig. 4.6.3.6: Mr. Ijaz Nijami's Internship Certificate



Fig. 4.6.3.7: Glimpses of Mr. Ijaz Nijami during Internship

4. International Education Trip to Germany and places visited are Audi Forum Neckarsulm Allianz Arena and BMW Museum university of Munich



Fig. 4.6.3.8: Glimpses of International Trip to Germany

Achievements in Placements:



Hearty Congratulations to our Students Shantanu Singh and Supriya P for having placed in Amazon Web Services with highest package 11.5 LPA

Fig. 4.6.3.9: Students placed in Amazon Web Services

CRITERION-5

FACULTY INFORMATION AND CONTRIBUTIONS

200

5. FACULTY INFORMATION AND CONTRIBUTIONS (200)

2017-2018

SI. No.	Name of the Faculty Member	Qualification			Association with the Institution	Designation	Date of Joining the Institution	Department	Distribution of Teaching		Specialization	Academic Research			Sponsored Research (Funded Research)	Consultancy and Product Development
		Degree (From Highest Degree)	University	Year of Graduation					I Year	UG		Research Paper Publication	Ph.D. Guidance	Faculty Receiving Ph.D. during the Assessment Years		
1	Dr. Jitendranath Mungara	PhD	Andhra University	2011	11.07.16	Prof. & HOD	11.07.16	ISE	0	100	MANET & IoT	2	4	-	1	-
		M.Tech	Andhra University	1999												
		MSc	Andhra University	1985												
2	Dr.N.Guruprasad	Ph.D	Dr. MGR University	2012	08.06.15	Professor	08.06.15	ISE	0	100	Computer Science & Engg.	-	5	-	-	-
		M.S	BITS PILANI	2000												
		B.E	Marathwada University	1992												
3	Dr.Vishwanath Y	Ph.D	Jain University	2016	27.01.09	Professor	27.01.09	ISE	0	100	Computer Science & Engg.	-	-	-	-	-
		M.Tech	VTU	2006												
		B.E	Mangalore University	1997												
4	Dr. C N Ravi	Ph.D	Bharath University	2016	25.01.12	Associate Prof.	25.01.12	ISE	0	100	Computer Science & Engg.	-	-	-	-	-
		M.Tech	Bharath University	2005												
		B.E	University of Madras	1997												
5	Dr.Mohan Kumar S	Ph.D	Karpagam University	2015	20.07.15	Associate Prof.	20.07.15	ISE	0	100	Computer Science & Engg.	1	4	-	1	-
		M.E	VMKEC-VMU	2007												
		MCA	Bharathiyar University	2005												
6	Dr.R. Chinnaiyan	Ph.D	Anna University	2012	20.07.15	Associate Prof.	20.07.15	ISE	0	100	Computer Application	-	6	-	-	-
		M.Tech	PRIST University	2011												
		MCA	Bharathidasan University	2001												
7	Dr. G Pradeep	Ph.D	Anna University	2016	21.07.14	Associate Prof.	21.07.14	ISE	0	100	Computer Science & Engg.	-	-	-	-	-
		M.Tech	MSU	2004												
		MCA	AVC (Autonomous)	1998												
8	Dr.Hanuman Kumar	Ph.D	Andhra University	2015	31.07.17	Associate Prof.	31.07.17	ISE	0	100	Computer Science & Engg.	-	-	-	1	-
		M.Tech	Andhra University	2007												
		B.Tech	Nagarjuna University	2004												

9	Ms. Rajeswari S	M.Tech	VTU	2013	06.09.10	Asst. Prof.	06.09.10	ISE	0	100	Computer Science & Engg.	1	-	-	-	-
		B.E	MSU	2001												
10	Ms. Asha Rani Borah	M.Tech	VTU	2010	25.07.11	Asst. Prof.	25.07.11	ISE	0	100	Computer Science & Engg.	-	-	-	-	-
		B.E	Bangalore University	2001												
11	Ms. Priti B Badar	M.Tech	Nagpur University	2008	25.07.11	Asst. Prof.	25.07.11	ISE	0	100	Computer Science & Engg.	-	-	-	-	-
		B.E	Nagpur University	2004												
12	Ms. Mounica B	M.Tech	JNTU	2012	25.07.12	Asst. Prof.	25.07.12	ISE	0	100	Computer Science & Engg.	1	-	-	-	-
		B.E	Anna University	2005												
13	Mr.Gangadhar Immadi	M.Tech	VTU	2009	11.08.11	Asst. Prof.	11.08.11	ISE	0	100	Computer Science & Engg.	-	-	-	-	-
		B.E	VTU	2007												
14	Ms.Baswaraju Swathi	M.Tech	JNTU	2011	25.08.11	Asst. Prof.	25.08.11	ISE	0	100	Software Engineering	-	-	-	-	-
		B.E	JNTU	2005												
15	Ms. Shwetha K S	M.Tech	VTU	2012	25.07.12	Asst. Prof.	25.07.12	ISE	0	100	Computer Science & Engg.	-	-	-	-	-
		B.E	VTU	2008												
16	Ms. Vandana C P	M.Tech	VTU	2013	24.07.13	Asst. Prof.	24.07.13	ISE	0	100	Computer Networks	1	-	-	1	-
		B.E	Calicut University	2005												
17	Ms. Preethi J D	M.Tech	VTU	2012	03.01.14	Asst. Prof.	03.01.14	ISE	0	100	Computer Science & Engg.	-	-	-	-	-
		B.E	VTU	2008												
18	Ms.M. Shanmugam Shoba	M.Tech	DR MGR University	2011	21.07.14	Asst. Prof.	21.07.14	ISE	0	100	Computer Science & Engg.	-	-	-	-	-
		B.E	JNTU	2005												
19	Ms. Divya K V	M.Tech	BU	2012	21.07.14	Asst. Prof.	21.07.14	ISE	0	100	Software Engineering	-	-	-	-	-
		B.E	Calicut University	2005												
20	Ms. Kavitha K K	M.Tech	VTU	2015	21.07.14	Asst. Prof.	21.07.14	ISE	0	100	Computer Science & Engg.	-	-	-	-	-
		B.E	VTU	2009												
21	Ms.Rafega Beham A	M.Tech	SASTRA University	2004	01.08.14	Asst. Prof.	01.08.14	ISE	0	100	Advanced Communication Systems	-	-	-	-	-
		B.E	MK University	2000												
22	Mr. Vikas B O	M.Tech	VTU	2015	25.07.16	Asst. Prof.	25.07.16	ISE	0	100	Computer Science & Engg.	-	-	-	-	-
		B.E	VTU	2013												
23	Ms. KarthiyayiniI J	M.E	Bangalore University	2011	26.07.17	Asst. Prof.	26.07.17	ISE	0	100	Software Engineering	3	-	-	1	-
		B.E	Bharathidasan University	1999												
24	Ms. Prakruthi S T	M.Tech	Sri Siddhartha Academy of Higher Education	2011	26.07.17	Asst. Prof.	26.07.17	ISE	0	100	Computer Science & Engg.	-	-	-	-	-
		B.E	VTU	2009												
25	Ms. Gowri Prasad	M.Tech	Calicut University	2015	26.07.17	Asst. Prof.	26.07.17	ISE	0	100	Computer Science & Engg.	-	-	-	1	-
		B.E	Kerala University	2010												
26	Mr. Vishwajith M V	M.Tech	VTU	2015	26.07.17	Asst. Prof.	26.07.17	ISE	0	100	Computer Science & Engg.	-	-	-	-	-
		B.E	VTU	2012												

2016-2017

Sl. No.	Name of the Faculty Member	Qualification			Association with the Institution	Designation	Date of Joining the Institution	Department	Distribution of Teaching		Specialization	Academic Research			Sponsored Research (Funded Research)	Consultancy and Product Development
		Degree (From Highest Degree)	University	Year of Graduation					I Year	UG		Research Paper Publication	Ph.D. Guidance	Faculty Receiving Ph.D. during the Assessment Years		
1	Dr. Jitendranath Mungara	PhD	Andhra University	2011	11.07.16	Prof. & HOD	11.07.16	ISE	0	100	MANET & IoT	19	4	-	-	4
		M.Tech	Andhra University	1999												
		MSc	Andhra University	1985												
2	Dr. Nandakumar	PhD	Berhanpur University	2008	15.02.16	Professor	15.02.16	ISE	0	100	Computer Science & Engg.	-	3	-	-	-
		M.Tech	Roorkee University	1990												
		B.E	Mysore University	1976												
3	Dr. N.Guruprasad	Ph.D	Dr. MGR University	2012	08.06.15	Professor	08.06.15	ISE	0	100	Computer Science & Engg.	1	3	-	1	1
		M.S	BITS PILANI	2000												
		B.E	Marathwada University	1992												
4	Dr. Vishwanath Y	Ph.D	Jain University	2016	27.01.09	Associate Prof.	27.01.09	ISE	0	100	Computer Science & Engg.	3	-	Y	-	3
		M.Tech	VTU	2006												
		B.E	Mangalore University	1997												
5	Dr. C N Ravi	Ph.D	Bharath University	2016	25.01.12	Associate Prof.	25.01.12	ISE	0	100	Computer Science & Engg.	1	-	Y	-	-
		M.Tech	Bharath University	2005												
		B.E	University of Madras	1997												
6	Dr. Ashwini K	Ph.D	Jain University	2016	25.07.12	Associate Prof.	25.07.12	ISE	0	100	Computer Science & Engg.	3	-	Y	-	-
		M.Tech	VTU	2012												
		B.E	VTU	2009												
7	Dr. G Pradeep	Ph.D	Anna University	2016	21.07.14	Associate Prof.	21.07.14	ISE	0	100	Computer Science & Engg.	2	-	Y	-	-
		M.Tech	MSU	2004												
		MCA	AVC (Autonomous)	1998												
8	Dr. R.Chinnaiyan	Ph.D	Anna University	2012	20.07.15	Associate Prof.	20.07.15	ISE	0	100	Computer Application	3	5	-	-	-
		M.Tech	PRIST University	2011												
		MCA	Bharathidasan University	2001												
9	Ms. Asha Rani Borah	M.Tech	VTU	2010	25.07.11	Asst. Prof.	25.07.11	ISE	0	100	Computer Science & Engg.	3	-	-	-	-
		B.E	Bangalore University	2001												
10	Ms. Anitha Bhandhary	M.Tech	Dr.MGR University	2007	26.07.10	Asst. Prof.	26.07.10	ISE	0	100	Computer Science & Engg.	-	-	-	-	-
		B.E	Mangalore University	2000												
11	Ms. Rajeswari S	M.Tech	VTU	2013	06.09.10	Asst. Prof.	06.09.10	ISE	0	100	Computer Science & Engg.	7	-	-	1	-
		B.E	MSU	2001												

12	Ms. Beena B.M	M.Tech	VTU	2007	24.01.11	Asst. Prof.	24.01.11	ISE	0	100	Computer Science & Engg.	2	-	-	-	-
		B.E	Gulbarga University	1997												
13	Ms. Nitty Sarah Alex	M.E	Anna University	2011	25.07.11	Asst. Prof.	25.07.11	ISE	0	100	Computer Science & Engg.	-	-	-	-	-
		B.E	MSU	2003												
14	Ms. Priti B Badar	M.Tech	Nagpur University	2008	25.07.11	Asst. Prof.	25.07.11	ISE	0	100	Computer Science & Engg.	1	-	-	-	-
		B.E	Nagpur University	2004												
15	Ms. Mounica B	M.Tech	JNTU	2012	25.07.12	Asst. Prof.	25.07.12	ISE	0	100	Computer Science & Engg.	4	-	-	1	2
		B.E	Anna University	2005												
16	Mr. Gangadhar Immadi	M.Tech	VTU	2009	11.08.11	Asst. Prof.	11.08.11	ISE	0	100	Computer Science & Engg.	3	-	-	-	2
		B.E	VTU	2007												
17	Ms. Baswaraju Swathi	M.Tech	JNTU	2011	25.08.11	Asst. Prof.	25.08.11	ISE	0	100	Software Engineering	4	-	-	-	3
		B.E	JNTU	2005												
18	Ms. Shwetha K S	M.Tech	VTU	2012	25.07.12	Asst. Prof.	25.07.12	ISE	0	100	Computer Science & Engg.	3	-	-	1	2
		B.E	VTU	2008												
19	Ms. Nithya A	M.Tech	VTU	2012	25.07.12	Asst. Prof.	25.07.12	ISE	0	100	Computer Science & Engg.	-	-	-	-	-
		B.E	Bharathidasan University	2003												
20	Ms. Sridevi S	M.Tech	VTU	2012	25.07.12	Asst. Prof.	25.07.12	ISE	0	100	Software Engineering	3	-	-	-	-
		B.E	Bharathidasan University	2003												
21	Ms. Chandrika M Dixit	M.Tech	VTU	2012	25.07.12	Asst. Prof.	25.07.12	ISE	0	100	Computer Network Engg.	-	-	-	-	-
		B.E	VTU	2004												
22	Ms. Vandana C P	M.Tech	VTU	2013	24.07.13	Asst. Prof.	24.07.13	ISE	0	100	Computer Networks	5	-	-	-	3
		B.E	Calicut University	2005												
23	Ms. Preethi J D	M.Tech	VTU	2012	03.01.14	Asst. Prof.	03.01.14	ISE	0	100	Computer Science & Engg.	3	-	-	1	-
		B.E	VTU	2008												
24	Ms. M. Shanmugam Shoba	M.Tech	DR MGR University	2011	21.07.14	Asst. Prof.	21.07.14	ISE	0	100	Computer Science & Engg.	5	-	-	-	-
		B.E	JNTU	2005												
25	Ms. Divya K V	M.Tech	BU	2012	21.07.14	Asst. Prof.	21.07.14	ISE	0	100	Software Engineering	5	-	-	-	-
		B.E	Calicut University	2005												
26	Ms. Kavitha K K	M.Tech	VTU	2015	21.07.14	Asst. Prof.	21.07.14		0	100	Computer Science & Engg.	3	-	-	1	1
		B.E	VTU	2009												
27	Ms. Rafega Beham A	M.Tech	SASTRA University	2004	01.08.14	Asst. Prof.	01.08.14	ISE	0	100	Advanced Communication Systems	11	-	-	1	-
		B.E	MK University	2000												
28	Mr. Vikas B O	M.Tech	VTU	2015	25.07.16	Asst. Prof.	25.07.16	ISE	0	100	Computer Science & Engg.	3	-	-	-	2
		B.E	VTU	2013												

2015-2016

Sl. No.	Name of the Faculty Member	Qualification			Association with the Institution	Designation	Date of Joining the Institution	Department	Distribution of Teaching		Specialization	Academic Research			Sponsored Research (Funded Research)	Consultancy and Product Development
		Degree (From Highest Degree)	University	Year of Graduation					I Year	UG		Research Paper Publication	Ph.D. Guidance	Faculty Receiving Ph.D. during the Assessment Years		
1	Dr. Nandakumar	PhD	Berhanpur University	2008	15.02.16	Professor	15.02.16	ISE	0	100	Computer Science & Engg.	1	3	-	-	10
		M.Tech	Roorkee University	1990												
		B.E	Mysore University	1976												
2	Dr. Sohan Kumar Gupta	PhD	Magadh University	2011	17.08.15	Professor	17.08.15	ISE	0	100	Computer Science & Engg.	1	-	-	1	-
		M.E	Kharkiv University	1999												
		B.E	Kharkiv University	1997												
3	Dr. N.Guruprasad	Ph.D	Dr. MGR University	2012	08.06.15	Professor	08.06.15	ISE	0	100	Computer Science & Engg.	1	3	-	1	4
		M.S	BITS PILANI	2000												
		B.E	Marathwada University	1992												
4	Dr. R. Chinnaiyan	Ph.D	Anna University	2012	20.07.15	Associate Prof.	20.07.15	ISE	0	100	Computer Application	3	1	-	-	-
		M.Tech	PRIST University	2011												
		MCA	Bharathidasan University	2001												
5	Mr. G Pradeep	M.Tech	MSU	2004	21.07.14	Associate Prof.	21.07.14	ISE	0	100	Computer Science & Engg.	2	-	-	-	-
		MCA	AVC (Autonomous)	1998												
6	Mr. C N Ravi	M.Tech	Bharath University	2005	25.01.12	Associate Prof.	25.01.12	ISE	0	100	Computer Science & Engg.	3	-	-	-	-
		B.E	University of Madras	1997												
7	Mr. Vishwanath Y	M.Tech	VTU	2006	27.01.09	Asst. Prof.	27.01.09	ISE	0	100	Computer Science & Engg.	7	-	-	1	5
		B.E	Mangalore University	1997												
8	Mr. Lokesh M R	M.Tech	VTU	2007	26.07.10	Asst. Prof.	26.07.10	ISE	0	100	Information Technology	7	-	-	-	-
		B.E	Mysore University	2001												
9	Ms. Anitha Bhandhary	M.Tech	Dr.MGR University	2007	26.07.10	Asst. Prof.	26.07.10	ISE	0	100	Computer Science & Engg.	-	-	-	-	-
		B.E	Mangalore University	2000												
10	Ms. Rajeswari S	M.Tech	VTU	2013	06.09.10	Asst. Prof.	06.09.10	ISE	0	100	Computer Science & Engg.	4	-	-	1	3
		B.E	MSU	2001												
11	Ms. Beena B.M	M.Tech	VTU	2007	24.01.11	Asst. Prof.	24.01.11	ISE	0	100	Computer Science & Engg.	2	-	-	-	-
		B.E	Gulbarga University	1997												
12	Ms. Nitty Sarah	M.E	Anna University	2011	25.07.11	Asst. Prof.	25.07.11	ISE	0	100	Computer Science	2	-	-	-	-

	Alex	B.E	MSU	2003							& Engg.					
13	Ms. Priti B Badar	M.Tech	Nagpur University	2008	25.07.11	Asst. Prof.	25.07.11	ISE	0	100	Computer Science & Engg.	1	-	-	-	-
		B.E	Nagpur University	2004												
14	Ms. Mounica B	M.Tech	JNTU	2012	25.07.12	Asst. Prof.	25.07.12	ISE	0	100	Computer Science & Engg.	2	-	-	1	2
		B.E	JNTU	2005												
15	Ms. Asha Rani Borah	M.Tech	VTU	2010	25.07.11	Asst. Prof.	25.07.11	ISE	0	100	Computer Science & Engg.	1	-	-	-	-
		B.E	Bangalore University	2001												
16	Mr. Gangadhar Immadi	M.Tech	VTU	2009	11.08.11	Asst. Prof.	11.08.11	ISE	0	100	Computer Science & Engg.	2	-	-	-	1
		B.E	VTU	2005												
17	Ms. Baswaraju Swathi	M.Tech	JNTU	2011	25.08.11	Asst. Prof.	25.08.11	ISE	0	100	Software Engineering	4	-	-	1	-
		B.E	JNTU	2005												
18	Ms. Sridevi S	M.Tech	VTU	2012	25.07.12	Asst. Prof.	25.07.12	ISE	0	100	Software Engineering	1	-	-	-	-
		B.E	Bharathidasan University	2003												
19	Ms. Shwetha K S	M.Tech	VTU	2012	25.07.12	Asst. Prof.	25.07.12	ISE	0	100	Computer Science & Engg.	1	-	-	-	2
		B.E	VTU	2008												
20	Ms. Ashwini K	M.Tech	VTU	2012	25.07.12	Asst. Prof.	25.07.12	ISE	0	100	Computer Science & Engg.	4	-	-	-	-
		B.E	VTU	2009												
21	Ms. Nithya A	M.Tech	VTU	2012	25.07.12	Asst. Prof.	25.07.12	ISE	0	100	Computer Science & Engg.	-	-	-	-	-
		B.E	Bharathidasan University	2003												
22	Ms. Chandrika M Dixit	M.Tech	VTU	2012	25.07.12	Asst. Prof.	25.07.12	ISE	0	100	Computer Network Engg.	-	-	-	-	-
		B.E	VTU	2004												
23	Ms. Vandana C P	M.Tech	VTU	2013	24.07.13	Asst. Prof.	24.07.13	ISE	0	100	Computer Networks	2	-	-	-	0
		B.E	Calicut University	2005												
24	Ms. Preethi J D	M.Tech	VTU	2012	03.01.14	Asst. Prof.	03.01.14	ISE	0	100	Computer Science & Engg.	1	-	-	-	3
		B.E	VTU	2008												
25	Ms. M. Shanmugam Shoba	M.Tech	DR MGR University	2011	21.07.14	Asst. Prof.	21.07.14	ISE	0	100	Computer Science & Engg.	3	-	-	-	3
		B.E	JNTU	2005												
26	Ms. Divya K V	M.Tech	BU	2012	21.07.14	Asst. Prof.	21.07.14	ISE	0	100	Software Engineering	2	-	-	-	-
		B.E	Calicut University	2005												
27	Ms. Kavitha K K	M.Tech	VTU	2015	21.07.14	Asst. Prof.	21.07.14	ISE	0	100	Computer Science & Engg.	4	-	-	1	2
		B.E	VTU	2009												
28	Ms. Rafega Beham A	M.Tech	SASTRA University	2004	01.08.14	Asst. Prof.	01.08.14	ISE	0	100	Advanced Communication Systems	2	-	-	-	1
		B.E	MK University	2000												

CRITERION-5**FACULTY INFORMATION AND CONTRIBUTIONS****200****5. FACULTY INFORMATION AND CONTRIBUTIONS (200)****5.1. Student-Faculty Ratio (SFR) (20)***(To be calculated at Department Level)*No. of UG Programs in the Department (n): 1No. of PG Programs in the Department (m): 0No. of Students in UG 2nd Year= u1No. of Students in UG 3rd Year= u2No. of Students in UG 4th Year= u3No. of Students in PG 1st Year= p1No. of Students in PG 2nd Year= p2

No. of Students = Sanctioned Intake + Actual admitted lateral entry students

(The above data to be provided considering all the UG and PG programs of the department)

S=Number of Students in the Department = UG1 + UG2 +.. +UGn + PG1 + ...PGn

F = Total Number of Faculty Members in the Department (excluding first year faculty)

Student Faculty Ratio (STR) = S / F

Table 5.1.1: Student-Faculty Ratio (SFR)

Year	CAY 2017-2018	CAYm1 2016-2017	CAYm2 2015-2016
U1.1	120+6+4	120+6+1	120+6+3
U1.2	120+6+1	120+6+3	120+6
U1.3	120+6+3	120+6	120+6+2
UG1=U1.1+U1.2+U1.3	386	382	383
Total No. of Students in the Department (S)	S1=UG1=386	S2=UG1=382	S3=UG1=383
No. of Faculty in the Department (F)	F1=26	F2=28	F3=28
Student Faculty Ratio (SFR)	SFR1=S1/F1=15	SFR2=S2/F2=14	SFR3=S3/F3=14
Average SFR	SFR=(SFR1+SFR2+SFR3)/3=40/3=14		

Note: In U1.1, U1.2, U1.3 (120+6+4, 120+6+1,, 6 is Sanctioned SNQ Students and 4 represents Admitted Lateral Entry Students)

Note: 75% should be Regular/ full time faculty and the remaining shall be Contractual Faculty/Adjunct Faculty/Resource persons from industry as per AICTE norms and standards.

The contractual faculty will be considered for assessment only if a faculty is drawing a salary as prescribed by the concerned State Government for the contractual faculty in the respective cadre and who have taught over consecutive 4 semesters.

Marks to be given proportionally from a maximum of 20 to a minimum of 10 for average SFR between 15:1 to 20:1, and zero for average SFR higher than 20:1. Marks distribution is given as below:

15.00 - 15.50	-	20 marks
15.51 - 16.50	–	18 marks
16.51 - 17.50	-	16 marks
17.51 - 18.50	-	14 marks
18.51 - 19.50	-	12 marks
19.51 - 20.00	-	10 marks

5.2. Faculty Cadre Proportion (25)

The reference Faculty cadre proportion is 1(F1):2(F2):6(F3)

F1: Number of Professors required = $1/9 \times$ Number of Faculty required to comply with 15:1 Student-Faculty ratio based on no. of students (N) as per 5.1

F2: Number of Associate Professors required = $2/9 \times$ Number of Faculty required to comply with 15:1 Student-Faculty ratio based on no. of students (N) as per 5.1

F3: Number of Assistant Professors required = $6/9 \times$ Number of Faculty required to comply with 15:1 Student-Faculty ratio based on no. of students (N) as per 5.1

Table 5.2.1: Faculty Cadre Proportion

Year	Professors		Associate Professors		Assistant Professors	
	Required F1	Available	Required F2	Available	Required F3	Available
CAY	3	3	6	5	17	18
CAYm1	3	3	6	5	17	20
CAYm2	3	3	6	4	16	21
Average Numbers	RF1=3	AF1=3	RF2=6	AF2=5	RF3=17	AF3=20

$$\text{Cadre Ratio Marks} = \left[\left[\frac{AF1}{RF1} \right] + \left[\frac{AF2 \times 0.6}{RF2} \right] + \left[\frac{AF3 \times 0.4}{RF3} \right] \right] \times 12.5$$

$$= 25$$

If AF1 = AF2 = 0 then zero marks

Maximum marks to be limited if it exceeds 25

Example: Student No. = 180; Required number of Faculty: 12; RF1= 1, RF2=2 and RF3=9

Case 1: AF1/RF1= 1; AF2/RF2 = 1; AF3/RF3 = 1; Cadre proportion marks = (1+0.6+0.4) x12.5 = 25

Case 2: AF1/RF1= 1; AF2/RF2 = 3/2; AF3/RF3 = 8/9; Cadre proportion marks = (1+0.9+0.3) x12.5 = limited to 25

Case 3: AF1/RF1=0; AF2/RF2=1/2; AF3/RF3=11/9; Cadre proportion marks = (0+0.3+0.49) x12.5 = 9.87

5.3. Faculty Qualification

(25)

FQ = 2.5 x [(10X + 4Y)/F] where x is no. of regular faculty with Ph.D., Y is no. of regular faculty with M.Tech., F is no. of regular faculty required to comply 1:15 Faculty Student ratio (no. of faculty and no. of students required are to be calculated as per 5.1)

Table 5.3.1: Faculty Qualification

Years	X	Y	F	FQ=2.5 x [(10X + 4Y)/F]
CAY	8	18	26	15
CAYm1	8	20	25	16
CAYm2	4	24	26	13
Average Assessment				15

5.4. Faculty Retention

(25)

No. of regular faculty members in		CAYm2=28	CAYm1=28	CAY=26
Item (% of faculty retained during the period of three academic keeping CAYm3 as base year)				Marks
>=90% of required Faculty members retained during the period of three academic years keeping CAYm3 as base year				25

>=75% of required Faculty members retained during the period of three academic years keeping CAYm3 as base year	20
>=60% of required Faculty members retained during the period of three academic years keeping CAYm3 as base year	15
>=50% of required Faculty members retained during the period of three academic years keeping CAYm3 as base year	10
<50% of required Faculty members retained during the period of three academic years keeping CAYm3 as base year	0

Table 5.4.1: Faculty Retention

Years	Total no. of Faculty UG	Total no. of Faculty Retention	Percentage of Faculty members retained during the period of three academic years keeping CAYm3 as base year	Marks
CAY	26	16=62%	>=60%	15
CAYm1	28	18=64%	>=60%	15
CAYm2	28	17=61%	>=60%	15
Average Assessment				15

5.5. Innovations by the Faculty in Teaching and Learning (20)

Innovations by the Faculty in teaching and learning shall be summarized as per the following description.

Contributions to teaching and learning:

Contributions to teaching and learning are activities that contribute to the improvements of student learning. These activities may include innovations not limited to, use of ICT, instruction delivery, instructional methods, assessment, evaluation and inclusive class rooms that lead to effective, efficient and engaging instruction. Any contributions to teaching and learning should satisfy the following criteria:

The work must be made available on Institute website

The work must be available for peer review and critique

The work must be reproducible and developed further by other scholars

The Department/Institution may set up appropriate processes for making the contributions available to the public, getting them reviewed and rewarding. These may typically include statement of clear goals, adequate preparation, use of appropriate methods, and significance of results, effective presentation and reflective critique.

Innovations by the faculty in teaching and learning:

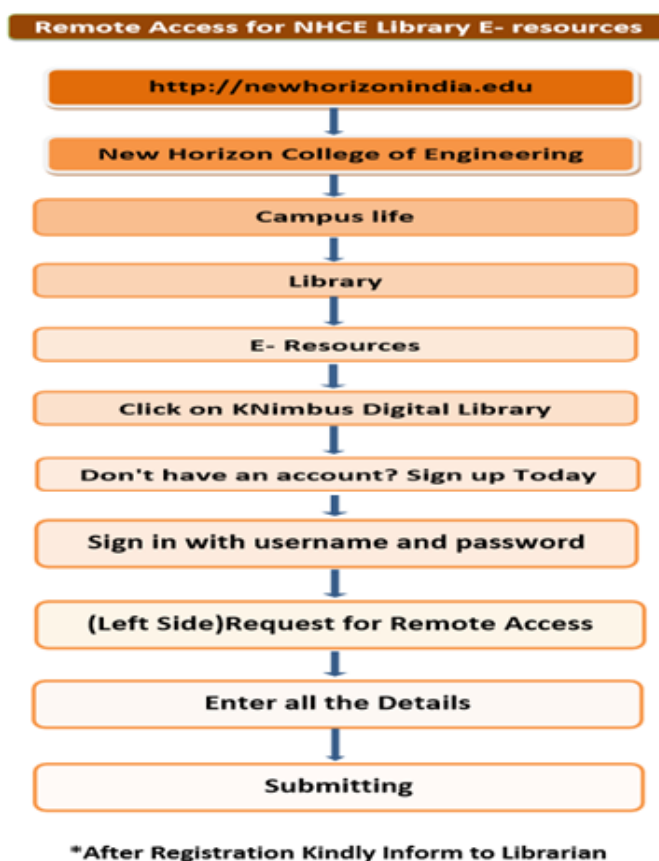
- Use of modern teaching aids like LCD projectors, SMART BOARD, Document Camera, Wireless Keyboard and mouse, Power Point Laser Presenter, Wireless Presenter, USB wireless pen mouse, Slide Changer, Smart Podium, Wi-Fi enabled laptops are usually employed in classrooms and other student learning environments.
- Department encourages Academic Discussions between faculties and students using WhatsApp.
- Faculties share Academic Study Material using Digital library
- Department conducts Seminar, Workshops, Expert Talks and Industrial Visits on every academic year.
- Department has introduced mini projects every semester in the curriculum
- Final year students participated in Techorizon- National Conference and Project Exhibition conducted at the College level.
- Faculty members use digital library and other Open Source platforms to make the subject easy to understand.
- The faculty members are encouraged to participate in short term courses, staff development programs and workshops on advanced topics to keep pace with the advanced level of knowledge and skills. Over the past years the faculties have been participating /presenting papers in national/international conferences and publish their articles in national/international journals to enrich their knowledge.
- Faculty utilize department library for references.
- NHCE Library is a resource centre for teaching, learning & research:
- Library is spread over two floors with 605 seating capacity, state of art digital library, E-Learning Centre, Video Conference Room, Online class room with recording facility, Students Discussion rooms, Faculty discussion room, and Books & Stationary shop are available in the Ground Floor while Stack Area, Reference Section, Circulation Counter, OPAC Search, Journals/Magazines and Newspaper Section are made available in Lower Level of the library building.
- Library holds a hybrid collection of printed as well as electronic resources which include books, journals, databases, audio-visuals, CDs/DVDs, e-books, e-journals, reports, course materials; previous years question papers, Bound Volumes, Project Reports, case studies, conference proceedings, training manuals, etc.

- Learning Resources are available to access like Gnana Sangama Portal- <http://164.100.133.129:81/eCONTENT/>, National Knowledge Network- <http://nkn.gov.in/> and National Digital Library- <https://ndl.iitkgp.ac.in/>.
- As the e-journals access is IP based, the stakeholders can take benefit of this facility from anywhere in the campus at any time. Some of them include,

Table 5.5.1: E-journal Details

Sl. No.	Database Name	Website Address
1	IEEE Xplore Digital Library	http://ieeexplore.ieee.org/
2	Science Direct	http://www.sciencedirect.com/
3	Taylor & Francis (E-Books)	http://www.crcnetbase.com/
4	Taylor & Francis (E-Journals)	http://www.tandfonline.com/
5	Springer (E-Journals & E-Books)	http://link.springer.com/
6	ASCE(American Society of Civil Engineers)	http://ascelibrary.org
7	KNimbus Digital Library	http://www.knimbus.com/
8	Proquest (Engineering)	http://search.proquest.com/
9	Proquest (Management)	http://search.proquest.com/

- The students can also access e-journal resources outside the campus by downloading the web application as described below,



- Currently the library holds over 10631 titles, 45412 Volumes, 65 print journals, provides access to Electronic Resources, newspapers and business magazines, and 4132 multimedia resources.
- Also the Institution has membership of ISTE, CSI, DELNET- <http://delnet.nic.in/>, IETE, and IEI.
- Digital Library comprises of 50 computers with Internet facility.
- A copy of e – learning material is kept in digital library- <http://192.168.33.5:8080/jspui>.
- Free Book Bank facility for SC/ST students and book bank facility for other category of students at the nominal price is also provided to fulfill their academic needs.
- Books are arranged subject wise and department wise and personal attention is given for fulfilling their library related needs.
- Open access facility is available. Library Staff motivate the students for open access to aware them about the latest arrivals.
- Separate Reference, Periodical, Circulation, Digital Library section and reading room facility is available in the Library.
- Video courses are available online which includes,
 - ✓ NPTEL, Link: <https://onlinecourses.nptel.ac.in/>
 - ✓ SWAYAM, Link: <https://swayam.gov.in/Institutions>
 - ✓ MOOCS, Link: <https://www.edx.org/course/subject/engineering>
 - ✓ MIT Open course, Link: <https://ocw.mit.edu/index.htm>

5.6. Faculty as participants in Faculty development / training activities / STTPs (15)

A Faculty scores maximum five points for participation

Participation in 2 to 5 days Faculty development program: 3 Points

Participation >5 days Faculty development program: 5 points

Table 5.6.1: Faculty as participants in Faculty development/training activities/STTPs

Name of the Faculty	Max. 5 per Faculty		
	CAYm1 (2016-2017)	CAYm2 (2015-2016)	CAYm3 (2014-2015)
Dr. Jitendranath Mungara	3	-	-
Dr. Nanda Kumar	3	3	-
Dr. Sohan Kumar Gupta	-	-	-

Dr. Ajit C	-	-	3
Dr. N Guruprasad	3	3	3
Dr. Vishwanath Y	3	3	3
Dr.G Pradeep	3	3	3
Dr.C N Ravi	3	3	3
Dr. R. Chinnaiyan	3	3	-
Dr. Ashwini	3	3	3
Dr. Chandrashekhar P.C	-	-	-
Mr. Mahadeva B	-	-	-
Mr. Lokesh M R	-	3	3
Ms. Rajeswari S	3	3	3
Ms. Anitha Bhandhary	3	3	3
Mr. Ravinandan M.E	-	-	-
Ms. Beena B M	3	3	3
Ms. Nitty Sarah Alex	3	3	3
Ms. Nithya A	3	3	-
Ms. Priti Badar	3	3	3
Ms. Chandrika M Dixit	3	3	-
Ms. Sridevi S	3	3	3
Ms. Vandana C P	5	5	3
Mr. Gangadhar Immadi	5	5	3
Ms. Asha Rani Borah	3	3	-
Ms. Preethi J D	3	3	3
Ms. Susan Ann Varghese	-	-	3
Ms. M. Shanmugam Shoba	3	3	3
Ms. Rafeega Beham A	3	3	3
Ms. Shwetha K S	3	3	3
Ms. Basawaraju Swathi	3	3	3
Ms. Mounica B	3	3	3
Ms. Divya K V	3	3	3
Ms. K K Kavitha	3	3	5
Ms. Nandini N	-	-	3

Mr. Vikas B O	5	-	-
Sum	90	85	77
RF= Number of Faculty required to comply with 15:1 Student-Faculty ratio as per 5.1	25	26	26
Assessment = $3 \times (\text{Sum}/0.5\text{RF})$ (Marks limited to 15)	22	20	18
Average assessment over three years (Marks limited to 15) = 20			

5.7. Research and Development

(30)

Academic research includes research paper publications, Ph.D. guidance, and faculty receiving Ph.D. during the assessment period.

Number of quality publications in refereed/SCI Journals, citations, Books/Book Chapters etc. (6)

Ph.D. guided /Ph.D. awarded during the assessment period while working in the institute (4)

All relevant details shall be mentioned.

Table 5.7.1: Ph.D. Awarded During the Assessment Period

Sl. No.	Name of the faculty	Designation	University	Ph.D Awarded year
1.	Dr.Vishwanath	Associate Professor	JAIN University, Karnataka	2016
2.	Dr.Pradeep G	Associate Professor	Anna University, Tamil Nadu	2016
3.	Dr.C N Ravi	Associate Professor	Bharath University, Tamil Nadu	2016
4.	Dr.Ashwini	Associate Professor	JAIN University, Karmataka	2016

5.7.1. Academic Research (10)

Research Publications by Faculty – CAY (2017-18)

Sl. No.	Faculty Name	Name of the Paper	Journal	Publication Details	Year of Publication	Impact Factor
1.	Dr.Jitendranath Mungara	A Survey on Data Mining Methods Available for Recommendation System	2nd IEEE International Conference on Computational Systems and Information Technology for Sustainable Solutions 2017; IEEE CFP17STD_PRT, ISBN: 978-1-5386-2042-7	IEEE Xplore	2017	9.237
2.	Dr.Jitendranath Mungara	Comparative study of adders used in designing High speed Vedic Multipliers for VLSI Applications	Institute of Advanced Vedic Mathematics	2nd Vedic Mathematics International Conference, 27-29 Dec 2017	Dec- 2017	-
3.	Dr.S.MohanKumar	Automated Detection of Retinal Defects using Image Mining- A Review	European Journal of Biomedical and Pharmaceutical Sciences, ISSN: 2349-8870 (UGC Approved Journal)	Volume: 5 Issue: 01 189-194 Year: 2018	Jan-2018	4.382
4.	Mrs.Vandana C.P	Semantic Ontology Based IoT- Resource Description	IEEE International Conference on Electrical, Electronics, Computer Communication, Mechanical and Computing (EECCMC),	IEEE Xplore digital library	Dec-2017	-
5.	Mrs.Mounica	Bigdata Architecture for Intelligence Transport System	IEEE International Conference on Electrical, Electronics, Computer Communication, Mechanical and Computing (EECCMC)	IEEE Xplore digital library	Dec-2017	-
6.	Mrs.Rajeswari	Survey of Data and Storage Security in Cloud Computing	IEEE International Conference on Circuits and Systems (ICCS 2018), (Accepted)	IEEE Xplore digital library	Dec-2017	-
7.	Mrs.J.Karthiyayini	Robot Assisted Emergency and Rescue System with Wireless Sensors	International Journal of Research and Scientific Innovation, ISSN:2321-2705	Vol.4, Issue 12	Dec-2017	1.694

8.	Mrs.J.Karthiyayini	An Industrial Helmet for Air Quality and Hazardous Event Detection using Smart Band	International Journal for Research in Applied Science & Engineering Technology (IJRASET) ISSN: 2321-9653	Volume 6 Issue II	Feb-2018	6.887
9.	Mrs.J.Karthiyayini	An Effective System for Automatic Detection & Prevention of Cybercrime in Micro Blog Systems	International Journal for Research in Applied Science & Engineering Technology (IJRASET) ISSN: 2321-9653	Volume 6 Issue II	Feb-2018	6.887

Research Publications by Faculty – CAYm1 (2016-17)

Sl. No.	Faculty Name	Name of the Paper	Journal	Publication Details	Year of Publication	Impact Factor
1.	Dr. Jitendranath Mungara	Identity and Access Management	International Journal of Engineering Science and Computing; ISSN 2321 3361	Vol.7, Issue 5	May-2017	5.611
2.	Dr. Jitendranath Mungara & Mr. Vikas B O	Data Mining Algorithms for Internet of Things : Technical Review	International Journal of Innovative Research in Computer and Communication Engineering, ISSN(Online): 2320-9801, ISSN (Print) : 2320-9798	Vol. 5, Special Issue 5	June-2017	7.19
3.	Dr. Jitendranath Mungara	A Survey on Automation Testing	International Journal of Innovative Research in Computer and Communication Engineering,ISSN(Online): 2320-9801, ISSN (Print) : 2320-9798	Vol. 5, Special Issue 5	June-2017	7.19
4.	Dr. Jitendranath Mungara & Ms. Rafega Beham A	Effective Method of Detecting and Tracking of Moving Objects for a Video Surveillance System	International Journal of Innovative Research in Computer and Communication Engineering,ISSN(Online): 2320-9801, ISSN (Print) : 2320-9798	Vol. 5, Special Issue 5	June-2017	7.19

5.	Dr. Jitendranath Mungara & Ms. Preethi J D	Survey on K-Nearest Neighbor Joins for Big Data on Map Reduce	International Journal of Innovative Research in Computer and Communication Engineering, ISSN(Online): 2320-9801, ISSN (Print) : 2320-9798	Vol. 5, Special Issue 5	June-2017	7.19
6.	Dr. Jitendranath Mungara & Ms. Shwetha K S	Recognizing and Handling the Malware Propagation in Large Scale Networks	International Journal of Innovative Research in Computer and Communication Engineering, ISSN(Online): 2320-9801, ISSN (Print) : 2320-9798	Vol. 5, Special Issue 5, Pg. 1-4	June-2017	7.19
7.	Dr. Jitendranath Mungara	Recognizing and Handling Malware Propagation in Large Scale Networks	International Journal of Innovative Research in Computer and Communication Engineering, ISSN(Online): 2320-9801, ISSN (Print) : 2320-9798	Vol. 5, Special Issue 5	May-2017	7.19
8.	Dr. Jitendranath Mungara & Ms. Kavitha K K	A Technical Review on Health Monitoring System at Household using IoT	International Journal of Innovative Research in Computer and Communication Engineering, ISSN(Online): 2320-9801, ISSN (Print) : 2320-9798	Vol.5, Issue 5	May-2017	7.19
9.	Dr. Jitendranath Mungara	Integrated Encryption of Passwords for Enhanced Security	International Research Journal of Engineering and Technology, ISSN(Online): 2395-0056 ISSN (Print) : 2395-0072.	Vol. 4, Issue 5	May-2017	6.17
10.	Dr. S Mohan Kumar	Medical Diagnosis CAD System using Latest Technologies, Sensors and Cloud Computing	International Journal of Computer Engineering and Technology, ISSN(Online): 0976-6375, ISSN (Print) : 0976-6367	Vol. 8 ,Issue 1	Feb-2017	3.1
11.	Dr. S Mohan Kumar	Factors for Improving the Research Publications and Quality Metrics	International Journal of Civil Engineering and Technology , ISSN(Online): 0976-6316, ISSN (Print) : 0976-6308	Vol. 8, Issue 4	Apr-2017	4.19
12.	Dr. S Mohan Kumar	Methods and Techniques to Deal with Big Data Analytics and Challenges in Cloud Computing Environment	International Journal of Civil Engineering and Technology , ISSN(Online): 0976-6316, ISSN (Print) : 0976-6308	Vol. 8, Issue 4	Apr-2017	4.19

13.	Dr. S Mohan Kumar	A Novel Survey on Location Based Node Detection and Identifying the Malicious Activity of Nodes in Sensor Networks	International Journal Of Civil Engineering and Technology, ISSN(Online): 0976-6375, ISSN (Print) :0976-6367	Vol. 8, Issue 2	Apr-2017	3.1
14.	Dr. S Mohan Kumar	Geocentric Based Node Detection and Revoking Malicious Node in WSN	International Journal for Science and Advance Research in Technology, ISSN (Print) :2395-1052	Vol. 3, Issue 4	Apr-2017	1
15.	Dr. S Mohan Kumar	Wavelet and Symmetric Stochastic Neighbor Embedding Based Computer Aided Analysis for Breast Cancer	Indian Journal of Science and Technology, ISSN(Online): 0974-5645, ISSN (Print) : 0974-6846	Vol. 9, Issue 47	Dec-2017	3
16.	Dr. S Mohan Kumar	Booster in High Dimensional Data Classification	International Journal of Innovative Research in Computer and Communication Engineering, ISSN 5984-5989	Vol. 5, Issue 3	Mar-2017	6.5
17.	Dr. S Mohan Kumar	Skin Lesion Classification System and Dermoscopic Feature Analysis for Melanoma Recognition and Prevention	International Journal of Emerging Technology and Advanced Engineering, ISSN: 2250-2459	Vol. 7, Issue 7	Jul-2017	2.324
18.	Dr. Vishwanath Y	Study of Perception in Recent Cognitive Robotic Architectures	International Journal of Trend in Research and Development, ISSN: 2394-9333	Vol. 4, Issue 2	Mar-2017	4.004
19.	Dr. Vishwanath Y	A Survey on Minix 3 OS with Dynamic Timeout Choice	International Journal of Innovative Research in Computer and Communication Engineering	Vol.5, Special Issue 5	June-2017	6.577

20.	Dr. Ashwini K	A Study on Contributing Technologies of AMI	International Journal of Innovative Research in Computer and Communication Engineering, ISSN (Online): 2320-9801, ISSN (Print): 2320-9798	Vol.4, Issue 8	Aug-2016	7.194
21.	Dr. Ashwini K	A Study on General AMI Architectures	International Journal of Innovative Research in Computer and Communication Engineering, ISSN (Online): 2320-9801, ISSN (Print): 2320-9798	Vol.4, Issue 10	Oct-2016	7.194
22.	Dr. Ashwini K	Essentials of Expert System and its Application	International Journal of Recent Innovation in Engineering & Research, ISSN: 2456 – 2084	Vol.1, Issue 4	Oct-2016	1.245
23.	Mrs. Rajeswari S	System Topology Chart as an Aid for Designing a Modern Pharmaceutical Quality System	International Journal of Recent Innovation in Engineering & Research, ISSN: 2456 – 2084	Vol. 1, Issue 8, Pg. 51-56	Dec-2016	1.245
24.	Mrs. Rajeswari S	Scenario and Risk Management in a Project	International Journal of Advanced Research, ISSN: 2320-5407	Vol. 4, Issue 12, Pg. 2647-2650	Dec-2016	5.336
25.	Mrs. Rajeswari S	A Study on Software Development Methodologies	International Journal of Innovative Research in Computer and Communication Engineering, ISSN : 2456-3307	Vol. 5, Issue 4, Pg. 7727-7737	Apr-2017	6.577
26.	Mrs. Rajeswari S & Dr. Jitendranath Mungara	A Review on Requirement Engineering in Rapid Application Development	International Journal of Scientific Research in Computer Science, Engineering and Information Technology, ISSN : 2456-3307	Vol. 2 , Issue 3 , Pg. 742-746	May-2017	4.032
27.	Mrs. Rajeswari S & Dr. Jitendranath Mungara	A Survey on E-Prescription System	International Journal of Innovative Research in Computer and Communication Engineering , ISSN(Online): 2320-9801	Vol. 5, Issue 5, Pg. 10052-10057	May-2017	6.577

28.	Mrs. Rajeswari S	Advancement of Agile Technology in Mobile Application Development and Validating Non-Functional Requirements	International Journal of Innovative Research In Computer And Communication Engineering, ISSN(Online) : 2320-9801	Vol. 5, Special Issue 5, Pg. 37-39	June-2017	6.577
29.	Mrs. Vandana C P	Security Issues in Home Automation	International Journal of Scientific Research in Computer Science, Engineering And Information Technology, ISSN : 2456-3307	Vol. 2 , Issue 3	May-2017	4.032
30.	Mrs. Vandana C P	Study of Resource Discovery Trends in Internet of Things (IoT)	International Journal of Advanced Networking and Applications, ISSN: 0975-0290	Vol. 8 Issue 3, Pg. 3084-3089	Dec-2016	3.462
31.	Mrs. Vandana C P	Web of Things	International Journal of Scientific Research in Computer Science, Engineering and Information Technology, ISSN : 2456-3307	Vol. 2 , Issue 3	May-2017	4.032
32.	Mrs. Vandana C P	IoT Future in Edge Computing	International Journal of Advanced Engineering Research and Science , ISSN(Online): 2456-1908, ISSN (Print) : 2349-6495	Vol. 3, Issue 12	Dec-2016	4.072
33.	Mrs. Vandana C P	Library Management System Based on IoT	International Journal of Research & Development Organisation, ISSN: 2456-1843	Vol. 3 , Issue 4	Apr-2017	4.011
34.	Mr. Gangadhar Immadi	Survey on Malware Detection in Cloud Computing Infrastructures	International Journal of Innovative Research in Computer and Communication Engineering, ISSN(Online): 2320-9801, ISSN (Print): 2320-9798	Vol. 5, Issue 5	May-2017	7.194

35.	Mr. Gangadhar Immadi	Sentiment Analysis of top Colleges in India using Twitter Data	International Journal of Scientific Research in Computer Science, Engineering and Information Technology, ISSN : 2456-3307	Vol.2 , Issue 3	June-2017	4.032
36.	Mrs. M S Shoba & Dr. Jitendranath Mungara	A Study on Data Encryption using AES and RSA	International Journal of Innovative Research in Computer and Communication Engineering, ISSN(Online): 2320-9801, ISSN (Print): 2320-9799	Vol. 5, Issue 4	May-2017	7.194
37.	Mrs. M S Shoba	FIDDOOP-DP: Data Partitioning in Frequent Itemset Mining on Hadoop Clusters.	International Journal of Innovative Research in Computer and Communication Engineering, ISSN(Online): 2320-9801, ISSN (Print): 2320-9800	Vol.5, Special Issue 5	June-2017	7.194
38.	Mrs. M S Shoba	Cryptographic Techniques using Binary Tree and Tree Traversal	International Journal of Scientific Research in Science and Technology, ISSN (Print): 2395-6011 , ISSN (Online): 2395-602X	Vol.3 , Issue 1, Pg:175-180	Feb-2017	5.327
39.	Mrs. M S Shoba	Amalgamation of Cryptographic Techniques for Secured Data Transmission	International Journal of Innovative Research in Computer and Communication Engineering, ISSN(Online): 2320-9801, ISSN (Print): 2320-9798	Vol. 5, Issue 5	May-2017	7.194
40.	Mrs. Rafega Beham A	Review on Different Techniques for Open Road Tolling System using Pattern Recognition	International Journal of Scientific Research in Computer Science, Engineering and Information Technology, ISSN : 2456-3307	Vol.2 , Issue 3	May-2017	4.032
41.	Mrs. Rafega Beham A & Dr. Jitendranath Mungara	Review on TV Channel Program Recommendation Techniques	International Journal of Innovative Research in Computer and Communication Engineering, ISSN(Online): 2320-9801, ISSN (Print): 2320-9800	Vol. 5, Issue 3	Apr-2017	7.194
42.	Mrs. Rafega Beham A & Dr. Jitendranath Mungara	Review on Medical Image Classification	International Journal of Innovative Research in Computer and Communication Engineering, ISSN(Online): 2320-9801, ISSN (Print): 2320-9800	Vol. 5, Issue 4	Apr-2017	7.194

43.	Mrs. Rafega Beham A	A Time Based Personalized Retail Recommender Strategy using Data Mining	International Journal of Innovative Research in Computer and Communication Engineering, ISSN(Online): 2320-9801, ISSN (Print): 2320-9800	Vol.5, Special Issue 5	June-2017	7.194
44.	Mrs. Rafega Beham A	A Novel Method of Detecting and Tracking of Moving Objects for Video Surveillance System	International Journal of Innovative Research in Computer and Communication Engineering, ISSN(Online): 2320-9801, ISSN (Print): 2320-9800	Vol.5, Special Issue 5	June-2017	7.194
45.	Mrs. Rafega Beham A	Open Road Tolling using Pattern Recognition	International Journal of Innovative Research in Computer and Communication Engineering, ISSN(Online): 2320-9801, ISSN (Print): 2320-9800	Vol.5, Special Issue 5	June-2017	7.194
46.	Mrs. Rafega Beham A	A Survey on Wireless Networks used in IoT Applications	International Journal of Innovative Research in Computer and Communication Engineering, ISSN(Online): 2320-9801, ISSN (Print): 2320-9800	Vol.5, Special Issue 5	June-2017	7.194
47.	Mrs. Rafega Beham A & Dr. Jitendranath Mungara	A Technical Review on Background Subtraction and Object Tracking on the Detection of Objects	International Journal of Innovative Research in Computer and Communication Engineering, ISSN(Online): 2320-9801, ISSN (Print): 2320-9800	Vol.5, Special Issue 5	June-2017	7.194
48.	Mrs. Rafega Beham A	A Review on RFID Localization Techniques for IoT	International Journal for Scientific Research & Development , ISSN (Online): 2321-0613	Vol. 4, Issue 10,	Dec-2016	4.396
49.	Mrs. Rafega Beham A	Swarm Intelligence in Strategy Games	International Journal of Innovative Research in Computer and Communication Engineering, ISSN(Online): 2320-9801, ISSN (Print): 2320-9800	Vol.5, Special Issue 5	June-2017	7.194
50.	Mrs. Shwetha K S	A Survey on Big Data in Hadoop Environment	International Journal of Recent Innovation in Engineering & Research, Issn (Online): 2456 – 2084	Vol. 1, Issue 8	Dec-2016	3.605

51.	Mrs. Shwetha K S & Dr. Jitendranath Mungara	A Survey on Traffic Management using Big Data Analytic Tool	International Journal of Innovative Research in Computer and Communication Engineering, ISSN(Online): 2320-9801, ISSN (Print): 2320-9800	Vol.5, Special Issue 5	June-2017	7.194
52.	Mrs. Swathi B	Survey on Bridge and Flyover Condition Monitoring System	International Journal of Research Science & Management, ISSN: 2349- 5197	Vol. 4, Issue 5, Pg. 152-154	May-2017	2.715
53.	Mrs. Swathi B	Survey on Inclusive Analysis of Incomplete Datasets	International Journal of Scientific Research in Computer Science, Engineering and Information Technology , ISSN : 2456 -3307	Vol.2 , Issue 2	Mar-2017	4.032
54.	Mrs. Swathi B	Inclusive Analysis of Incomplete Datasets using IKNN Search	International Journal of Innovative Research in Computer and Communication Engineering, ISSN(Online): 2320-9801, ISSN (Print): 2320-9798	Vol.5, Issue 4	Apr-2017	7.194
55.	Mrs. Swathi B	An Approach to Measure the Quality of User Content in Web	International Journal of Recent Innovation In Engineering & Research, ISSN (Online) : 2456 -2084	Vol.1, Issue 6	Oct-2016	3.605
56.	Mrs. Mounica B	Priority Based Reporting Tool for Business Intelligence	International Journal of Research Studies in Management, ISSN: 2349 -5197	Vol.2, Issue 3	Oct-2016	3.765
57.	Mrs. Mounica B	Clustering of Large Datasets using Hadoop Ecosystem	International Journal of Scientific Research in Computer Science, Engineering and Information Technology, ISSN : 2456-3307	Vol.2 , Issue 3	May-2017	4.032
58.	Mrs. Mounica B	Clustering of Datasets using K-Means Algorithm in Spark	International Journal of Innovative Research in Computer and Communication Engineering, ISSN: 2320-9801	Vol. 5, Issue 5	May-2017	7.194

59.	Mrs. Mounica B	Secured Health Record Maintenance and House-Hold Device Control Operations using IoT	International Journal of Research Studies in Management, ISSN: 234-5197	Vol. 4, Issue 6	June-2017	3.765
60.	Mrs. Divya K V	Association Rule Based Recommendation System using Big Data	International Research Journal of Engineering and Technology, ISSN: 2395-0072	Vol. 4 Issue 6	June-2017	6.171
61.	Mrs. Divya K V	Automatic Street Light Control , Fault Detection and Traffic Density Control	International Journal of Innovative Research in Computer and Communication Engineering, ISSN (Online): 2320-9801, ISSN(Print):2320-9798	Vol. 5, Special Issue 5, Pg. 45-50	June-2017	7.194
62.	Mrs. Divya K V	A Survey on Street Light Monitoring and Control	International Journal of Scientific Research in Computer Science, Engineering and Information Technology, ISSN : 2456-3307	Vol. 2 , Issue 3	Apr-2017	4.032
63.	Mrs. Divya K V & Dr. Jitendranath Mungara	Survey on Recommendation Technologies	International Journal of Innovative Research in Computer and Communication Engineering, ISSN (Online): 2320-9801, ISSN(Print):2320-9798	Vol. 5, Issue 4	Apr-2017	7.194
64.	Mrs. Divya K V	Study on Pattern Based and Multidimensional Sequence Classification	International Journal of Recent Innovation in Engineering and Research, ISSN (Online): 2456 – 2084	Vol. 2 , Issue 1	Jan-2017	3.605
65.	Mrs. K K Kavitha	Survey of Healthcare at Household using Wearable Devices on Cloud	International Journal of Computer Science and Mobile Computing, ISSN: 2320-088X	Vol. 5, Issue 5	May-2017	6.017
66.	Mrs. K K Kavitha & Dr. Jitendranath Mungara	Real Time Monitoring of Change in Temperature with CO2 using IoT	International Journal of Innovative Research in Computer and Communication Engineering, ISSN (Online): 2320-9801, ISSN(Print):2320-9798	Vol. 5, Issue 5	May-2017	7.194

67.	Mr. Vikas B O & Dr. Jitendranath Mungara	An Enhanced Extraction and Summarization Technique with User Review Data for Product Recommendation to Customers	International Journal of Scientific Research in Science, Engineering and Technology, ISSN (Print):2395-1990, ISSN(Online) : 2394-4099	Vol. 2, Issue 6	Dec-2016	3.63
68.	Mr. Vikas B O	Perceptive Monitoring System using IoT for Agriculture Environment Sector	International Journal of Scientific Research in Science, Engineering and Technology, ISSN(Online): 2394-4099, ISSN (Print) : 2395-1990	Vol. 3 , Issue 3	May-2017	3.63
69.	Mrs. Preethi J D	Big Data Analytics in Model Driven Application	International Journal of Recent Innovation in Engineering & Research; ISSN (Online), 2456-2084.	Vol. 1, Issue 8	Dec-2016	3.605
70.	Mrs. Preethi J D	Data Classification by KNN using Mapreduce using Hadoop	International Journal of Scientific Research in Computer Science, Engineering and Information Technology, ISSN (Print) : 2456-3307	Vol. 2, Issue 3	June-2017	4.032

Research Publications by Faculty - CAYm2 (2015-16)

Sl. No.	Faculty Name	Name of the Paper	Journal	Publication Details	Year of Publication	Impact Factor
1.	Dr. Nanda Kumar	Constructing Relationship Between Software Metrics and Code Reusability in Object Oriented Design	International Journal of Advanced Computer Science and Applications, ISSN(Online) : 2156-5570, ISSN (Print): 2158-107X	Vol. 7, Issue 2	May-2016	1.324
2.	Dr. Sohan Kumar Guptha	Self Organizing Trust Model for Peer-Peer System	International Research Journal of Management Sociology & Humanities, ISSN (Online): 2277 – 9809, ISSN (Print): 2348 - 9359	Vol.7, Issue 1, Pg. 13-21	Jan-2016	0.98

3.	Dr. S Mohan Kumar	Classification of Breast Mass Classification – CAD System and Performance Evaluation using SSNE	International Journal of Innovative Science, Engineering & Technology, ISSN: 2348 – 7968	Vol. 2, Issue 9, Pg. 417-425	Sep-2015	1.5
4.	Dr. S Mohan Kumar	Classification of Breast Mass Classification – CAD System with Performance Evaluation	International Journal of Engineering and Computer Science, ISSN: 2319-7242	Vol.4, Issue 9, Pg. 14187-14193	Sep-2015	1.2
5.	Dr. S Mohan Kumar	Classification of Breast Micro calcification- CAD System and Performance Evaluation using SSNE	International Journal of Advanced Research in Computer Science and Software Engineering, Volume 5 , ISSN: 2277 128X	Vol. 5 , Issue 9, Pg. 824-830	Sep-2015	2.5
6.	Dr. S Mohan Kumar	Essential Best Practices and Processes in Higher Educational Technical Institutions	INTERNATIONAL JOURNAL OF ENGINEERING RESEARCH AND GENERAL SCIENCE, ISSN: 2091-2730 231	Vol.3, Issue 6, Pg. 231-236	Dec-2015	3.8
7.	Dr. S Mohan Kumar	LNW- A System Model for a High Quality Effective E-Learning using Cloud Environs	International Journal of Current Research and Review, ISSN: 0975-5241	Vol. 7, Issue 23, Pg. 21-25	Dec-2015	4.02
8.	Dr. S Mohan Kumar	Ayurveda Medicine Roles in Healthcare Medicine, and Ayurveda Towards Ayurinformatics	International Journal of Computer Science and Mobile Computing, ISSN: 2320-088X	Vol. 4, Issue 12 , Pg. 35-43	Dec-2015	4.28

9.	Dr. S Mohan Kumar	Importance of Accreditation and Autonomous Status in HEI – An Assessment with Special Orientation to Karnataka State	International Journal of Engineering Sciences & Research Technology, ISSN: 2277-9655	Vol. 5, Issue 1, Pg. 472-479	Jan-2016	3.75
10.	Dr. S Mohan Kumar	Interrelated Research Works and Importance of Object Oriented Analysis and Modeling	International Journal of Engineering Sciences & Research Technology, ISSN: 2277-9655	Vol. 5, Issue 1, Pg.59-62	Jan-2016	3.75
11.	Dr. S Mohan Kumar	A Survey on Medical Data Mining – Health Care Related Research and Challenges	International Journal of Current Research, ISSN: 0975-833X	Vol. 8, Issue 1, Pg. 25170-25173	Jan-2016	6.24
12.	Dr. S Mohan Kumar	A Study on Data Mining Techniques, Methods, Tools and Applications in Various Industries	International Journal of Current Research & Review, ISSN: 0975-5241	Vol. 8, Issue 4, Pg.35-43	Jan-2016	4.06
13.	Dr. S Mohan Kumar	Cyber Crime Variant Activities and Network Forensic Investigation	International Journal of Emerging Technology and Advanced Engineering, ISSN: 2250-2459	Vol. 6, Issue 4	Mar-2016	2
14.	Dr. S Mohan Kumar	Exploratory Study of Cyber Crimes, Digital Forensics and its Tools	International Journal of Emerging Technology and Advanced Engineering, ISSN: 2250-2459,	Vol. 6, Issue 4,	Mar-2016	2

15.	Dr. S Mohan Kumar	Efficient Implementation using RM Method for Detecting Sensitive Data Leakage in Public Network	International Journal of Modern Trends in Engineering and Research, ISSN(Online): 2349-9745 , ISSN (Print) : 2393-8161	Vol. 3, Issue 4, Pg.515-518,	Apr-2016	3.52
16.	Dr. S Mohan Kumar	Review on Importance and Advancement in Detecting Sensitive Data Leakage in Public Network	International Journal of Engineering Research and General Science, ISSN: 2091-2730	Vol.4, Issue 2, Pg.:263-265,	Apr-2016	3.8
17.	Dr. S Mohan Kumar	A Survey on Detecting the Leakage of Sensitive Data in Public Network	International Journal of Emerging Technology and Advanced Engineering, ISSN: 2250-2459	Vol. 6, Issue 3, Pg.234-236	Jan-2016	2
18.	Dr. S Mohan Kumar	A Survey on Secure Communication in Public Network During Disaster	International Journal of Engineering Sciences & Research Technology, ISSN: 2277-9655	Vol. 5, Issue 3, Pg.430-434,	Mar-2016	4.12
19.	Dr. S Mohan Kumar	Survey on Routing Algorithms During Emergency Crisis Based on MANET	International Journal of Emerging Technology and Advanced Engineering , ISSN: 2250-2459	Vol. 6, Issue 3, Pg. 278-281,	Mar-2016	2.32
20.	Dr. S Mohan Kumar	Emergency Communication System for Natural Disaster using MANET	International Journal of Research and Development Organization, ISSN: 2456-1843	Vol.2, Issue 5, Pg.1 to 10	May-2016	1

21.	Dr. S Mohan Kumar	Social Data Analysis using Big-Data Analytic Technologies- APACHE, FLUME, HDFS, HIVE	International Journal of Research and Development Organization, ISSN: 2456-1843	Vol. 2, Issue 5, Pg.16 to 21	May-2016	1
22.	Dr. S Mohan Kumar	Social Media Analysis using APACHE, FLUME, HDFS, HIVE	International Journal of Current Trends in Engineering & Technology, ISSN: 2395-3152	Vol. 2, Issue 2, Pg. 282 to 285	Mar-2016	1
23.	Dr. S Mohan Kumar	A Survey on Social Data Processing using APACHE, Hadoop, Map-Reduce	International Journal of Scientific and Technical Advancements, ISSN: 2454-1532	Vol.2, Issue 2, Pg.121-123	Mar-2016	1
24.	Dr. Vishwanath Y	Study and Analysis of Threshold Perception using an Agent Environment	International Journal for Scientific Research & Development, ISSN: 2321 0613	Vol. 3, Issue 12	Feb-2016	4.39
25.	Dr. Vishwanath Y	Study and Analysis of Intention of a BDI Agent and its Performance	International Journal of Engineering and Computer Science, ISSN: 2319-7242	Vol.4, Issue 9, Pg. 14401-14405	Sep-2015	2.38
26.	Dr. Vishwanath Y	Survey Paper an Smart Parking System using Internet of Things	International Journal for Scientific Research & Development, ISSN (online): 2321-0613	Vol. 4, Issue 1	Mar- 2016	4.396
27.	Dr. Vishwanath Y	Survey Paper on Smart Parking System Based on Internet of Things	International Journal of Recent Trends in Engineering & Research; ISSN(Online): 2455–1457	Vol. 2, Issue 3	Mar- 2016	3.34

28.	Dr. Vishwanath Y	A Perceptual Cognitive Model using BDI Model and Bayes Theorem	International Journal of Artificial Intelligence and Mechatronics, ISSN: 2320 -5121	Vol. 4, Issue 2, Pg.77-81	Oct-2015	1.131
29.	Mr. Lokesh M R	A Study on State Awareness Toward Resiliency in Cyber Physical System	International Journal for Scientific Research & Development, ISSN (Online): 2321-0613	Vol. 3, Issue 12, Pg.330 – 332	Apr-2016	4.396
30.	Mr. Lokesh M R	State Awareness Towards Resiliency in Cyber-Physical System	IEEE International Conference on Computer Graphics, Vision and Information Security, ISSN (Online): 978-1-4673-7437-8	Pg.201 – 208	Apr-2016	-
31.	Mr. Lokesh M R	Next State Prediction Algorithm for the Avionic Systems using the Hidden Markov Models	IEEE International Conference on Green Computing and Internet of Things, ISBN: 978-1-4673-7909-0	Pg.1614-1619	Apr-2015	-
32.	Mr. Lokesh M R	Healing Process Towards Resiliency in Cyber-Physical System- A Modified Danger Theory Based Artificial Immune Recognition2 Algorithm Approach	IEEE International Conference on Computer Graphics, Vision and Information Security , ISSN (Online): 978-1-4673-7437-8	Pg. 226 – 232	Apr- 2016	-
33.	Mr. Lokesh M R	Modified Danger Theory Based Optimized Artificial Immune Network on Resiliency in Cyber – Physical System	IEEE International Conference on Green Computing and Internet of Things, ISBN: 978-1-4673-7909-0	Pg. 1223 –1230	Apr- 2016	-

34.	Mr. Lokesh M R	On Resiliency in Cyber-Road Traffic Control System using Modified Danger Theory Based Optimized Artificial Immune Network	American Journal of Engineering Research , ISSN(Online): 2320-0847, ISSN (Print) : 2320-0936	Vol.4, Issue 10, Pg.134-147	Sep-2015	1
35.	Mr. Lokesh M R	Challenges in Accident Collision and Prevention in Cyber-Road Traffic Control System	International Journal for Scientific Research & Development, ISSN (Online): 2321-0613	Vol. 3, Issue 12 ,Pg. 384-386	Apr-2016	4.396
36.	Mrs. Priti Badar	Study of Various Methodologies for Selection of Materialized View	ABHIYANTRIKI: An International Journal of Engineering & Technology, ISSN(Online): 2394-627X	Vol. 3, Issue 1	Jan-2016	1
37.	Mrs. Nitty Sarah Alex	Dynamic Resolving of Edge Detection Techniques for an Image	International Journal of Innovative Research in Computer and Communication Engineering, ISSN(Online): 2320-9801, ISSN (Print) : 2320-9798	Vol. 4, Issue 3, Pg. 4019-4023	Mar-2016	7.194
38.	Mrs. Nitty Sarah Alex	Hands Free HCI Based on Head Tracking using Feature Extraction	International Journal of Science, Engineering and Technology Research, ISSN (Online): 2278-7798	Vol. 5, Issue 1	Jan-2016	3.59
39.	Mrs. Rajeswari S	Survey on Solution Providers of Hybrid Cloud Computing	International Journal of Research & Development Organisation, ISSN: 3785-0855	Vol. 2, Issue 1 , Pg. 1-5	Jan -2016	2.213

40.	Mrs. Rajeswari S	A Survey on Online Bus Pass Generation System using Aztec Code	International Journal of Innovative Research in Computer and Communication Engineering, ISSN: 2320-9798	Vol. 4, Issue 2, Pg. 1157-1159	Feb- 2016	5.618
41.	Mrs. Rajeswari S	Study on Techniques to Defend Against Social Network Sybils	International Journal of Research & Development Organisation, ISSN: 3785 – 0855	Vol. 2, Issue 4, Pg. 17-22	Apr-2016	2.213
42.	Mrs. Vandana C P	Security Improvement in IoT Based on Software Defined Networking (SDN)	International Journal of Science, Engineering and Technology Research, ISSN: 2319-8885	Vol. 5, Issue 1	Jan-2016	5.762
43.	Mrs. Vandana C P	A Need of Time: Android Security	International Journal of Research & Development Organisation, ISSN: 2456-1843	Vol. 2, Issue 2	Feb-2016	1
44.	Mrs. Ashwini K	Survey Paper on Fruit Picking Robots	International Journal of Computer Science and Mobile Computing, ISSN: 2320-088X	Vol. 5, Issue 1, Pg. 96-101	Jan-2016	5.258
45.	Mrs. Ashwini K	Implementing CST in Learning Layer of CSIA for Higher Level of Intelligence	International Journal of Computer Science and Mobile Computing, ISSN: 2320-088X	Vol. 5, Issue 3, Pg. 303-308	Mar-2016	5.258
46.	Mrs. Ashwini K	Development of Swarm and Ambient Cognitive Architecture by using Society of Agents	International Journal of Advanced Studies in Computer Science and Engineering, ISSN: 2278-7917	Vol. 4, Issue 9, Pg. 21-27	Sep-2015	4.569

47.	Mrs. Ashwini K	A Novel Two Step Random Colored Grid Process: Graphical Password Authentication System	International Journal of Contemporary Research in Computer Science and Technology, ISSN: 2395-5325	Vol. 2, Issue 4	Apr-2016	4.569
48.	Mr. Gangadhar Immadi	Privacy Preserving using Public Auditing and Detection of Packet Drop Attacks in Wireless Ad Hoc Networks	International Journal of Modern Computer Science, ISSN (Online): 2320-7868	Vol. 4, Issue 2	Apr-2016	4.556
49.	Mr. Gangadhar Immadi	A Survey on Customer-Vendor Interaction in Services Marketplace	International Journal of Innovative Research in Computer and Communication Engineering, ISSN (Online): 2320-9801 , ISSN: (Print) : 2320-9798	Vol. 4, Issue 3	Mar-2016	7.194
50.	Mrs. M S Shoba	A Survey on Vehicle Document Check System	International Journal of Innovative Research in Computer and Communication Engineering, ISSN: 2320-9798	Vol.4 Issue 2	Feb-2016	7.194
51.	Mrs. M S Shoba	CCOS Detection and Security in Wireless Sensor Network	International Journal of Recent Trends in Engineering & Research, ISSN: 2455-1457	Vol.2, Issue 3	Mar-2016	4.101
52.	Mrs. M S Shoba	A Survey on Twitter Data Analysis Techniques to Extract Public Opinion	International Journal of Advanced Research in Computer Science and Software Engineering, ISSN: 2277 128X	Vol. 5, Issue 11, Pg. 536-540	Nov-2015	2.5
53.	Mrs. Rafega Beham A	Performance Analysis of DOA Algorithms	International Journal of Innovative Research in Computer and Communication Engineering, ISSN: 2320 – 9801	Vol. 4, Issue , 1	Jan- 2016	7.194

54.	Mrs. Rafega Beham A	Machine Learning in Soil Classification and Crop Detection	International Journal for Scientific Research & Development, ISSN (Online): 2321-0613	Vol. 4, Issue 1	Apr-2016	4.396
55.	Mrs. Swathi B	A Comparative Study and Analysis on the Performance of the Algorithm	International Journal of Computer Science and Mobile Computing, ISSN: 2320-088X	Vol.5, Issue 1, Pg.91-95	Jan-2016	6.017
56.	Mrs. Swathi B	Survey on Secure Distributed Deduplication Systems with Improved Reliability	International Journal of Contemporary Research in Computer Science and Technology, ISSN (Online): 2395-5325	Vol. 2, Issue 4, Pg. 740-743	Apr-2016	4.569
57.	Mrs. Swathi B	Map Reduce Based Analysis of Live Website Traffic Integrated with Improved Performance for Small Files using Hadoop	International Journal for Scientific Research & Development, ISSN (Online): 2321-0613	Vol. 4, Issue 1	Apr-2016	4.396
58.	Mrs. Mounica B	Efficient Reporting Tool for Business Intelligence with Increasing Volume of Data	International Journal of Computer Science and Mobile Computing, ISSN: 2320-088X	Vol.5, Issue 1, Pg.86-90	Jan-2016	6.017
59.	Mrs. Mounica B	Flatcare Household Administrator	International Journal of Computer Science and Mobile Computing, ISSN: 2320-088X	Vol. 5, Issue 2	Feb-2016	6.017

60.	Mrs. Divya K V	Survey on Security of Big Data Outsourcing in Cloud	International Journal of Scientific Research in Computer Science, Engineering and Information Technology, ISSN: 2395-5325	Vol. 2, Issue 4	Apr-2016	4.032
61.	Mrs. Divya K V	Web Service Discovery using Functional Level Service Categorization Approach	International Journal of Engineering Sciences & Research Technology, ISSN: 2277-9655	Vol.5, Issue 1	Jan-2016	5.164
62.	Mrs. K K Kavitha	Mobile Cloud Computing with a Private Authentication Scheme	International Journal of Recent Trends in Engineering and Research, ISSN: 2455-1457	Vol. 2, Issue 3	Mar-2016	3.344
63.	Mrs. K K Kavitha	Background Models for Tracking Objects under Water	International Journal of Computer Science and Mobile Computing, ISSN: 2320-088X	Vol. 5, Issue 3	Mar-2016	6.017
64.	Mrs. K K Kavitha	An Effective Authentication Scheme for Distributed Mobile Cloud Computing Services using a Single Private Key	International Journal of Computer Science and Mobile Computing, ISSN: 2320-088X	Vol. 5, Issue 4	Apr-2016	6.017

5.7.2. Sponsored Research (5)

Funded research:

(Provide a list with Project Title, Funding Agency, Amount and Duration)

Funding amount (Cumulative during three academic years):

Amount > 20 Lacs – 5 Marks

Amount >= 16 Lacs and <= 20 lacs – 4 Marks

Amount >= 12 Lacs and < 16 lacs – 3 Marks

Amount >= 8 Lacs and < 12 lacs – 2 Marks

Amount >= 4 Lacs and < 8 lacs – 1 Mark

Amount < 4 Lacs – 0 Mark

Table 5.7.2.1: Sponsored Project

Sl. No.	Project Title	Funding Agency	Amount in Rupees	Principal Investigator	Duration	Year of sanction
1.	Design and Development of Animation Software/ Motion Capture Software System	7D+ Fun Corner, Madurai, Tamilnadu	7,80,000	• Dr.GopalaKrishnan • Dr.Sohan Kumar Gupta • Dr.N.Guruprasad • Mr.Viswanath • Mrs.Rajeswari • Mrs.Mounica • Ms.Swathi • Mrs. K K Kavitha	1 yr	2015-2016
2.	Creation of Motion Control Files for 3DoF of movements for Motion Chairs in accordance with movie files/ simulator rides- Phase 1	7D plus Technology Network, Chennai	8,50,000	• Dr.GopalaKrishnan • Dr.N.Guruprasad • Mrs.Rajeswari • Mrs.RafegaBeham • Mrs.Mounica • Mrs.Shwetha • Mrs. K K Kavitha • Mrs.Preethi J D	1 yr	2016-2017

3.	Creation of Motion Control Files for 3DoF of movements for Motion Chairs in accordance with movie files/ simulator rides- Phase 2	7D+ Fun Corner, Madurai, Tamilnadu	8,60,000	• Dr.GopalaKrishnan • Dr.Jitendranath Mungara • Dr.S.Mohan Kumar • Dr.Hanuman Kumar • Mrs.Vandana C P • Mrs.J.Karthiyayini • Mrs.Gowri Prasad	1 yr	2017-2018
Cumulative Amount in Rupees			25,10,000			

5.7.3. Development activities (10)

Provide details:

Product Development

Research laboratories

Instructional materials

Working models/charts/monograms etc.

5.7.3.1: Product Development

Table: 5.7.3.1.1: Product Development

Sl. No.	Name of the Faculty members	Product Title	Duration
1.	• Dr.A.N.Nandakumar • Dr.N.Guruprasad • Dr.C.S.R.Prashanth • Mrs.Shwetha	Online Evaluation Tools	2015-16
2.	• Dr.A.N.Nandakumar • Dr.N.Guruprasad • Dr.C.S.R.Prashanth • Mr.Gangadhar Immadi	Online Evaluation Tools	2015-16
3.	• Dr.Jithendranath Mungara • Dr. R. Elumalai • Dr. Mahesh K • Mrs.Swathi	Development of Software and Mobile App	2016-17

5.7.3.4: Working Models/Charts/Monograms etc.**Table: 5.7.3.4.1: Working Models/Charts/Monograms etc.**

Sl.No.	Name of the Charts
1.	OSI Layer
2.	SDLC
3.	Network Protocols
4.	Water Fall Model
5.	Flow Chart Symbols
6.	ER diagrams
7.	Pin Diagrams
8.	Compiler Phases
9.	UML diagram

5.7.4. Consultancy (from Industry) (5)

(Provide a list with Project Title, Funding Agency, Amount and Duration)

Funding amount (Cumulative during three academic years):

Amount > 10 Lacs – 5 Marks

Amount >= 8 Lacs and <= 10 lacs – 4 Marks

Amount >= 6 Lacs and < 8 lacs – 3 Marks

Amount >= 4 Lacs and < 6 lacs – 2 Marks

Amount >= 2 Lacs and < 4 lacs – 1 Mark

Amount < 2 Lacs – 0 Mark

5.7.4.1 Consultancy Projects**Table: 5.7.4.1.1 Consultancy Projects**

Sl. No.	Principal Investigators	Funding Agency	Project Title	Amount In Rupees	Duration
1	Dr.Jitendranath Mungara Dr.Sheelan Mishra Dr.A.R.Sainath Mrs.Kavitha K K Mr.Vikas B O	Nike, Bangalore.	Mobile App Development & Customer Satisfaction Survey	2,00,000.00	2016-17

2	Dr.Jitendranath Mungara Dr.Vishwanath.Y Dr.Sheelan Misra Dr.A.R.Sainath Mr.Gangadhar Immadi Mrs.Shwetha	Durga Book Agencies, #26,Veerapillai Street, 2 nd Parallel to Commercial Street, Shivajinagar, Bangalore-560001. E-Mail: durgabookagencies@gmail.com , ph: 080-25598677	Development of Portal and Mobile Apps	1,00,000.00	2016-17
3	Dr.JitendranathMungara Dr. N. Guruprasad Dr.Vishwanath. Y Dr.C.S.R. Prashanth Dr. Shridhar Kurse Dr. Sheelan Misra Dr. A.R.Sainath Mr.GangadharImmadi Mrs.Shwetha	Globe Express Travels Pvt. Ltd, #105,Globe House Richmond Road, Richmond Circle, Bangalore-560025, Ph: 080-22112331/330, E-Mail: Holidatpackages@globextravels.com , www.globextravels.com	Enhancement of Productivity Studies & Customer Survey	1,00,000.00	2016-17
4	Dr.SheelanMisra Dr.A.R.Sainath Mrs.Swathi Mrs.Vandana C P	Manasa Gardens , #115/4 Domlur Village, Bangalore- 71,Ph:9341258019	Development of Software and Mobile App & Survey	50,000.00	2016-17
5	Dr.R.Elumalai Dr. Mahesh K Mrs.Mounica Mr.Vikas B O	Sri Ganesh Textiles, Mob: 9738454297, #7,Door # 216, Venkatamma Street, 10 th Cross, MS Nagar Post, Bangalore- 560033, E-Mail: diliphi2u@gmail.com	Development of Software and Mobile App	50,000.00	2016-17
6	Dr.Vishwanath.Y Mrs.Swathi Mrs.Vandana C P	Udupi Hospitality Services, #4, 'Durgashree', 6 th 'B' Cross, Ganeshnagar, Kodigehalli, Bangalore- 560097, Mob: 9972251111, E-Mail: udupihospitalityservices@gmail.com .	Development of Software and Mobile App	50,000.00	2016-17
7	Dr.R.Elumalai Dr.Mahesh K Mrs.Mounica Mrs.Vandana C P	ILLUME Shoes, Bangalore.	Web Portal Development	1,25,000.00	2016-17

8	Dr.A.N.Nandakumar Mr.Vishwanath. Y Dr. C.S.R. Prashanth Dr. N.Guruprasad Mrs.Shwetha	Durga Book Agencies, #26,Veerapillai Street, 2 nd Parallel to Commercial Street, Shivajinagar, Bangalore-560001. E-Mail: durgabookagencies@gmail.c om , ph: 080-25598677	Online Evaluation Tools	1,00,000.00	2015-16
9	Dr.A.N.Nandakumar Mr.Vishwanath.Y Dr.Sheelan Misra Dr.A.R.Sainath Mrs.Mounica Mrs.Shobha	Coporate Café, Bangalore. Ph: 8553140101	Mobile App Development for Online Survey	20,000.00	2015-16
10	Dr.A.N.Nandakumar Mr.Vishwanath.Y Mrs.KavithaKK Mrs.Shobha	Chhabria Tiles, #G-5, Ramana Street Chamber 37, Lady Curzon Road , Bangalore-01,ph: 080- 40141000	Web Portal Development for Online Survey	50,000.00	2015-16
11	Dr.A.N.NandakumarY Mrs.Rajeswari Mrs.Preethi J D	Nithya Enterprises, #52, Shri Marithi Complex, G Street, Jogupalya, Ulsoor, Bangalore-560008, Mob: 09449532944	Mobile App Development for Online Survey	30,000.00	2015-16
12	Dr.A.N.Nandakumar Dr.C.S.R. Prashanth Dr.N.Guruprasad Mr.Vishwanath.Y Mrs.Rajeswari Mrs.Preethi J D	Microport Infotech Pvt. Ltd, #4, Welcome Plaza, PR Lane, SP Road, 3 rd Cross, Bangalore-560002, Ph: 080-41249912/13 Mob : 9845837366	Mobile App Development for Online Survey	1,00,000.00	2015-16
13	Dr.A.N. Nandakumar Dr. Sheelan Misra Dr.A.R.Sainath Mrs.Mounica Mrs.Shobha	Akar Advertising & Marketing Pvt Ltd, #201, La Citadel Apartments, ½, Cannigham Gesent Road, Bangalore-560052, Mob: 09448480542	Online Survey for Customer Satisfaction	1,00,000.00	2015-16
14	Dr.A.N.Nandakumar Mr.Vishwanath.Y Dr.Sheelan Misra Dr.A.R.Sainath Mrs.Rafega Mrs.Kavitha K K	Bhushan K (school canteen), Bangalore.	Online Survey for Customer Satisfaction	20,000.00	2015-16
15	Dr.A.N.Nandakumar Dr. Prabhakar Kammar Mrs.Rajeswari Mrs. Preethi J D	SLV Caterers, Bangalore.	Development of Portal and Mobile Apps	25,000.00	2015-16
Cumulative Amount in Rupees				11,20,000.00	

5.8. Faculty Performance Appraisal and Development System (FPADS) (30)

Faculty members of Higher Educational Institutions today have to perform a variety of tasks pertaining to diverse roles. In addition to instruction, Faculty members need to innovate and conduct research for their self-renewal, keep abreast with changes in technology, and develop expertise for effective implementation of curricula. They are also expected to provide services to the industry and community for understanding and contributing to the solution of real life problems in industry. Another role relates to the shouldering of administrative responsibilities and co-operation with other Faculty, Heads-of-Departments and the Head of Institute. An effective performance appraisal system for Faculty is vital for optimizing the contribution of individual Faculty to institutional performance.

The assessment is based on:

A well-defined system for faculty appraisal for all the assessment years (10)

Its implementation and effectiveness (20)

Feedback System

- The performance appraisals provide College management with information useful in merit salary determinations and at the same time, it offers opportunity for positive evaluation and discussion of employee weaknesses and strengths.
- The College/Department encourages faculty members, who are doing R&D projects and consultancy.
- The College/Department encourages faculty members, who are attending in the internal/national conference.
- The College/Department encourages faculty members, who are filing patent/copyrights by paying money toward expenditure of it.
- The College/Department encourages faculty members, who are member of professional societies such as IEEE, ACM etc.by paying membership amount.
- The Institution Management strives hard to promote professional development of faculty by Encouraging them to attend general orientation courses, refresher
- Courses, training programs and workshops organized by the reputed Institutions/universities.
- Organizing national /international seminars/guest lecturers/workshops/conferences on crucial issues.
- Granting leave for attending state/national seminars/workshops/FDPs etc.
- Encouraging faculty to apply for research grants.
- Cash incentive of Rs. 5000/- and Rs. 2000/- will be given to faculty for publishing papers in international and national reputed journals respectively.

- The college/ department take feedback of the faculties from the students which are used as evaluation in faculty appraisal.
- The minimum feedback for a faculty member from the students is 3.5 for 5 scale rating system. Any faculty who are scoring less than the institution standard, necessary corrective actions are followed.
- Necessary advice by the Head of the department about handling and monitoring the class to the faculty.
- Deputing faculty to the Faculty Development Program (FDP).
- Counseling the faculty through counselors about building confidence in handling the subjects.
- If there is no improvement even after the above mentioned activities, he / she continuation in department is reviewed by the Principal.
- College/ management also rewards the best faculty on the following factors
 - ✓ Student's feedback.
 - ✓ The faculty's self-appraisal report.
 - ✓ HOD's evaluation.
 - ✓ The marks given by faculty appraisal committee, headed by principal.
 - ✓ The increments and promotions also add some effect to these scores: If the faculty achieves 90% - 100%, an appreciation from the management will be awarded along with a monetary benefit of increment.
 - ✓ A sample feedback form of faculty from student and self-appraisal form of the faculty is shown.

New Horizon College of Engineering,

Bangalore

Student Feedback

Faculty	Sub	1	3	4	5	6	7	9	10	11	12	13	14	43	45	46	Avg.
	Sub. code(n)																
	Overall																
	Earlier Sem Overall Rating																

Question No	Description
1	Clarity in explaining the subject
2	Content quality is relevant and useful
3	Faculty answers to your queries/questions
4	Coverage of topic/subject is on time
5	The concepts were explained with examples
6	Faculty preparation for the class
7	Punctuality of the faculty for the class
8	Communicates distinctly and effectively
9	Treats students with respect and courtesy
10	Control of the classroom by faculty
11	Relevance of assignments to the subject
12	Overall satisfaction
⋮	⋮
43.	Discussion of any interesting topic beyond the syllabus but relevant to the field
45.	Helpfulness of the online course material(Question Bank ,etc.) and assignments for
46.	Accessability and availability after class hours in the college

SCALE USED	
1	POOR
2	FAIR
3	GOOD
4	VERY GOOD
5	EXCELLENT
6	NA

NEW HORIZON COLLEGE OF ENGINEERING
ANNUAL PERFORMANCE APPRAISAL OF TEACHING STAFF

Academic Year: 2015 – 16

Name : _____

Designation : _____

Department : _____

NOTE:

(This document consists of evaluation (i) of teacher by students (ii) by teachers themselves and(iii) of the concerned of Head, all considered together. This evaluation is conducted at the end of each academic year and forms an important document of performance evaluation)

PERFORMANCE APPRAISAL: TEACHING STAFF

In conformity with the job responsibilities prescribed by AICTE, Assessment period from August 2015 to July 2016

PART - A**(Personal Particular)**

Name

:

Educational Qualifications

:

(If you possess a Doctorate degree, state if you are a recognized guide)

:

Department

:

Designation

:

No of years served in NHCE till date:

Total Experience till date

:

Any extraordinary achievement during the assessment period

:

Part - B**ACADEMIC DUTIES AND RESPONSIBILITIES ASSIGNED**

	Subject Assigned	No. of Classes Planned	No. of Classes Conducted	Remarks
ODD Semester Theory				

	Laboratory	No. of Experiments Planned	No. of Experiments Conducted	Remarks
ODD Semester Laboratory				

EVEN Semester Theory	Subject Assigned	No. of Classes Planned	No. of Classes Conducted	Remarks

EVEN Semester Laboratory	Laboratory	No. of Experiments Planned	No. of Experiments Conducted	Remarks

APPLICABLE TO FACULTIES HANDLED AUTONOMOUS

ODD SEMESTER	Subjects Assigned	Self Study / Sem / Student	Assignments / Semester	Quiz / Semester

EVEN SEMESTER	Subjects Assigned	Self Study / Sem / Student	Assignments / Semester	Quiz / Semester

PART - C

A brief pen picture of self, not exceeding in 5 to 6 lines, highlighting the administrative and support activities entrusted

PART - D

(Appraisal on a 5 point rating scale)

Note : Please put a tick in the appropriate rating

1) Proper maintenance of course files and attendance registers (as per Check list) with necessary proof:

25

20

15

10

5

Outstanding

Very Good

Good

Fair

Poor

2) Proper valuation & maintenance of blue books of Students with necessary proof:

15

12

9

6

3

Outstanding

Very Good

Good

Fair

Poor

3) Contribution in development of lab manuals, addition of new experiments and innovations and modernization of labs

5

4

3

2

1

Outstanding

Very Good

Good

Fair

Poor

NA

4) Participation in co-curricular activities:

5

4

3

2

1

Outstanding

Very Good

Good

Fair

Poor

(Here contributions in areas like ISTE, forum activities, arranging guest lectures, symposiums/ seminars, Workshops, blood donation, sports and other fruitful activities need to be taken into consideration.)

5) Initiatives taken towards counseling / Mentoring, guidance & overall character building of students:

10

8

6

4

2

Outstanding

Very Good

Good

Fair

Poor

6) Initiatives and interest shown in acquiring and disseminating new knowledge and skill through publications, books, attending seminars etc: Publications – Minimum 02 per Academic Year

5

4

3

2

1

Outstanding

Very Good

Good

Fair

Poor

7) Initiatives and interest shown in acquiring and disseminating new knowledge and skill through publications, books, attending seminars etc:

FDP – Minimum 03 per Academic Year

5

4

3

2

1

Outstanding

Very Good

Good

Fair

Poor

8) Contribution in guiding students for completion of their projects:

5

4

3

2

1

Outstanding

Very Good

Good

Fair

Poor

9) Efforts made in attending continuing education programmes:

5

4

3

2

1

Outstanding

Very Good

Good

Fair

Poor

10) Initiative & involvement in curriculum development (Suggestions to improve the Curriculum):

5

4

3

2

1

Outstanding

Very Good

Good

Fair

Poor

11) Endeavours towards self development by upgrading/acquiring qualifications, gaining experience through professional activities, including membership of Professional societies.

5

4

3

2

1

Outstanding

Very Good

Good

Fair

Poor

12) Contribution in promoting institute industry, R&D activities & consultancy services (Minimum 02 Proposals per Academic Year).

5

4

3

2

1

Outstanding

Very Good

Good

Fair

Poor

13) The efforts made by individual to motivate & guide fellow faculty persons for acquiring higher education , Guidance for M Sc., Eng, Ph D etc) (Applicable only for PhD Holders)

5	4	3	2	1
Outstanding	Very Good	Good	Fair	Poor

14) Contribution in shouldering the administrative responsibilities pertaining to the institution

5	4	3	2	1
Outstanding	Very Good	Good	Fair	Poor

15) Initiatives & involvement in the field of policy planning, monitoring evaluation & promotional activities at departmental & institutional level:

5	4	3	2	1
Outstanding	Very Good	Good	Fair	Poor

16) Involvement in design & development of new academic/training programmes:

5	4	3	2	1
Outstanding	Very Good	Good	Fair	Poor

17) Efforts made towards judicious utilization, management & development of institutional facilities.

5	4	3	2	1
Outstanding	Very Good	Good	Fair	Poor

18) Involvement in planning & implementation of staff development activities:

5	4	3	2	1
Outstanding	Very Good	Good	Fair	Poor

19) Initiative taken towards Societal Development (adult literacy drives & bringing awareness in the society towards hygiene/moral & ethical value etc):

5	4	3	2	1
Outstanding	Very Good	Good	Fair	Poor

20) Effort made in promotion of entrepreneurship & job creation:

5	4	3	2	1
Outstanding	Very Good	Good	Fair	Poor

21) Degree of integrity, efficiency, effectiveness & dedication shown during the course of discharging assigned responsibilities:

5	4	3	2	1
Outstanding	Very Good	Good	Fair	Poor

PART - E

Formula Used: (Grand Result % * 5) / 100

(Result Conversion Scale: 100% - 5, 80% - 4, 60% - 3, 40% - 2, 20% - 1, 0% - 0)

ODD Semester						
	Sub 1	Sub 2	Sub 3	Sub 4	Sub 5	Average
Student Feedback						
Result						
EVEN Semester						
	Sub 1	Sub 2	Sub 3	Sub 4	Sub 5	Average
Student Feedback						
Result						
Grand Average						
	ODD	EVEN	Grand			
Student Feedback						
Result						

SUMMARY OF PART "D"

Total points awarded to staff: (D1)

(Points Obtained / Maximum Points *5)

Points awarded with 60 weight age: (D1*0.6)

SUMMARY OF PART "E"

Average of student Feedback and Result (E1)=

40% weight age based on grand average: (E1*0.4).....

OVERALL SUMMARY

Annual performance index (D + E) = _____

CORRESPONDING RANKING TAKING INTO ACCOUNT THE POINT SCORE AND CONVERTING IT TO TOTAL WEIGHTAGE OF 60%+40%= 100

Final Grade:

4.5 – 5.0 : OUTSTANDING

3.0 – 3.9 : Good

4.0 – 4.4: Very good

2.0 – 2.9 : Fair

Less than 2: Poor

Signature of faculty member

Date:.....

Areas for improvement:

Signature of HOD

Date:

REMARKS & SIGNATURE OF PRINCIPAL

Signature of the Principal

Date:

GUIDELINES TO HEADS OF DEPARTMENT FOR FILLING UP PERFORMANCE APPRAISAL FORM IN RESPECT OF TEACHING STAFF:

- Every faculty person will be assessed on 21 items/areas of achievement on the pressure point rating scale. The concept of rating scale are given below:
 - ✓ Outstanding: Excellent professional competence, unblemished track record, utmost efficiency & effectiveness, optimum human capacity utilization, punctuality, sincerity and dedication of highest order.
 - ✓ Very good: Satisfactory professional competence with reasonable efficiency & effectiveness, reasonable extent of human capacity utilization and high order of punctuality, sincerity and dedication.
 - ✓ Good: Just satisfactory performance with marginal level of efficiency and effectiveness. Medium human capacity utilization, punctuality, sincerity and dedication just adequate to deliver minimum satisfactory performance.
 - ✓ Fair: Performance much below the level of expectations. Lack of efficiency and effectiveness, zeal and enthusiasm in performing his/her duties. Underutilization of capacity advertently or inadvertently(due to physical, mental disabilities)
 - ✓ Poor: A deplorable performance devoid of initiative efforts, zeal or enthusiasm. A liability for the organization with either total lack of capacity, utilization to perform or advertently shirking from responsibilities.
- PROCEDURE OF COMPUTATION OF GRADING
 - ✓ 60% weight age of the total points awarded in performance appraisal.

- ✓ 40% weight age will be given for points awarded in the faculty evaluation by students both from both semesters.
- CORRESPONDING RANKING TAKING INTO ACCOUNT THE POINT SCORE AND CONVERTING IT TO TOTAL WEIGHTAGE OF 60%+40%= 100
 - ✓ 4.5 – 5.0 : OUTSTANDING
 - ✓ 4.0 – 4.4: Very good
 - ✓ 3.0– 3.9 : Good
 - ✓ 2.0 – 2.9 : Fair
 - ✓ Less than 2: Poor
- HOD's are required to fill up the performance appraisal pro forma in presence of the concerned teaching staff by asking the staff explain item wise performance and their perceptions about the point grades. The HOD's after taking into account the submissions and expectations of the concerned staff & his own perceptions/ option about the capability of the staff, will put a tick on mark particular point scale. In case the ticked grade does not tally with the expectations of the staff, the reasons for variations must be told to staff by HOD in explicit terms.
- The HODs are to ensure that assessment is based on the performance of the individual throughout the stipulated assessment period and not based on seasonal performance.
- Further biases all sorts and preferential treatment to selected ones should be avoided to make the appraisal system totally transparent and purposeful.
- Both the HOD and the staff have to sign in the appraisal pro forma at the appropriate place meant for the purpose. The employees should invariably sign even if they have some reservation on the assessment grades given by HOD's on certain items. They can mention the particular items where they have reservations/ disagreement below their signature at the appropriate place mentioned there in. These dissenting items/points or divergences will be discussed by the staff with Principal at appropriate time after seeking interview or if otherwise automatically called by Principal.
- The decision of the Principal in all dissenting matters will be final & binding on employees. No further query or representations on the subject will be entertained at later stage.

5.9. Visiting/Adjunct/Emeritus Faculty etc. (10)

Adjunct faculty also includes Industry experts. Provide details of participation and contributions in teaching and learning and /or research by visiting/adjunct/Emeritus faculty etc. for all the assessment years:

Provision of inviting/having visiting/adjunct/emergitus faculty (1)

Minimum 50 hours per year interaction with adjunct faculty from industry/retired professors etc.
(Minimum 50 hours interaction in a year will result in 3 marks for that year; 3 marks x 3 years = 9 marks)

Table 5.9.1: Visiting/adjunct/emeritus faculties for CAY (2017-18)

S. No.	Name of the faculty	Designation	No. of hours handling
1.	Dr.Vasudha Srikumar	Adjunct Faculty	30+25

Table 5.9.2: Visiting/adjunct/emeritus faculties for CAYm1 (2016-17)

S. No.	Name of the faculty	Designation	No. of hours handling
1.	Dr.Vasudha Srikumar	Adjunct Faculty	53

Table 5.9.3: Visiting/adjunct/emeritus faculties for CAYm2 (2015-16)

S. No.	Name of the faculty	Designation	No. of hours handling
1.	Dr.Vasudha Srikumar	Adjunct Faculty	54

CRITERION 6: FACILITIES AND TECHNICAL SUPPORT 80**6. FACILITIES AND TECHNICAL SUPPORT (80)****6.1. Adequate and Well Equipped Laboratories and Technical Manpower (30)****Table 6.1.a: List of laboratories with technical power**

SI. No.	Name of the Laboratory	No. of Students per setup (Batch Size)	Name of the Important Equipment	Weekly Utilization Status (all the Courses for which Lab is utilized)	Technical Manpower Support		
					Name of Technical Staff	Designation	Qualification
1.	DATA STRUCTURE S WITH C/C++ LAB	1 Computer System Per Student 30 Students Per Batch	Computer with Intel I3 Processor, 500 GB Hard Disk, 4 GB RAM	Utilized	Mrs. Srilatha S	Lab Instructor	MCA
2.	ELECTRONI C CIRCUITS AND LOGIC DESIGN LAB	30 Students Per Batch	CRO, Signal Generator, Power Supply, Trainer Kit, IC Tester, Spring Board	Utilized	Mr. M. Rajesh	Lab Instructor	BE
3.	DESIGN AND ANALYSIS OF ALGORITHM S LAB	1 Computer System Per Student 30 Students Per Batch	Computer with Intel I3 Processor, 500 GB Hard Disk, 4 GB RAM	Utilized	Mrs. Srilatha S	Lab Instructor	MCA
4.	MICROPROC ESSORS LAB	1 Computer System Per Student 30 Students Per Batch	Computer with Intel I3 Processor, 500 GB Hard Disk, 4 GB RAM, PCI DIOT Cards and M.P Lab Kits	Utilized	Mr. M. Rajesh	Lab Instructor	BE

5.	DATABASE APPLICATIONS LAB	1 Computer System Per Student 30 Students Per Batch	Computer with Intel I3 Processor, 500 GB Hard Disk, 4 GB RAM.	Utilized	Mr. K.M Ajith Kumar	Lab Instructor	Diploma in Computer networking
6.	SYSTEM SOFTWARE AND OPERATING SYSTEMS LAB	1 Computer System Per Student 30 Students Per Batch	Computer with Intel I3 Processor, 500 GB Hard Disk, 4 GB RAM	Utilized	Mr. Prakash Ray	Lab Instructor	MCA
7.	FILE STRUCTURES LAB	1 Computer System Per Student 30 Students Per Batch	Computer with Intel I3(Core) Processor, 500 GB Hard Disk, 4 GB RAM	Utilized	Mr. K.M Ajith Kumar	Lab Instructor	Diploma in Computer networking
8.	SOFTWARE TESTING LAB	1 Computer System Per Student 30 Students Per Batch	Computer with Intel I3 Processor, 500 GB Hard Disk & 4 GB RAM	Utilized	Mr. Prakash Ray	Lab Instructor	MCA
9.	NETWORKS LAB	1 Computer System Per Student 30 Students Per Batch	Computer with Intel I3(Core) Processor, 500 GB Hard Disk, 4 GB RAM	Utilized	Mr. P. Suresh	Lab Instructor	B.Sc, PGDCA
10.	WEB PROGRAMMING LAB	1 Computer System Per Student 30 Students Per Batch	Computer with Intel I3 Processor, 500 GB Hard Disk, 3 GB RAM	Utilized	Mr. Govindha Raj	Lab Instructor	B.Sc (CS)
<i>All Labs are connected to UPS and 200 Mbps internet facility</i>							



Fig 6.1.1 Database Application Lab



Fig 6.1.2 System Software and OS Lab



Fig 6.1.3 Software Testing Lab



Fig 6.1.4 Analysis and Design of Algorithms Lab



Fig 6.1.5 File Structures Lab



Fig 6.1.6 Web Programming Lab

6.2. Additional Facilities Created for Improving the Quality of Learning Experience in Laboratories (25)

- ❖ VMware IT Academy Lab is established to equip students with VMware technologies and make them industry ready with VMware Virtualization skills.
- ❖ ADOBE Digital Center of Excellence is established to impart hands on training to students on Adobe Suite of Products and Services.
- ❖ Big Data and Data Analytics with HP Vertica Lab is set up as additional facility to prepare students with big data analytics skill using Vertica Analytics Platform supported by Hewlett Packard Enterprise.
- ❖ Cisco Networking Academy Lab provides an integrated and comprehensive coverage of networking knowledge with practical hands-on experience on CCNA Routing and Switching.
- ❖ SAP Next Gen Lab is established to make students equip with SAP technologies by working on SAP modules.
- ❖ Quest Global IIOT is established to create an industrial segment ecosystem preparing Ready to Deploy (R2D) Resources and enabling the students to work on technology stack of IIoT platform.
- ❖ Indo-French Schneider- Electric Laboratory is equipped with the up-to-date technology in the field of industrial automation, building automation and energy management.

Table 6.2.a: Additional facilities

Sl. No.	Facility Name	Details	Reason (s) for creating the facility	Utilization	Area in which Students are expected to have enhanced learning	Relevance to POs/PSOs
1.	ADOBE Digital Center of Excellence	Computer with I3 Processor, 1TB Hard Disk, 4 GB RAM	Industry collaboration program to enhance students placement	Utilized	Enterprise Web Content Management Platform	PO1,PO2, PO3,PO4, PO5,PO9, PO10,PO11P O12 PSO1, PSO2
2.	Big Data and Data Analytics with HP Vertica Lab	Computer with I3 Processor, 1TB Hard Disk, 4 GB RAM	Industry collaboration program to enhance students placement	Utilized	Data analytics and Big Data management	PO1,PO2, PO3,PO4, PO5,PO9, PO10,PO11P O12 PSO1, PSO2
3.	VMware IT Academy Lab	Computer with I3 Processor,	Industry collaboration	Utilized	Virtualization servers and	PO1,PO2, PO3,PO4,

		1TB Hard Disk, 8 GB RAM	program to enhance students placement		services	PO5,PO9, PO10,PO11P O12 PSO1, PSO2
4.	SAP Next Gen Lab	Computer with I3 Processor, 1TB Hard Disk, 8 GB RAM	Industry collaboration program to enhance students placement	Utilized	SAP software for advanced research.	PO1,PO2, PO3,PO4, PO5,PO9, PO10,PO11P O12 PSO1, PSO2
5.	Indo-French Schneider-Electric Lab	Computer with I3 Processor, 1TB Hard Disk, 8 GB RAM	Industry collaboration program to enhance students placement	Utilized	Industrial automation, building automation, electricity and energy management	PO1,PO2, PO3,PO4, PO5,PO9, PO10,PO11P O12 PSO1, PSO2
6.	Cisco Networking Academy	Computer with I3 Processor, 1TB Hard Disk, 8 GB RAM	Industry collaboration program to enhance students placement	Utilized	CCNA routing and switching	PO1,PO2, PO3,PO4, PO5,PO9, PO10,PO11P O12 PSO1, PSO2
7.	Quest Global IIOT	Computer with I3 Processor, 1TB Hard Disk, 8 GB RAM	Industry collaboration program to enhance students placement	Utilized	Software Application Development and Testing of IIOT stack for Ready to Deploy (R2D) Resources	PO1,PO2, PO3,PO4, PO5,PO9, PO10,PO11P O12 PSO1, PSO2
8.	Skill development Lab	Computer with I 5 Processor/ Core 2 duo processor, 250GB Hard Disk, 4 GB RAM	Skill development programs	Utilized	Learning new technologies	PO5,PO8, PO9,PO10,PO 11,PO12 PSO1, PSO2
9.	Research Centre	Computer with I 5 Processor/ Core 2 duo processor, 250GB Hard Disk, 4 GB RAM	To cater the demand of in-house and external PhD candidates under VTU with recognized guides at department	Utilized	Research and Development	PO1,PO2, PO3,PO4, PO5,PO9, PO10,PO11P O12, PSO1, PSO2



Fig 6.2.1 VMware IT Academy Lab



Fig 6.2.2 VMware IT Academy Lab



Fig 6.2.3 ADOBE Digital Center of Excellence Lab



Fig 6.2.4 BigData and Data Analytics using HP-Vertica Lab



Fig 6.2.5 SAP Next Gen Lab



Fig 6.2.6 SAP Next Gen Lab



Fig 6.2.7 Schneider Electric Lab



Fig 6.2.8 Schneider Electric Lab



Fig 6.2.9 Quest Global IIOT Lab

6.3. Laboratories: Maintenance and Overall Ambience (10)

- ❖ All the labs are well equipped and well maintained.
- ❖ Technical staffs are well trained for lab maintenance.
- ❖ Routine maintenance of the equipments is performed by the lab instructors of the respective labs on regular basis.
- ❖ The maintenance and service of all the IT equipment is carried out by System Department.
- ❖ Conditions of chairs/benches are in good condition.
- ❖ All the computer systems in labs are in good condition.
- ❖ Air circulation for laboratories is good.
- ❖ Lighting–The classrooms and laboratories are well designed with enough natural light, ventilation and fresh air circulation.
- ❖ White board is provided in all the laboratories.
- ❖ LED projectors are provided in all laboratories.
- ❖ Window curtains are provided for good visibility.
- ❖ The overall ambience in the laboratories and class rooms is very good.
- ❖ Log registers are maintained.

6.4. Project Laboratories (5)

- ❖ Project Laboratory enables UG students to develop their projects with hands-on experience in various technologies.
- ❖ Project Laboratory has access to IEEE and other Journals.
- ❖ Open source software: Java SE Development Kit, Eclipse, Net beans IDE, Apache Tomcat, and MySQL are installed in Project Laboratory for developing projects.
- ❖ Project Laboratory has access to printers and scanners.
- ❖ “TECHORIZON”, a National Level Project Exhibition is conducted for the students to exhibit their final year projects. Project innovation and ideas are evaluated and the “Best Projects” are identified and awarded.
- ❖ Students are encouraged to publish their project work in National/International journals and conferences.

Table 6.4.a: Project Laboratory

Sl. No.	Name of the laboratory	Name of important equipment	Weekly utilization status (for all courses for which lab is utilized)	Technical Manpower Support			
				Faculty In-Charge	Name of Technical Staff	Designation	Qualification
1	PROJECT LAB	Computer with I 3 processor, 1 TB Hard Disk, 4 GB RAM	Utilized	Dr.Vishwanath Y	Mr. P. Suresh	Lab Instructor	B.Sc, PGD CA

6.5 Safety Measures in Laboratories (10)

- ❖ Security personnel are provided in the college campus 24x7.
- ❖ In-house Electrical Engineer is contacted at times of any emergency for any kind of electrical issues.

Table 6.5.a: Safety measures in laboratories.

Sl. No.	Name of the laboratory	Safety measures
1	DATA STRUCTURES WITH C/C++ LAB	❖ All electrical wires protected by MCB, RCBO and fuses. ❖ Fire Extinguisher ❖ First-Aid kit ❖ Voltage detectors ❖ Short circuit kits ❖ Surge Protector
2	DESIGN AND ANALYSIS OF ALGORITHMS LAB	
3	ELECTRONIC CIRCUITS AND LOGIC DESIGN LAB	
4	MICROPROCESSORS LAB	
5	DATABASE APPLICATIONS LAB	
6	SYSTEM SOFTWARE AND OPERATING SYSTEMS LAB	
7	FILE STRUCTURES LAB	
8	SOFTWARE TESTING LAB	
9	NETWORKS LAB	
10	WEB PROGRAMMING LAB	
11	PROJECT LAB	



Fig 6.5 Representative Safety /Precautionary facilities/Sign boards at laboratories & campus

CRITERION 7: CONTINUOUS IMPROVEMENT**50****7.1 Actions taken based on the results of evaluation of each of the POs & PSOs (20)**

Identify the areas of weaknesses in the program based on the analysis of evaluation of POs & PSOs attainment levels. Measures identified and implemented to improve POs & PSOs attainment levels for the assessment years.

POs Attainment Levels and Actions for improvement – CAY (2016-17)

POs	Target Level	Attainment Level	Observation
PO1: Engineering knowledge: Engineering knowledge: Apply the knowledge of Engineering Mathematics, Basic Sciences, Engineering Fundamentals, and Engineering Specialization to the solution of complex Information Science and Engineering problems.			
PO1	2.50	2.66	- Target achieved - Enhancement in the ability to Solve and analyze problems is desirable.
Action 1: Conducted guest lecture on “Software Development Process” on 27/08/2016 by Mr.Amit Goyal, Honeywell, Bangalore. Action 2: Conducted an guest lecture on “Software Engineering Etiquettes” on 09/09/2016 by Mrs.Raghavi Bhujang, Freelancer, Bangalore. Action 3: Arranged expert lecture on “Software Rejuvenation” on 23/09/2016 by Dr. Srinivasan, RV College of Engineering, Bangalore. Action 4: Conducted expert lecture on “Testing tools in Automata Theory” on 22/10/2016 by Mr.Raghavendra Prasad, Assistant Professor of ISE Department, RV College of Engineering, Bangalore. Action 5: Organised a workshop on “Hybrid Mobile App development using apache cordova” on 26/10/2016 by Mr. Ramkumar Arumugham, Head-Model Exams, Madhurai. Action 6: Arranged guest lecture on “Mobile Adhoc networks” on 02/11/2016 by Ms. PriyaR, Software engineer, Mavenir Systems, Bangalore. Action 7: Conducted expert lecture on “Bootstrap Essentials” on 03/11/2016 by Mr. Tanmay Pratap, Cisco, Bangalore. Action 8: Conducted expert lecture on “SQL Server” on 07/11/2016 by Mrs. Madhuri A, CTS, Bangalore. Action 9: Arranged expert Lecture on “Developing Web Application using Google App Script” on 9/11/2016 by Mr. Ram kumar, Freelancer, Bangalore.			

Action 10: Conducted a workshop on “R Tool” on 16/03/2017 by Mr. Nagamallikarjuna, Senior Architect, Cloudera , Bangalore.

Action 11: Conducted expert lecture on “Primitive Software Testing Concepts & Tools” on 06/04/2017 by Mrs. Hema.B.C, Test Engineer, Cerebra Integrated Technologies, Bangalore.

Action 12: Arranged guest lecture on “Overview Of Data Management Platform Tools” on 08/04/2017 by Mr. Sreekantha T, Market Data Management Platform, Bangalore.

Action 13: Conducted guest lecture on “Advanced Filters in UNIX operating system” on 11/04/2017 by Mr. Deepu, Sr. Expert, ZTE Telecom, Bangalore.

Action 14: Organised a Workshop on “Game console Interface development on iOS platform” on 10/05/2017 by Mr. Allamaprabhu S Sotti ,Senior Software Engineer, Snapdeal, Bangalore.

Action 15: Conducted a National Level project Exhibition “Techorizon-2017” on 27/05/2017

PO2: Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems of Information Science and Engineering reaching substantiated conclusions using first principles of Engineering Mathematics and Engineering Sciences.

PO2	2.46	2.54	• Target achieved • Able to analyse and interpret the data obtained with experiments.
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Action 1: Conducted guest lecture on “Software Development Process” on 27/08/2016 by Mr.Amit Goyal, Honeywell, Bangalore.

Action 2: Organised a guest lecture on “Software Engineering Etiquettes” on 09/09/2016 by Mrs.Raghavi Bhujang, Freelancer, Bangalore.

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Action 14: Organised a Workshop on “Game console Interface development on iOS platform” on 10/05/2017 by Mr. Allamaprabhu S Sotti, Senior Software Engineer, Snapdeal, and Bangalore.

PO3: Design/development of solutions: Design solutions for complex Information Science Problems and design system components or processes of Information Science and Engineering that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO3	2.47	2.49	• Target achieved • Ability to design and develop new software applications
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Action 1: Conducted guest lecture on “Software Development Process” on 27/08/2016 by Mr.Amit Goyal, Honeywell, Bangalore.

Action 2: Arranged guest lecture on “Software Engineering Etiquettes” on 09/09/2016 by Mrs.RaghaviBhujang, Freelancer, Bangalore.

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Action 11: Conducted a workshop on “R Tool” on 16/03/2017 by Mr.Nagamallikarjuna, Senior Architect, Cloudera, Bangalore.

Action 12: Conducted expert lecture on “Primitive Software Testing Concepts & Tools” on 06/04/2017 by Mrs. Hema.B.C, Test Engineer, Cerebra Integrated Technologies, Bangalore.

Action 13: Conducted guest lecture on “Overview Of Data Management Platform Tools” on 08/04/2017 by Mr. Sreekantha T, Market Data Management Platform, Bangalore.

Action 14: Conducted guest lecture on “Advanced Filters in UNIX operating system” on 11/04/2017 by Mr. Deepu, Sr. Expert, ZTE Telecom, Bangalore.

Action 15: Arranged Industrial visit to Jetking Data Center, Sadashivnagar, Bangalore on 18/04/2017.

Action 16: Organised a Workshop on “Game console Interface development on iOS platform” on 10/05/2017 by Mr. Allamaprabhu S Sotti, Software Engineer, Snapdeal, Bangalore.

Action 17: Organised a National Level project Exhibition “Techorizon-2017” on 27/05/2017.

PO4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions in Information Science and Engineering.

PO4	2.11	2.30	• Target achieved. • Able to experimentally analyze the problems through relevant software's.
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Action 1: Conducted guest lecture on “Software Development Process” on 27/08/2016 by Mr.Amit Goyal, Honeywell, Bangalore.

Action 2: Organised a guest lecture on “Software Engineering Etiquettes” on 09/09/2016 by Mrs.Raghavi Bhujang, Freelancer, Bangalore.

Action 3: Conducted expert lecture on “Software Rejuvenation” on 23/09/2016 by Dr. Srinivasan, RV College of Engineering, Bangalore.

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Action 8: Conducted expert Lecture on “Developing Web Application using Google App Script” on 9/11/2016 by Mr. Ram kumar, Freelancer, Bangalore.

Action 9: Organised a workshop on “R Tool” on 16/03/2017 by Mr.Nagamallikarjuna, Senior Architect, Cloudera, Bangalore.

Action 10: Conducted expert lecture on “Primitive Software Testing Concepts & Tools” on 06/04/2017 by Mrs. Hema.B.C, Test Engineer, Cerebra Integrated Technologies, Bangalore.

Action 11: Conducted guest lecture on “Overview Of Data Management Platform Tools” on 08/04/2017 by Mr. Sreekantha T, Market Data Management Platform, Bangalore

Action 12: Conducted guest lecture on “Advanced Filters in UNIX operating system” on 11/04/2017 by Mr. Deepu, Sr. Expert, ZTE Telecom, Bangalore.

Action 13: Organised a Workshop on “Game console Interface development on iOS platform” on 10/05/2017 by Mr. Allamaprabhu S Sotti, Software Engineer, Snapdeal, Bangalore.

Action 14: Organised a National Level project Exhibition “Techorizon-2017” on 27/05/2017

Action 15: Coaching classes were conducted for Numerical Subjects beyond the regular planned classes.

PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations in Information Science and Engineering.

PO5	1.92	2.13	• Target achieved • Able to obtain knowledge on additional software's and lab.
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Action 1: Conducted guest lecture on “Software Development Process” on 27/08/2016 by Mr.Amit Goyal, Honeywell, Bangalore.

Action 2: Conducted expert lecture on “Software Rejuvenation” on 23/09/2016 by Dr. Srinivasan, RV College of Engineering, Bangalore

Action 3: Arranged expert lecture on “Testing tools in Automata Theory” on 22/10/2016 by Mr.Raghavendra Prasad, Assistant Professor of ISE Department, RV College of Engineering, Bangalore.

Action 4: Organised a workshop on “Hybrid Mobile App development using apache cordova” on 26/10/2016 by Mr. Ramkumar Arumugham, Head-Model Exams, Madhurai.

Action 5: Arranged Industrial visit to SAP Labs, ITPL, Bangalore on 04/11/2016.

Action 6: Conducted expert Lecture on “Developing Web Application using Google App Script” on 9/11/2016 by Mr. Ram kumar, Freelancer, Bangalore.

Action 7: Organised a workshop on “R Tool” on 16/03/2017 by Mr.Nagamallikarjuna, Senior Architect, Cloudera, Bangalore

Action 8: Conducted expert lecture on “Primitive Software Testing Concepts & Tools” on 06/04/2017 by Mrs. Hema.B.C, Test Engineer, Cerebra Integrated Technologies, Bangalore.

Action 9: Conducted guest lecture on “Overview Of Data Management Platform Tools” on 08/04/2017 by Mr. Sreekantha T, Market Data Management Platform, Bangalore.

Action 10: Conducted guest lecture on “Advanced Filters in UNIX operating system” on 11/04/2017 by Mr. Deepu, Sr. Expert, ZTE Telecom, Bangalore.

Action 11: Arranged Industrial visit to Jetking Data Center, Sadashivnagar, Bangalore on 18/04/2017.

Action 12: Organised a Workshop on “Game console Interface development on iOS platform” on 10/05/2017 by Mr. Allamaprabhu S Sotti, Senior Software Engineer, Snapdeal, Bangalore.

Action 13: Organised a National Level project Exhibition “Techorizon-2017” on 27/05/2017.

PO6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice in Information Science and Engineering.

PO6	1.7	2.10	• Target achieved • Problems faced by society were addressed through projects.
Action 1: Conducted a guest lecture on “Software Engineering Etiquettes” on 09/09/2016 by Mrs. Raghavi Bhujang, Freelancer, Bangalore. Action 2: Conducted expert Lecture on “Developing Web Application using Google App Script” on 9/11/2016 by Mr. Ram kumar, Freelancer, Bangalore. Action 3: Organised a National Level project Exhibition “Techorizon-2017” on 27/05/2017.			
PO7: Environment and sustainability: Understand the impact of the professional engineering solutions in Information Science and Engineering in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.			
PO7	1.54	2.02	• Target achieved
Action 1: Conducted a guest lecture on “Software Engineering Etiquettes” on 09/09/2016 by Mrs. Raghavi Bhujang, Freelancer, Bangalore. Action 2: Conducted expert lecture on “Software Rejuvenation” on 23/09/2016 by Dr. Srinivasan, RV College of Engineering, Bangalore. Action 3: Arranged expert Lecture on “Developing Web Application using Google App Script” on 9/11/2016 by Mr. Ram kumar, Freelancer, Bangalore. Action 4: Organised a National Level project Exhibition “Techorizon-2017” on 27/05/2017.			
PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.			
PO8	1.9	2.19	• Target achieved. • Guest lecture on professional ethics and managerial skills is desirable.
Action 1: Conducted guest lecture on “Software Development Process” on 27/08/2016 by Mr. Amit Goyal, Honeywell, Bangalore. Action 2: Conducted a guest lecture on “Software Engineering Etiquettes” on 09/09/2016 by Mrs. Raghavi Bhujang, Freelancer, Bangalore. Action 3: Arranged expert lecture on “Software Rejuvenation” on 23/09/2016 by Dr. Srinivasan, RV College of Engineering, Bangalore. Action 4: Conducted expert lecture on “Testing tools in Automata Theory” on 22/10/2016 by Mr. Raghavendra Prasad, Assistant Professor of ISE Department, RV College of Engineering, Bangalore. Action 5: Conducted expert Lecture on “Developing Web Application using Google App Script” on 9/11/2016 by Mr. Ram kumar, Freelancer, Bangalore. Action 6: Conducted expert lecture on “Primitive Software Testing Concepts & Tools” on 06/04/2017 by Mrs. Hema.B.C, Test Engineer, Cerebra Integrated Technologies, Bangalore. Action 7: Organised a National Level project Exhibition “Techorizon-2017” on 27/05/2017.			

PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO9	1.81	2.09	• Target achieved • Ability to co-ordinate and team management through conduction of projects
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Action 1: Conducted guest lecture on “Software Development Process” on 27/08/2016 by Mr.Amit Goyal, Honeywell, Bangalore.

Action 2: Conducted expert lecture on “Software Rejuvenation” on 23/09/2016 by Dr. Srinivasan, RV College of Engineering, Bangalore.

Action 3: Conducted expert lecture on “Testing tools in Automata Theory” on 22/10/2016 by Mr.Raghavendra Prasad, Assistant Professor of ISE Department, RV College of Engineering, Bangalore.

Action 4: Conducted expert lecture on “SQL Server” on 7/11/2016 by Mrs. Madhuri A, CTS, Bangalore.

Action 5: Arranged expert Lecture on “Developing Web Application using Google App Script” on 9/11/2016 by Mr. Ram kumar, Freelancer, Bangalore.

Action 6: Conducted expert lecture on “Primitive Software Testing Concepts & Tools” on 06/04/2017 by Mrs. Hema.B.C, Test Engineer, Cerebra Integrated Technologies, Bangalore.

Action 7: Organised a National Level project Exhibition “Techorizon-2017” on 27/05/2017.

Action 8: Projects pertaining to the latest problems were analysed with frequent interactions from industrial experts and to distribute the work within the team towards its execution through academic projects.

Action 9: Participation in Conferences/Seminars/Workshops/Symposiums.

Action 10: Participation in various extra-curricular activities in other colleges.

PO10: Communication: Communicate effectively on complex Information Science engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO10	1.8	2.09	• Target achieved • Ability to present and convey the latest engineering trends.
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Action 1: Classes related to communication skills were conducted as per plan during the respective periods.

Action 2: Seminars related to latest engineering topics were conducted pertaining to respective subjects.

Action 3: Conducted guest lecture on “Software Development Process” on 27/08/2016 by Mr.Amit Goyal, Honeywell, Bangalore.

Action 4: Conducted expert lecture on “Software Rejuvenation” on 23/09/2016 by Dr.Srinivasan, RV College of Engineering, Bangalore.

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Action 8: Organised a National Level project Exhibition “Techorizon-2017” on 27/05/2017.

PO11: Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one’s own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO11	1.6	2.00	• Target achieved • Activities to improve managerial skills are desirable.
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Action 1: Student projects granted from funded agencies helped the students to learn about project management and finance management.

Action 2: Conducted guest lecture on “Software Development Process” on 27/08/2016 by Mr.Amit Goyal, Honeywell, Bangalore

Action 3: Conducted expert Lecture on “Developing Web Application using Google App Script” on 9/11/2016 by Mr. Ram kumar, Freelancer, Bangalore.

Action 4: Organised a National Level project Exhibition “Techorizon-2017” on 27/05/2017.

PO12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change..

PO12	2.19	2.20	• Target achieved • Activities to adapt technical advancement are desirable.
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Action 1: Arranged guest lecture on “Software Development Process” on 27/08/2016 by Mr.Amit Goyal, Honeywell, Bangalore.

Action 2: Conducted a guest lecture on “Software Engineering Etiquettes” on 09/09/2016 by Mrs.Raghavi Bhujang, Freelancer, Bangalore.

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Action 5: Conducted guest lecture on “Mobile Adhoc networks” on 02/11/2016 by Ms. PriyaR,

Software engineer, Mavenir Systems, Bangalore.

Action 6: Organized Industrial visit to SAP Labs, ITPL, Bangalore on 04/11/2016.

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Action 10: Conducted guest lecture on “Overview Of Data Management Platform Tools” on 08/04/2017 by Mr. Sreekantha T, Market Data Management Platform, Bangalore.

Action 11: Organized Industrial visit to Jetking Data Center, Sadashivnagar, Bangalore on 18/04/2017.

Action 12: Conducted a National Level project Exhibition “Techorizon-2017” on 27/05/2017.

Action 13: Internship and project work in final year helps to gain life-long learning knowledge.

Action 14: Blended and Co-operative learning helps the students to learn various soft skills which can be applied in various facets of life.

PSOs Attainment Levels and Actions for improvement – CAY (2016-17)

PSOs	Target Level	Attainment Level	Observation
PSO1: The ability to understand, analyze and develop computer programs in the areas related to algorithms, system software, multimedia, web design, big data analytics and networking for efficient design of computer based systems of varying complexity.			
PSO1	2.37	2.45	- Target achieved - Exposure on techniques adopted in software industries.
Action 1: Conducted expert lecture on “Software Rejuvenation” on 23/09/2016 by Dr. Srinivasan, RV College of Engineering, Bangalore. Action 2: Conducted expert lecture on “Testing tools in Automata Theory” on 22/10/2016 by Mr.Raghavendra Prasad, Assistant Professor of ISE Department, RV College of Engineering, Bangalore . Action 3: Organized Industrial visit to SAP Labs, ITPL, Bangalore on 04/11/2016. Action 4: Arranged expert lecture on “SQL Server” on 7/11/2016 by Mrs. Madhuri A, CTS, Bangalore. Action 5: Conducted expert lecture on “Primitive Software Testing Concepts & Tools” on 06/04/2017 by Mrs. Hema.B.C, Test Engineer, Cerebra Integrated Technologies, Bangalore. Action 6: Organized Industrial visit to Jetking Data Center, Sadashivnagar, Bangalore on 18/04/2017.			

Action 7: Conducted a National Level project Exhibition “Techorizon-2017” on 27/05/2017.

PSO2: The ability to apply standard practices and strategies in software project development using innovative ideas and open ended programming environment with skills in teams and professional ethics to deliver a quality product for business success.

PSO2	2.28	2.32	• Target achieved • Exposure on design & analysis of components.
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Action 1: Conducted guest lecture on “Software Development Process” on 27/08/2016 by Mr.Amit Goyal, Honeywell, Bangalore.

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Action 12: Arranged guest lecture on “Advanced Filters in UNIX operating system” on 11/04/2017 by Mr. Deepu, Sr. Expert, ZTE Telecom, Bangalore.

Action 13: Organized Industrial visit to Jetking Data Center, Sadashivnagar, Bangalore on 18/04/2017.

Action 14: Organised a Workshop on “Game console Interface development on iOS platform” on 10/05/2017 by Mr. Allamaprabhu S Sotti, Senior Software Engineer,Snapdeal, Bangalore.

Action 15: Conducted a National Level project Exhibition “Techorizon-2017” on 27/05/2017.

POs Attainment Levels and Actions for improvement – CAYm1 (2015-16)

POs	Target Level	Attainment Level	Observation
PO1: Engineering knowledge: Engineering knowledge: Apply the knowledge of Engineering Mathematics, Basic Sciences, Engineering Fundamentals, and Engineering Specialization to the solution of complex Information Science and Engineering problems.			
PO1	2.46	2.5	- Target achieved - Enhancement in the ability to Solve and analyze problems is desirable.
Action 1: Conducted workshop on “Making Professionals Powerful” on 3-09-2015 by Venkat Ramana Reddy, key resource, DBRC Action 2: Arranged expert lecture on “Hashing techniques” on 30/09/2015 by Dr. Dinesh, Amazon. Action 3: Conducted Expert lecture on “RTOS for general purpose operating systems” on 28/10/2015 by Mr. Vijay K R Test Engineer, L&T technologies, Bangalore. Action 4: Conducted expert lecture on “Swarm Intelligence” on 28/10/2015 by Ms Chandana Software Engineer, Suyog Technologies. Action 5: Expert lecture on “Real Time application development using JAVA” on 30/10/2015 by Mrs. Sushma Sravanthi, Team Lead, Virtusa Technologies. Action 6: Conducted expert lecture on “Advances in Networking Technologies” on 06/11/2015 by Mr. Ashwin M, Network Engineer, CISCO, Bangalore. Action 7: Arranged guest lecture on “Advances in Dynamic Programming: Saving space & time” on 25/02/2016 by Mr. Veerendra Vasumathy, Information Technology, Schneider Electric, Bangalore. Action 8: Conducted expert lecture on “Software quality improvement and advanced testing tools” on 31/03/2016 by Mrs. Hridya Krishna Kumar, Test Lead, VOLVO Ltd, Bangalore. Action 9: Organised workshop on “Cloud Computing” from 1-04-2016 to 2-04-2016 by Mr. Abhishek Soni, Inferio, scitech council. Action 10: Conducted guest lecture on “UNIX programming” on 15/04/2016 by Mr. Ramesh Sadashiva, Capgemini, Bangalore. Action 11: Conducted guest Lecture on “Black box testing” on 06/05/2016 by Mr. Manoj Jain, EMC2, Bangalore. Action 12: Additional coaching classes were conducted beyond the regular planned classes. Action 13: Bridge courses were conducted before the beginning of the semester for 1st year students.			
PO2: Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems of Information Science and Engineering reaching substantiated conclusions using first principles of Engineering Mathematics and Engineering Sciences.			

PO2	2.35	2.46	• Target achieved • Able to analyse and interpret the data obtained with experiments.
Action 1: Incorporation of more numerical during their regular lectures. Action 2: Organised workshop on “Making Professionals Powerful” on 3-09-2015 by Venkat Ramana Reddy, key resource, DBRC. Action 3: Conducted expert lecture on “Hashing techniques” on 30/09/2015 by Dr. Dinesh, Amazon, Bangalore. Action 4: Conducted a guest lecture on “Arithmetic Circuits” on 07/10/2015 by Mr. Puneeth Tyagi, System Engineer, Texas Instruments, Bangalore. Action 5: Conducted Expert lecture on “RTOS for general purpose operating systems “on 28/10/2015 by Mr. Vijay K R Test Engineer, L& T technologies, Bangalore. Action 6: Arranged expert lecture on “Swarm Intelligence” on 28/10/2015 by Ms. Chandana, Software Engineer, Suyog Technologies, Bangalore. Action 7: Conducted Expert lecture on “Real Time application development using JAVA” on 30/10/2015 by Mrs. Sushma Sravanthi, Team Lead, Virtusa Technologies, Bangalore. Action 8: Conducted guest Lecture on “Voice over internet protocol (VOIP)” on 04/11/2015 by Mr. Rajgopal Krishnamurthy, AT&T, Bangalore. Action 9: Arranged expert lecture on “Advances in Networking Technologies” on 06/11/2015 by Mr. Ashwin M, Network Engineer, CISCO, Bangalore. Action 10: Conducted guest lecture on “Advances in Dynamic Programming: Saving space & time” on 25/02/2016 by Mr. Veerendra Vasumathy, Information Technology, Schneider Electric, Bangalore. Action 11: Conducted expert lecture on “Software quality improvement and advanced testing tools” on 31/03/2016 by Mrs. Hridya Krishna Kumar, Test Lead, VOLVO Ltd, Bangalore. Action 12: Organised workshop on “Cloud Computing” from 1-04-2016 to 2-04-2016 by Mr. Abhishek Soni, Inferio, scitech council. Action 13: Arranged guest Lecture on “Black box testing” on 06/05/2016 by Mr. Manoj Jain, EMC2, Bangalore.			
PO3: Design/development of solutions: Design solutions for complex Information Science Problems and design system components or processes of Information Science and Engineering that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations..			
PO3	2.3	2.47	• Target achieved • Ability to design and develop new software applications

Action 1: Organised workshop on “Making Professionals Powerful” on 3-09-2015 by Venkat Ramana Reddy, key resource, DBRC.

Action 2: Conducted expert lecture on “Hashing techniques” on 30/09/2015 by Dr. Dinesh, Amazon, Bangalore.

Action 3: Conducted Expert lecture on “RTOS for general purpose operating systems” on 28/10/2015 by Mr. Vijay K R Test Engineer, L&T technologies, Bangalore.

Action 4: Conducted expert lecture on “Swarm Intelligence” on 28/10/2015 by Ms. Chandana Software Engineer, Suyog Technologies, Bangalore.

Action 5: Conducted Expert lecture on “Real Time application development using JAVA” on 30/10/2015 by Mrs. Sushma Sravanthi, Team Lead, Virtusa Technologies, Bangalore.

Action 6: Arranged an industrial visit to AmtekAuto India Ltd., Hosur on 31/10/2015.

Action 7: Conducted expert lecture on “Advances in Networking Technologies” on 06/11/2015 by Mr. Ashwin M, Network Engineer, CISCO, Bangalore.

Action 8: Conducted Training on “CISCO Certified Network Associate” on 13/2/2016 to 27/3/2016 by Mr. Vaidraju, Managing Director, Scaltech, Bangalore.

Action 9: Arranged an Industrial visit to Yokogawa IT Technologies India Private Ltd., Bangalore on 16/02/2016.

Action 10: Conducted guest lecture on “Advances in Dynamic Programming: Saving space & time” on 25/02/2016 by Mr. Veerendra Vasumathy, Information Technology, Schneider Electric, Bangalore.

Action 11: Conducted expert lecture on “Software quality improvement and advanced testing tools” on 31/03/2016 by Mrs. Hridya Krishna Kumar, Test Lead, VOLVO Ltd, Bangalore.

Action 12: Conducted Guest lecture on “Logistics & Supply Chain Management” on 31/03/2016 by Prof. B Ananth Narayan, Freelance Faculty, Amrita School of Business, Coimbatore.

Action 13: Organised workshop on “Cloud Computing” from 1-04-2016 to 2-04-2016 by Mr. Abhishek Soni, Inferio, Scitech council.

Action 14: Conducted guest lecture on “UNIX programming” on 15/04/2016 by Mr. Ramesh Sadashiva, Capgemini, Bangalore.

Action 15: Organised Industrial Visit to CISCO, Bangalore on 22/04/2016.

Action 16: Conducted a guest Lecture on “Black box testing” on 06/05/2016 by Mr. Manoj Jain, EMC2, Bangalore.

PO4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions in Information Science and Engineering.

PO4	1.96	2.11	- Target achieved - Able to experimentally analyze the problems through relevant software.
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Action 1: Organised workshop on “Making Professionals Powerful” on 3-09-2015 by Venkat Ramana Reddy, key resource, DBRC.

Action 2: Conducted expert lecture on “Hashing techniques” on 30/09/2015 by Dr. Dinesh, Amazon.

Action 3: Conducted Expert lecture on “RTOS for general purpose operating systems” on 28/10/2015 by Mr. Vijay K R Test Engineer, L&T technologies, Bangalore.

Action 4: Conducted expert lecture on “Swarm Intelligence” on 28/10/2015 by Ms. Chandana, Software Engineer, Suyog Technologies, Bangalore.

Action 5: Arranged Expert lecture on “Real Time application development using JAVA” on 30/10/2015 by Mrs. Sushma Sravanthi, Team Lead, Virtusa Technologies, Bangalore.

Action 6: Conducted guest Lecture on “Voice over internet protocol (VOIP)” on 04/11/2015 by Mr. Rajgopal Krishnamurthy, AT&T, Bangalore.

Action 7: Conducted expert lecture on “Advances in Networking Technologies” on 06/11/2015 by Mr. Ashwin M, Network Engineer, CISCO, Bangalore.

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Action 10: Conducted expert lecture on “Software quality improvement and advanced testing tools” on 31/03/2016 by Mrs. Hridya Krishna Kumar, Test Lead, VOLVO Ltd, Bangalore.

Action 11: Organised workshop on “Cloud Computing” from 1-04-2016 to 2-04-2016 by Mr. Abhishek Soni, IFC3 Hyderabad.

Action 12: Conducted guest lecture on “UNIX programming” on 15/04/2016 by Mr. Ramesh Sadashiva, Capgemini, Bangalore.

Action 13: Conducted guest Lecture on “Black box testing” on 06/05/2016 by Mr. Manoj Jain, EMC2, Bangalore.

Action 14: Coaching classes were conducted for numerical subjects beyond the regular planned classes.

PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations in Information Science and Engineering.

PO5	1.6	1.92	• Target achieved • Able to obtain knowledge on additional software's and lab.
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Action 1: Conducted expert lecture on “Swarm Intelligence” on 28/10/2015 by Ms. Chandana, Software Engineer, Suyog Technologies, Bangalore.

Action 2: Arranged an industrial visit to AmtekAuto India Ltd., Hosur on 31/10/2015.

Action 3: Conducted guest Lecture on “Voice over internet protocol (VOIP)” on 04/11/2015 by Mr. Rajgopal Krishnamurthy, AT&T, Bangalore.

Action 4: Arranged an Industrial visit to Yokogawa IT Technologies India Private Ltd., Bangalore on 16/02/2016.

Action 5: Conducted expert lecture on “Software quality improvement and advanced testing tools” on 31/03/2016 by Mrs. Hridya Krishna Kumar, Test Lead, VOLVO Ltd, Bangalore.

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Action 7: Conducted guest lecture on “UNIX programming” on 15/04/2016 by Mr. Ramesh Sadashiva, Capgemini, Bangalore.

Action 8: Arranged an Industrial Visit to CISCO, Bangalore on 22/04/2016.

Action 9: Conducted a guest Lecture on “Black box testing” on 06/05/2016 by Mr. Manoj Jain, EMC2, Bangalore.

PO6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice in Information Science and Engineering.

PO6	1.7	1.65	- Target marginally missed. - Problems faced by society were addressed through projects.
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Action 1: Project work carried out in final year helped to gain knowledge in real time.

Action 2: Mini projects, Project work and Summer Internships trains students to solve problems related to society, health, safety etc.

Action 3: Organised a Workshop on “Making Professionals Powerful” on 03/09/2015 by Mr. Venkat Ramana Reddy, Key Resource ,DBRC, Bangalore.

Action 4: Conducted guest Lecture on “Logistics & Supply chain management” on 31/03/2016 by Prof. B AnanthNarayan, Free Lance Faculty, Amrita School of Buisness, Coimbatore.

PO7: Environment and sustainability: Understand the impact of the professional engineering solutions in Information Science and Engineering in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO7	1.4	1.50	- Target achieved. - Projects related to economical and environmental contexts were planned.
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Action 1: Computer hardware which is no more used by the department is scientifically disposed by the stores department.

Action 2: Computers are strictly turned-off while not in use.

Action 3: Department is virtually paper-free due to the extensive usage of whatsapp in intra-departmental communication (both students and faculty).

Action 4: Organised a Workshop on “Making Professionals Powerful” on 03/09/2015 by Mr. Venkat Ramana Reddy, Key Resource, DBRC, Bangalore.

Action 5: Arranged Expert lecture on “Real Time application development using JAVA” on 30/10/2015 by Mrs. Sushma Sravanthi, Team Lead, Virtusa Technologies, Bangalore.

Action 6: Conducted guest Lecture on “Logistics & Supply chain management” on 31/03/2016 by Prof. B AnanthNarayan, Free Lance Faculty, Amrita School of Business, Coimbatore.

PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO8	1.9	1.76	- Target missed. - GUEST lecture on professional ethics and managerial skills is desirable.
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Action 1: Organised a Workshop on “Making Professionals Powerful” on 03/09/2015 by Mr. Venkat Ramana Reddy, Key Resource, DBRC, Bangalore.

Action 2: Conducted guest lecture on “Arithmetic Circuits” on 07/10/2015 by Mr. Puneeth Tyagi, System Engineer, Texas Instruments, Bangalore.

Action 3: Arranged expert lecture on “Software quality improvement and advanced testing tools” on 31/03/2016 by Mrs. Hridya Krishna Kumar, Test Lead, VOLVO Ltd, Bangalore.

Action 4: Conducted guest Lecture on “Logistics & Supply chain management” on 31/03/2016 by Prof. B Ananth Narayan, Free Lance Faculty, Amrita School of Buisiness, Coimbatore.

PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO9	1.72	1.81	- Target achieved - Ability to co-ordinate and team management through conduction of projects
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Action 1: Projects pertaining to the latest problems were analysed with frequent interactions from industrial Expert's and to distribute the work within the team towards its execution through academic projects.

Action 2: Participation in Conferences/Seminars/Workshops/Symposiums.

Action 3: Participation in various extra-curricular activities in other colleges.

Action 4: Organised workshop on “Making Professionals Powerful” on 3-09-2015 by Venkat Ramana Reddy, key resource, DBRC.

Action 5: Conducted guest lecture on “Arithmetic Circuits” on 07/10/2015 by Mr. Puneeth Tyagi, System Engineer, Texas Instruments, Bangalore.

Action 6: Conducted expert lecture on “Software quality improvement and advanced testing tools” on 31/03/2016 by Mrs. Hridya Krishna Kumar, Test Lead, VOLVO Ltd, Bangalore.

PO10: Communication: Communicate effectively on complex Information Science engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO10	1.74	1.8	• Target achieved • Ability to present and convey the latest engineering trends.
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Action 1: Classes related to communication skills were conducted as per plan during the respective periods.

Action 2: Seminars related to latest engineering topics were conducted pertaining to respective subjects.

Action 3: Organised workshop on “Making Professionals Powerful” on 3-09-2015 by Venkat Ramana Reddy, key resource, DBRC.

Action 4: Conducted guest lecture on “Arithmetic Circuits” on 07/10/2015 by Mr. Puneeth Tyagi, System Engineer, Texas Instruments, Bangalore

Action 5: Conducted expert lecture on “Software quality improvement and advanced testing tools” on 31/03/2016 by Mrs. Hridya Krishna Kumar, Test Lead, VOLVO Ltd, Bangalore.

PO11: Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one’s own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO11	1.56	1.6	• Target achieved • Activities to improve managerial skills are desirable.
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Action 1: Student projects granted from funded agencies helped the students to learn about project management and finance management.

Action 2: Conducted expert lecture on “Swarm Intelligence” on 28/10/2015 by Ms. Chandana, Software Engineer, Suyog Technologies, Bangalore.

Action 3: Arranged Expert lecture on “Real Time application development using JAVA” on 30/10/2015 by Mrs. Sushma Sravanthi, Team Lead, Virtusa Technologies, Bangalore.

PO12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change..

PO12	1.99	2.19	• Target achieved • Activities to adapt technical advancement are desirable.
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Action 1: Conducted expert lecture on “Hashing techniques” on 30/09/2015 by Dr. Dinesh, Amazon, Bangalore.

Action 2: Conducted Expert lecture on “RTOS for general purpose operating systems “on 28/10/2015 by Mr. Vijay K R Test Engineer, L&T technologies, Bangalore.

Action 3: Conducted expert lecture on “Swarm Intelligence” on 28/10/2015 by Ms. Chandana, Software Engineer, Suyog Technologies, Bangalore.

Action 4: Arranged an industrial visit to AmtekAuto India Ltd., Hosur on 31/10/2015.

Action 5: Conducted expert lecture on “Advances in Networking Technologies” on 06/11/2015 by Mr. Ashwin M, Network Engineer, CISCO, Bangalore.

Action 6: Arranged an Industrial visit to Yokogawa IT Technologies India Private Ltd., Bangalore on 16/02/2016.

Action 7: Conducted guest lecture on “Advances in Dynamic Programming: Saving space & time” on 25/02/2016 by Mr. Veerendra Vasumathy, Information Technology, Schneider Electric, Bangalore

Action 8: Conducted expert lecture on “Software quality improvement and advanced testing tools” on 31/03/2016 by Mrs. Hridya Krishna Kumar, Test Lead, VOLVO Ltd, Bangalore.

Action 9: Arranged an Industrial Visit to CISCO, Bangalore on 22/04/2016.

Action 10: Conducted a guest Lecture on “Black box testing” on 06/05/2016 by Mr. Manoj Jain, EMC2, Bangalore.

PSOs Attainment Levels and Actions for improvement – CAYm1 (2015-16)

PSOs	Target Level	Attainment Level	Observation
PSO1: The ability to understand, analyze and develop computer programs in the areas related to algorithms, system software, multimedia, web design, big data analytics and networking for efficient design of computer based systems of varying complexity.			
PSO1	2.22	2.37	- Target achieved - Exposure on techniques adopted in software industries.
Action 1: Problem based learning techniques are practiced. Action 2: Brainstorming students on various ways of analyzing a given problem. Action 3: Conducted expert lecture on “Swarm Intelligence” on 28/10/2015 by Ms. Chandana, Software Engineer, Suyog Technologies, Bangalore. Action 4: Arranged Expert lecture on “Real Time application development using JAVA” on 30/10/2015 by Mrs.Sushma Sravanthi, Team Lead, Virtusa Technologies, Bangalore. Action 5: Arranged an industrial visit to AmtekAuto India Ltd., Hosur on 31/10/2015.			

Action 6: Conducted expert lecture on “Advances in Networking Technologies” on 06/11/2015 by Mr. Ashwin M, Network Engineer, CISCO, Bangalore.

Action 7: Arranged an Industrial visit to Yokogawa IT Technologies India Private Ltd., Bangalore on 16/02/2016.

Action 8: Conducted guest lecture on “Advances in Dynamic Programming: Saving space & time” on 25/02/2016 by Mr. Veerendra Vasumathy, Information Technology, Schneider Electric, Bangalore.

Action 9: Conducted guest lecture on “UNIX programming” on 15/04/2016 by Mr. Ramesh Sadashiva, Capgemini, Bangalore.

Action 10: Arranged an Industrial Visit to CISCO, Bangalore on 22/04/2016.

PSO2: The ability to apply standard practices and strategies in software project development using innovative ideas and open ended programming environment with skills in teams and professional ethics to deliver a quality product for business success.

PSO2	2.11	2.28	• Target achieved • Exposure on design & analysis of components.
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Action 1: Mini projects help them to develop solutions to real time problems.

Action 2: Project work and internship carried out in companies helps students to solve real time problems.

Action 3: Organised a Workshop on “Making Professionals Powerful” on 03/09/2015 by Mr. Venkat Ramana Reddy, Key Resource, DBRC, Bangalore.

Action 4: Conducted expert lecture on “Hashing techniques” on 30/09/2015 by Dr. Dinesh, Amazon, Bangalore.

Action 5: Conducted guest lecture on “Arithmetic Circuits” on 07/10/2015 by Mr. Puneeth Tyagi, System Engineer, Texas Instruments, Bangalore.

Action 6: Conducted Expert lecture on “RTOS for general purpose operating systems” on 28/10/2015 by Mr. Vijay K R Test Engineer, L&T technologies, Bangalore.

Action 7: Arranged an industrial visit to AmtekAuto India Ltd., Hosur on 31/10/2015.

Action 8: Conducted guest Lecture on “Voice over internet protocol (VOIP)” on 04/11/2015 by Mr. Rajgopal Krishnamurthy, AT&T, Bangalore.

Action 9: Arranged an Industrial visit to Yokogawa IT Technologies India Private Ltd., Bangalore on 16/02/2016.

Action 10: Conducted guest Lecture on “Logistics & Supply chain management” on 31/03/2016 by Prof. B AnanthNarayan, Free Lance Faculty, Amrita School of Buisiness, Coimbatore.

Action 11: Conducted expert lecture on “Software quality improvement and advanced testing tools” on 31/03/2016 by Mrs. Hridya Krishna Kumar, Test Lead, VOLVO Ltd, Bangalore.

Action 12: Organised Workshop on “Cloud Computing” on 01/04/2016 to 02/04/2016 by Mr. Abhishek Soni, Software Engineer, IFC3 India, Bangalore.

Action 13: Arranged an Industrial visit to CISCO, Bangalore on 22/04/2016.

Action 14: Conducted guest Lecture on “Black box testing” on 06/05/2016 by Mr. Manoj Jain, EMC2, Bangalore.

POs Attainment Levels and Actions for improvement – CAYm2 (2014-15)

POs	Target Level	Attainment Level	Observation
PO1: Engineering knowledge: Engineering knowledge: Apply the knowledge of Engineering Mathematics, Basic Sciences, Engineering Fundamentals, and Engineering Specialization to the solution of complex Information Science and Engineering problems.			
PO1	2.4	2.46	- Target achieved - Enhancement in the ability to Solve and analyze problems is desirable.
Action 1: Additional coaching classes were conducted beyond the regular planned classes. Action 2: Bridge courses were conducted before the beginning of the semester for 1st year students. Action 3: Conducted expert Lecture on “Design of fourth generation language” on 25/08/2014 by Dr. Ajeet A C, HOD, Department of ISE, New Horizon College of Engineering, Bangalore. Action 4: Conducted expert Lecture on “Embedded Systems & Embedded Devices in Networking” on 17/09/2014 by Mr. Veerendra Vasamsetty, Innovation Manager & Group Edison expert in Schneider Electric, Bangalore Action 5: Conducted expert Lecture on “Lack of Advanced learning in HTML5 PHP and AJAX” on 22/09/2014 by Mr. A Vishwanatha Reddy ,symphony Teleca, Bangalore. Action 6: Arranged expert Lecture on “Lack of Advances in wireless communication in networking” on 26/02/2015 by Mr. Veerendra Vasumathy , Schneider Electric, Bangalore. Action 7: Conducted expert Lecture on “Elliptical Curve Cryptography and Patents” on 10/04/2015 by Dr. Pritam Gajkumar Shah, Associate Professor, R V College of Engineering, Bangalore. Action 8: Conducted expert Lecture on “Extreme programming, object-oriented software testing methods, and component-based software testing issues, challenges, and solutions” on 08/05/2015 by Mr. Manoj Jain , EMC2, Bangalore.			
PO2: Problem analysis: Identify, formulate, review research literature, and analyze complex			

engineering problems of Information Science and Engineering reaching substantiated conclusions using first principles of Engineering Mathematics and Engineering Sciences.

PO2	2.3	2.35	• Target achieved • Able to analyse and interpret the data obtained with experiments.
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Action 1: Incorporate of more numerical in to the problematic subjects.

Action 2: Conducted expert Lecture on “Design of fourth generation language” on 25/08/2014 by Dr. Ajeet A C, HOD, Department of ISE, New Horizon College of Engineering, Bangalore .

Action 3: Conducted expert Lecture on “Embedded Systems & Embedded Devices in Networking” on 17/09/2014 by Mr. Veerendra Vasamsetty, nnovation Manager & Group Edison expert in Schneider Electric, Bangalore.

Action 4: Conducted expert Lecture on “Lack of Advanced learning in HTML5 PHP and AJAX” on 22/09/2014 by Mr. A Vishwanatha Reddy ,symphony Teleca, Bangalore.

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Action 7: Conducted expert Lecture on “Extreme programming, object-oriented software testing methods, and component-based software testing issues, challenges, and solutions” on 08/05/2015 by Mr. Manoj Jain , EMC2, Bangalore.

PO3: Design/development of solutions: Design solutions for complex Information Science Problems and design system components or processes of Information Science and Engineering that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations..

PO3	2.3	2.22	• Target marginally missed • Ability to design and develop new software applications were planned for final year.
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Action 1: Conducted expert Lecture on “Design of fourth generation language” on 25/08/2014 by Dr. Ajeet A C, HOD, Department of ISE, New Horizon College of Engineering, Bangalore .

Action 2: Arranged expert Lecture on “Embedded Systems & Embedded Devices in Networking” on 17/09/2014 by Mr. Veerendra Vasamsetty, Innovation Manager & Group Edison in Schneider Electric, Bangalore.

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Action 6: Conducted expert Lecture on “Extreme programming, object-oriented software testing methods, and component-based software testing issues, challenges, and solutions” on 08/05/2015 by Mr. Manoj Jain , EMC2, Bangalore.

PO4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions in Information Science and Engineering.

PO4	1.9	1.96	• Target achieved • Able to experimentally analyze the problems through relevant software's.
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Action 1: Conducted expert Lecture on “Design of fourth generation language” on 25/08/2014 by Dr. Ajeet A C, HOD, Department of ISE, New Horizon College of Engineering, Bangalore

Action 2: Conducted expert Lecture on “Embedded Systems & Embedded Devices in Networking” on 17/09/2014 by Mr. Veerendra Vasamsetty, Innovation Manager & Group Edison expert in Schneider Electric, Bangalore.

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Action 6: Conducted expert Lecture on Extreme programming, object-oriented software testing methods, and component-based software testing issues, challenges, and solutions on 08/05/2015 by Mr. Manoj Jain from EMC2 ,Bengaluru.

Action 7: Coaching classes were conducted for numerical subjects beyond the regular planned classes

PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations in Information Science and Engineering.

PO5	1.6	1.45	• Target missed • Planned to obtain knowledge on additional software's and lab.
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Action 1: Conducted expert Lecture on “Design of fourth generation language” on 25/08/2014 by Dr. Ajeet A C, HOD, Department of ISE, New Horizon College of Engineering, Bangalore.

Action 2: Conducted expert Lecture on “Embedded Systems & Embedded Devices in Networking” on 17/09/2014 by Mr. Veerendra Vasamsetty, from Innovation Manager & Group Edison GUEST in Schneider Electric, Bangalore.

Action 3: Conducted expert Lecture on “Lack of Advanced learning in HTML5 PHP and AJAX” on 22/09/2014 by Mr. A Vishwanatha Reddy from symphony Teleca, Bangalore.

Action 4: Organised expert Lecture on “Lack of Advances in wireless communication in networking” on 26/02/2015 by Mr. Veerendra Vasumathy, Schneider Electric, Bangalore

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Action 6: Arranged expert Lecture on “Extreme programming, object-oriented software testing methods, and component-based software testing issues, challenges, and solutions” on 08/05/2015 by Mr. Manoj Jain from EMC2, Bangalore.

PO6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice in Information Science and Engineering.

PO6	1.7	1.62	• Target marginally missed • Problems faced by society were planned to address through projects.
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Action 1: Project work carried out in final year helped to gain knowledge in real time.

Action 2: Mini projects, Project work and Summer Internships trains students to solve problems related to society, health, safety etc.

PO7: Environment and sustainability: Understand the impact of the professional engineering solutions in Information Science and Engineering in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO7	1.4	1.23	• Target missed • Projects related to economical and environmental contexts were planned.
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Action 1: Computer hardware which is no more used by the dept is scientifically disposed by the stores department.

Action 2: Computers are strictly turned-off while not in use.

Action 3: Department is virtually paper-free due to the extensive usage of whatsapp in intra-departmental communication (both students and faculty).

Action 4: Conducted expert Lecture on “Design of fourth generation language” on 25/08/2014 by Dr. Ajeet A C, HOD, Department of ISE, New Horizon College of Engineering, Bangalore.

Action 5: Conducted expert Lecture on “Embedded Systems & Embedded Devices in

Networking” on 17/09/2014 by Mr. Veerendra Vasamsetty, Innovation Manager & Group Edison GUEST in Schneider Electric, Bangalore.

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Action 8: Arranged expert Lecture on “Extreme programming, object-oriented software testing methods, and component-based software testing issues, challenges, and solutions” on 08/05/2015 by Mr. Manoj Jain, EMC2, Bangalore.

PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO8	1.9	1.75	• Target missed. • GUEST lecture on professional ethics and managerial skills is desirable.
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Action 1: Orientation programs were conducted to sensitize students on professional ethics.

PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO9	1.6	1.72	• Target achieved • Ability to co-ordinate and team management through conduction of projects
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Action 1: Projects pertaining to the latest problems were analysed with frequent interactions from industrial Expert’s and to distribute the work within the team towards its execution through academic projects.

Action 2: Participation in Conferences/Seminars/Workshops/Symposiums.

Action 3: Participation in various extra-curricular activities in other colleges.

PO10: Communication: Communicate effectively on complex Information Science engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO10	1.6	1.74	• Target achieved • Ability to present and convey the latest engineering trends.
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Action 1: Classes related to communication skills were conducted as per plan during the respective periods.

Action 2: Seminars related to latest engineering topics were conducted pertaining to respective subjects.

PO11: Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one’s own work, as a member and

leader in a team, to manage projects and in multidisciplinary environments.			
PO11	1.5	1.56	• Target achieved • Activities to improve managerial skills are desirable.
Action 1: Student projects helped the students to learn about project management and finance management. Action 2: Conducted expert Lecture on Design of fourth generation language on 25/08/2014 by Dr. Ajeet A C, HOD, Department of ISE, New Horizon College of Engineering, Bangalore. Action 3: Conducted expert Lecture on Lack of Advanced learning in HTML5 PHP and AJAX on 22/09/2014 by Mr. A Vishwanatha Reddy from symphony Teleca, Bangalore.			
PO12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.			
PO12	1.9	1.99	• Target achieved • Activities to adapt technical advancement are desirable.
Action 1: Summer internship and project work in final year helps to gain life-long learning knowledge. Action 2: Blended and Co-operative learning helps the students to learn various soft skills which can be applied in various facets of life. Action 3: Conducted expert Lecture on “Embedded Systems & Embedded Devices in Networking” on 17/09/2014 by Mr. Veerendra Vasamsetty, Innovation Manager & Group Edison expert in Schneider Electric, Bangalore. Action 4: Arranged expert Lecture on “Lack of Advances in wireless communication in networking” on 26/02/2015 by Mr.Veerendra Vasumathy, Schneider Electric, Bangalore . Action 5: Conducted expert Lecture on” Elliptical Curve Cryptography and Patents” on 10/04/2015 by Dr. Pritam Gajkumar Shah, Associate Professor, R V College of Engineering, Bangalore. Action 6: Conducted expert Lecture on “Extreme programming, object-oriented software testing methods, and component-based software testing issues, challenges, and solutions” on 08/05/2015 by Mr. Manoj Jain ,EMC2, Bangalore.			

PSOs Attainment Levels and Actions for improvement – CAYm2 (2014-15)

PSOs	Target Level	Attainment Level	Observation
PSO1: The ability to understand, analyze and develop computer programs in the areas related to algorithms, system software, multimedia, web design, big data analytics and networking for efficient design of computer based systems of varying complexity.			
PSO1	2.1	2.22	• Target achieved • Exposure on techniques adopted in software industries.

Action 1: Problem based learning techniques are practiced.

Action 2: Brainstorming students on various ways of analyzing a given problem.

Action 3: Conducted expert Lecture on “Design of fourth generation language” on 25/08/2014 by Dr. Ajeet A C, HOD, Department of ISE, New Horizon College of Engineering, Bangalore.

Action 4: Organised expert Lecture on “Embedded Systems & Embedded Devices” in Networking on 17/09/2014 by Mr. Veerendra Vasamsetty, Innovation Manager & Group Edison in Schneider Electric, Bangalore.

Action 5: Conducted expert Lecture on “Elliptical Curve Cryptography and Patents” on 10/04/2015 by Dr. Pritam Gajkumar Shah, Associate Professor, R V College of Engineering, Bangalore.

PSO2: The ability to apply standard practices and strategies in software project development using innovative ideas and open ended programming environment with skills in teams and professional ethics to deliver a quality product for business success.

PSO2	2.0	2.11	• Target achieved • Exposure on design & analysis of components.
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Action 1: Project work and internship carried out in companies helps students to solve real time problems.

7.2 Academic Audit and actions taken thereof during the period of Assessment (10)

(Academic Audit system/process and its implementation in relation to Continuous Improvement)

The Academic audits are conducted as per ISO standards and evaluated. The process consists of internal audits and external audits. Audits are conducted for faculties, Laboratories, and departmental activities.

The Academic Audit provides the opportunity for a regular strategic overview of the entirety of learning and teaching activity. It is the primary means by which the University assures itself of the efficacy and robustness of each department’s quality management procedures and of continued enhancement of the quality of the student experience.

A report of the review will be produced by the department and the College will be asked to respond to the report by producing an action plan to address any issues identified. The Academic Audit is done both at the department level and at the College level.

Main Features of Department Academic Audit

The Academic audits are conducted as per ISO standards and evaluated. The process consists of internal audits and external audits. Audits are conducted for faculties, Laboratories, and departmental activities.

Department Academic Audit is designed to scrutinize the strategic management and oversight of academic standards and quality within the department of undergraduate.

- The academic audit is done by 2 - 3 senior professors within the college.
- The auditor will submit the audit summary to the department head based on the self evaluation document submitted by each faculty.

Faculty audit: The following documents (part of Faculty academic file) are verified during the internal academic audits.

- Calendar of events
- Competency skills
- Individual time table
- Work load
- Class list
- Lab batch list, lab records
- Lesson plan
- Attendance register
- Model question papers / previous university question papers
- Assignment questions

- Quiz question papers
- Result analysis
- CAPA (Internal Assessment and external examination)
- Tutorial student list (Coaching class list)
- Lesson plan tutorials
- Attendance (coaching class)
- Additional resources to students (notes, ppt, etc.)

In addition the following parameters are audited with respect to each department.

1. Teaching, Learning Process:

- a. Lesson Plan, CAPA, Result Analysis & Evaluation
 - b. Counselling & Mentoring
 - c. Co-curricular activities : Seminar/Conference/workshop/Expert
Lecture conducted and attended; Industrial Visit
 - d. Research Activities : Publications; Patents/Grant proposal
 - e. Value Added Program
2. Training and Placement
- a. The number of students placed in different companies.
 - b. Different types of Technical training given to students

NEW HORIZON COLLEGE OF ENGINEERING, BANGALORE
(Autonomous college affiliated to VTU, Accredited by NAAC with 'A' Grade)

Academic Audit Report: Odd Semester 2016-17

Dept audited: Information Sciences and Engineering

Date: October 7, 2016 10 am to 12.10 pm

Auditee: HOD- ISE Auditors: Dr P S Niranjana, Prof and HOD-Civ Engg and Dr
Pratima Khandelwal, Prof and HOD- BT

Notable points:

1. Implementation of Mini Projects under III Sem ISE curriculum is worth appreciating as the planning, execution and records of the same are being well documented.
2. Students' Club information as shared by Club Coordinator and HOD is quite encouraging, with new concepts and events happening as a routine. Enthusiasm, creativity and endeavors of interested III students in the events is also worth applauding.
3. Workshops and Guest Talks conducted as per the given Calendar with apt documentation

Observations: and Suggestions:

1. In Lesson Plan of each academic file, HOD's signature not found after completion of the lecture/lab classes. In a few file, faculty too need to update the records and sign after completing the task.
2. HOD's sign to be furnished in CAPA sheets as filled by faculty members.
3. ISO numbers needs to be reflected in Calendar of Events and Timetable documents.
4. Coaching Class records to be improved, blank forms observed in files.
5. Some of the mentoring records seen incomplete.
6. IA question papers must not be kept in the file prior to the conduction of tests.
7. VTU exam question papers of previous years to be included in few files and these be updated from NHCE Digital Library or as received from VTU.
8. Record of assignments and class tests could be made better by assigning headings and date of submission and conduction, respectively.
9. In III Sem Academic files, Calendar of Events, CIE Calendar to carry sign of Dean Academics also. An account of RBT be kept in order to ensure compliance as indicated in Syllabus copy
10. In two academic files and attendance records, exchange of subjects as made by dept not recorded leading to confusion and incompleteness of records.
11. Mini Project info in academic files of corresponding teachers be added
12. Industrial visits – not conducted.


Head of the Department
Information Science and Engg.
New Horizon College of Engineering
Bengaluru 560 103

Fig 7.2.1: Internal Audit report for the year 2016-17

INTERNATIONAL CERTIFICATION SERVICES
AUDIT REPORT- INITIAL/RECERTIFICATION



Organization Name :	Report NO : RC3/RQ91/6289 30.11.2015 NEW HORIZON COLLEGE OF ENGINEERING
Address :	Ring Road, Marathalli, Bellandur Post, Bangalore-560103.
Site(s) Audited :	Ring Road, Marathalli, Bellandur Post, Bangalore-560103.
Audit Date(s) / Duration :	30.11.2015
Standard(s) :	9001:2008
Scope :	Providing educational services from admission till placement assistance for bachelor of engineering MTech, MCA and MBA programmes
Scope and Capability :	Verified and accepted
ANZ-SIC Code :	843188432
Exclusion of clause requirement from ISO Standard if any :	7.3 Designs
Outsource Process affecting quality if any AND Special process affecting quality :	GUEST LECTURE FOR SOME SPECIAL SUBJECT
Auditor Team :	Mohan Dasami, Jayashankar, Mohan Dasami, Smitha Venkatesh
Statutory and Regulatory Requirements :	1. GRANT OF ATONOMUS STATUS VTU/ACAL2014-15/A-11/2623, 2015-16 TO 2020-21 2. VTU - REMOVED AFFILIATED 2015 -2016 TO 2017-18, DT 08/05/2015. 3. AICTE- F-NO SOUTH -WEST /1-2450979063/2015/EOA DATE 07/04/2015

INTERNATIONAL CERTIFICATION SERVICES
AUDIT REPORT- INITIAL/RECERTIFICATION



Audit Objective: The objective of this audit was to verify compliance to QMS Standard.

1.0 General : The Organisation is Maintained Systematic approach towards implementation and Maintenance QMS.

1.1 Corrective Action Request - Minor : No Minor NC

1.2 Corrective Action Request - Major : No Major NC

2.0 Assessment of Documentation

2.1 List of Documentation assessed(System Manual, Procedures and related Documentation) :

No	QMS Requirement	Document	Doc. No.	Issue
1	All	Quality Manual	QMSM04/C	05 , 20.10.2015
2	All	Quality Procedures	QSP	05 , 20.10.2015
3	All	Work Instructions	WI	05 , 20.10.2015

2.2 Summary of Document Review : Documents Reviewed on 10.11.2015 No Missings Found Continue for the Audits

3.0 Location and Shift Audited :
Outer Ring Road, Marathahalli, Bangalore - 560103. on 30.11.2015

4.0 Audit Summary :

4.1 Representative Interviewed - Function / Process Audited :

S.No.	Name and Designation	Function / Process
1	Manjunatha-Principal	Total Incharge
2	Anitha S. Rai-MR & Head Library	MR & QMS Implementation, Library Management
3	Dr. Prasanth CSR-Dean Academics	HOD , Dean Academics
4	Dr. MS Ganesh Prasad-Dean Student Affairs	HOD Mechanical Departments
5	Dr. Niranjana-Civil	HOD Civil Engg
6	Dr. Anandha Vardhan-Bio Technology	HOD

4.2 Exclusion of ISO Clauses :

7.3 Designs : Organisation is doing all activities as per the VTU Directions Syllabus Examination As Per the University There is no any Design Activity hence opted exclusion

4.3 Observations made during the Audit(Record corrective actions only) :NIL

INTERNATIONAL CERTIFICATION SERVICES
AUDIT REPORT- INITIAL/RECERTIFICATION



4.4 Verification of Certification Marks (Logo's of ICS and Accreditation Body applicable during Surveillance Audit / Reassessment) : Used in LETTER HEAD AND ATTACHED

5.0 EFFECTIVENESS, CONCLUSIONS & RECOMMENDATIONS :

5.1 Degree of Effectiveness & Reliance of Internal Audit : The Internal Audit is being done by expert in the field of QMS.

5.2 Positive Findings : 1. Very Good Infrastructure 2. Highly Educated Staff 3. 5th in a India 3rd in Karnataka 4. Student Admissions 100% 5. Student Placements 80% 6. Very good Virtual Marketing.

5.3 Area For Improvement : Nil

5.4 Effectiveness of Management System Implementation : Good Implementation in QMS & Effective

5.5 Conclusion : Near to Compare to Earlier Audits there is a visible changes in infrastructure, Curricular Activities, Results, Placements & QMS Implementation is Seen, Department Heads are driven continuously to maintain by MR to show the visible results on ground. It is recommended the Certificate

5.6 Recommendation : on the basis of Auditors observations subsequent visible QMS records are maintained, Hence it is recommended to issue ISO 9001:2008 certificate subjected to HOCC Approval

Lead Auditor : Mohan Dasami	
Audit Place : Bangalore	Audit Date : 30.11.2015
Reported by :	Sign :
	Date :

Fig 7.2.2: External Audit report for the year 2015-16

7.3 Improvement in Placement, Higher Studies and Entrepreneurship (10)

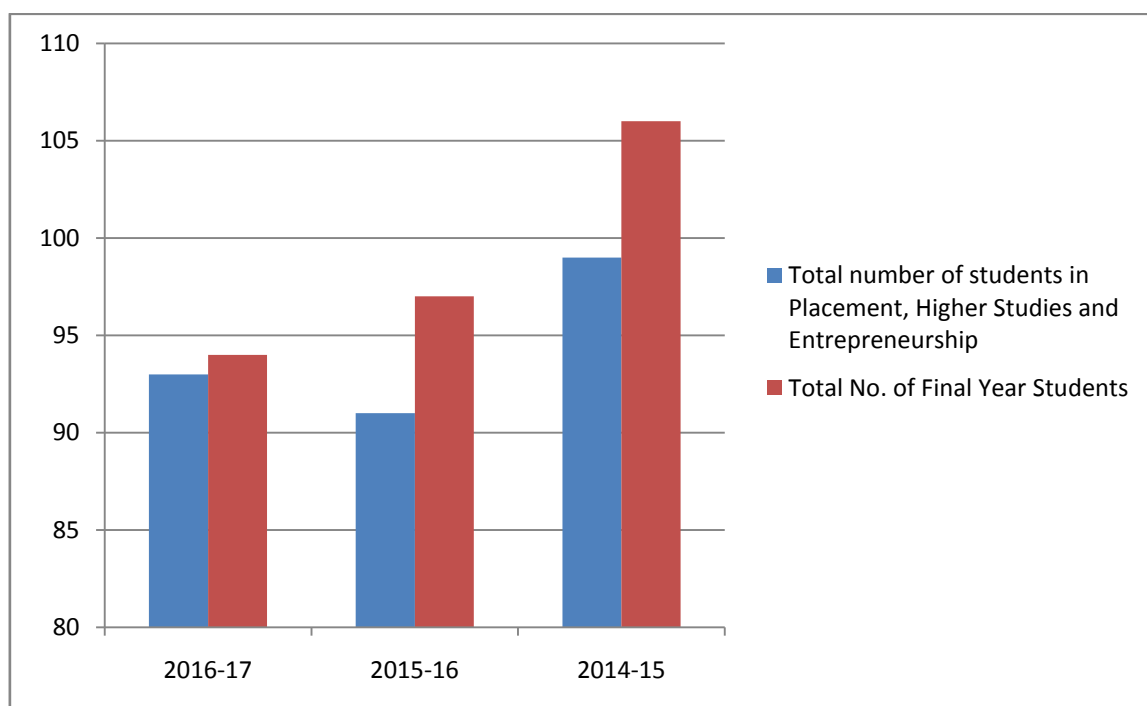
Assessment is based on the improvement in:

- Placement: number, quality placement, core industry, pay packages etc.
- Higher studies: performance in GATE, GRE, GMAT, CAT etc., and admissions in premier Institutions
- Entrepreneurs

The following data depicts the number of placements for the particular year:

Table 7.3.1: Total number of students in Placement, Higher Studies and Entrepreneurship

Item	2016-17 CAYm1	2015-16 CAYm2	2014-15 CAYm3
Total No. of Final Year Students (N)	94	97	106
No. of students placed in companies or Government Sector (X)	83	86	92
No. of students admitted to higher studies with valid qualifying scores (GATE or equivalent State or National Level Tests, GRE, GMAT etc.) (Y)	6	3	6
No of students turned entrepreneur in engineering/technology (Z)	4	2	1
X + Y + Z	93	91	99

**Fig 7.3.1:** Total number of students in Placement, Higher Studies and Entrepreneurship

Bridge courses, pre-placement activities, Centre of excellence and expert lecturing were conducted in order to increase the ratio of the placement, which effected in the increase of placements and exposure to the industrial concepts as technical talks by the Industrial expert have been arranged.

The pre-placement activities for the students of 3rd year and final year have been carried out. The students got the inputs from the expert lectures and industrial expert.

The sessions were arranged twice in the week.

The students had examination based on the particular topics covered and the key answers, explanation for each question were distributed after the test. The Pre-placement committee members gave in detail explanation of the questions asked for the test and taught the easiest methods in order to solve the complex problems.

7.4 Improvement in the quality of students admitted to the program (10)

The quality of students is measured based on improvement in terms of ranks in qualifying state level/national level entrance tests, percentage marks in physics, Chemistry and Mathematics in 12th standard and percentage of marks of lateral entry students.

Table 7.4.1: Admission details of 2017-18, 2016-17, 2015-16

Item		(2017-18)	(2016-17)	(2015-16)
National Level Entrance Examination (Name of the Entrance Examination)	No. of Students admitted	0	0	0
	Opening Score/Rank	0	0	0
	Closing Score/Rank	0	0	0
Karnataka-Common Entrance Test-CET + Super Numeric quota	No. of Students admitted	48+6	48+6	48+6
	Opening Score/Rank	9917	11340	10822
	Closing Score/Rank	19134	15454	17817
Karnataka Religious & Linguistic Minority (KRLM) Entrance test	No. of Students admitted	72	72	72
	Opening Score/Rank	95	92	93
	Closing Score/Rank	44	44.33	45.2
Lateral entry details	No. of Students admitted	4	1	3
	Opening Score/Rank	12825	19454	6482
	Closing Score/Rank	172171	19454	14515
Average CBSE/Any other Board Result of admitted students (Physics, Chemistry & Maths)		72	70	72

CRITERION 8:**FIRST YEAR ACADEMICS****50****8. FIRST YEAR ACADEMICS (50)****8. 1. First Year Student – Faculty Ratio (FYSFR) (5)**

Assessment = $(5 \times 5) / \text{Average FYSFR (Limited to Max.5)}$

Data for first year course to calculate the FYSFR :

Table 8.1 :First Year Student-Faculty Ratio

Year	No. of students (approved intake strength)	No. of faculty members (considering fractional load)	FYSFR
CAYm2	1020	71	14.4
CAYm1	1020	74	13.8
CAY	1020	73	14
Average FYSFR	14		
Assessment = $(5 \times 15) /$ Average FYSFR	5		

8.2. Qualification of Faculty Teaching First Year Common Courses (5)

Assessment of qualification = $(5x + 3y) / RF$, x = Number of Regular Faculty with Ph.D y = Number of Regular Faculty with post – graduate qualification RF=Number of faculty members required as per SFR of 15:1, Faculty definition as defined in 5.1

Table 8.2: Assessment of qualification

Year	X	Y	RF	Assessment of faculty qualification $(5x + 3y) / RF$
CAYm2	6	65	68	3.31
CAYm1	9	65	68	3.53
CAY	10	63	68	3.5
Average Assessment	3.45			

8.3. First Year Academic Performance (10)

Academic Performance = ((Mean of 1st Year Grade Point Average of all successful students on a 10 point scale) or (Mean of the percentage of marks in first year of all successful students/10)) x (number of successful students/number of students appeared in the examination)

Successful students are those who are permitted to proceed to the second year.

Academic Performance	CAYm2	CAYm1	CAY
Mean of CGPA or mean percentage of all successful student s(X)	6.5	6.8	6.3
Total Number of successful students(Y)	109	112	104
Total Number of students appeared in the examination (Z)	126	126	125
API [X*(Y/Z)]	5.62	6.04	5.24
Average API(AP1+AP2+AP3/3) :	5.63		
Assessment [1.5*Average API]	8.45		

8.4. Attainment of Course Outcomes of first year courses (10)

8.4.1. Describe the assessment processes used to gather the data upon which the evaluation of Course Outcomes of first year is done (5)

Internal Tests/ Exams:

- As per the University calendar of events, the college calendar of events is prepared.
- The Course Coordinator, based on the college calendar of events, will design the flow of curriculum (Lesson Plan), Laboratory related problems and distribute to the students.
- After commencement of the course, the course coordinator shall conduct 3 tests in a given semester, uniformly distributed throughout the semester (preferably one test per month)
- Course coordinator will distribute the scheme of evaluation to the concerned faculty member for uniform evaluation.
- It is preferable that a student shall obtain not less than 60% of the maximum marks prescribed for the course
- The final IA marks will be based on the average of best of the two tests

Laboratory Exam Evaluation:

- Course coordinator will distribute the rubrics to the concerned faculty members for uniform evaluation of laboratory programs.
- It is mandatory that a student must obtain not less than 50% of the maximum marks (12 out of 25) prescribed for the laboratory failing which he/she will be ineligible for the laboratory exams.

Representative RUBRICS for Lab**Internal Assessment Marks: 25**

Divided into two components:

Continuous Assessment: 15 marks

Internal Test: 10 marks

Continuous Assessment:

- Based on the performance in each experiment in every lab, the student shall be assessed
- Each experiment shall be evaluated for 10 marks and the total will be averaged out to 10
- Regular submission of records at the end of each experiment shall be given 5 marks
- After the completion of all experiments, an internal test shall be conducted for 50 marks and scaled to 10 marks.

Break up of 15 marks (in every lab):

Attributes	Descriptors	Scores
Preparation(2)	Student clear with the concepts and thoroughly prepared	2
	Average level of preparation	1
	Incomplete preparation	0
Performance(2)	Completes the experiment	2
	Completes with slight error in measurements	1
Execution & Results(4)	Obtains the expected result	4
	Obtains the result with slight error	3
	Correctly executed but error in calculation	2
	Incomplete experiment	0
VIVA VOCE(2)	Answers correctly	2
	Answers satisfactorily	1
	Do not answer any question	0
Record completion and submission(5)	Submits in time and completed (during subsequent lab)	5
	Fails to submit the record in time / incomplete submission	0

8.4.2. Record the attainment of course outcomes of all first year courses (5)

Program shall have set attainment levels for all first year courses.

(The attainment levels shall be set considering average performance levels in the university examination or any higher value set as target for the assessment years.

Attainment level is to be measured in terms of student performance in internal assessments with respect the Cos of a subject plus the performance in the University examination)

TARGET & ATTAINMENT LEVELS OF COs FOR INTERNAL ASSESSMENT

Number of students scoring greater than or equal to **17 (≥ 17)** in the internal assessment for a maximum marks of 25.

Attainment Level

60 % of the students scoring greater than or equal to 17 (≥ 17) in the internal assessment is set as an attainment level and if the targets are achieved then all the course outcomes are attained for that year

TARGET & ATTAINMENT LEVELS OF COS FOR EXTERNAL ASSESSMENT

Number of students scoring greater than or equal to **35(≥ 35)** in the external exam for a maximum marks of 100.

Attainment Level

75% of the students scoring greater than or equal to 35(≥ 35) in the external assessment is set as an attainment level and if the targets are achieved then all the course outcomes are attained for that year

Table 8.4.2.1. Target & attainment levels of COs using internal assessment (internal exams) for courses in 1st year- CAYm1

Course	INTERNAL ASSESSMENTS											
	Targeted Percentage of COs						Attainment Percentage of COs					
	CO1	CO2	CO3	CO4	CO5	CO6	CO1	CO2	CO3	CO4	CO5	CO6
I Semester												
10MAT11	65	65	65	65	65	65	86	86	86	86	86	86
10PHY12	65	65	65	65	65	65	89	89	89	89	89	89
10CIV13	60	60	60	60	60	60	97	97	97	97	97	97
10EME14	60	60	60	60	60	60	91	91	91	91	91	91
10ELE15	60	60	60	60	60	60	86	86	86	86	86	86
10WSL16	60	60	60	60	60	60	88	88	88	88	88	88
10PHYL17	65	65	65	65	65	65	96	96	96	96	96	96
10CIP18	65	65	65	65	65	65	98	98	98	98	98	98
II Semester												
10MAT21	65	65	65	65	65	65	98	98	98	98	98	98
10CHE22	65	65	65	65	65	65	91	91	91	91	91	91
10CCP23	65	65	65	65	65	65	85	85	85	85	85	85
10CED24	60	60	60	60	60	60	96	96	96	96	96	96
10ELN25	60	60	60	60	60	60	84	84	84	84	84	84
10CPL26	65	65	65	65	65	65	88	88	88	88	88	88
10CHEL27	65	65	65	65	65	65	99	99	99	99	99	99
10CIV28	65	65	65	65	65	65	97	97	97	97	97	97

Table 8.4.2.1. Target & attainment levels of COs using external assessment (internal exams) for courses in 1st year- C.A.Ym1

Course	EXTERNAL ASSESSMENTS											
	Targeted Percentage of COs						Attainment Percentage of COs					
	CO1	CO2	CO3	CO4	CO5	CO6	CO1	CO2	CO3	CO4	CO5	CO6
I Semester												
10MAT11	75	75	75	75	75	75	95	95	95	95	95	95
10PHY12	75	75	75	75	75	75	97	97	97	97	97	97
10CIV13	70	70	70	70	70	70	97	97	97	97	97	97
10EME14	70	70	70	70	70	70	100	100	100	100	100	100
10ELE15	70	70	70	70	70	70	93	93	93	93	93	93
10WSL16	90	90	90	90	90	90	100	100	100	100	100	100
10PHYL17	90	90	90	90	90	90	100	100	100	100	100	100
10CIP18	75	75	75	75	75	75	95	95	95	95	95	95

II Semester												
10MAT21	75	75	75	75	75	75	100	100	100	100	100	100
10CHE22	75	75	75	75	75	75	98	98	98	98	98	98
10CCP23	75	75	75	75	75	75	99	99	99	99	99	99
10CED24	70	70	70	70	70	70	100	100	100	100	100	100
10ELN25	70	70	70	70	70	70	97	97	97	97	97	97
10CPL26	90	90	90	90	90	90	100	100	100	100	100	100
10CHEL27	90	90	90	90	90	90	100	100	100	100	100	100
10CIV28	75	75	75	75	75	75	98	98	98	98	98	98

8.5. Attainment of Program Outcomes from first year courses (20)

8.5.1. Indicate results of evaluation of each relevant PO and/or PSO, if applicable (15)

The relevant program outcomes that are to be addressed at first year need to be identified by the institution.

Program Outcome attainment levels shall be sent for all relevant Pos and/or PSOs Through first year courses.

(Describe the assessment processes that demonstrate the degree to which the Program Outcomes are attained through first year courses and document the attainment levels.

Also include information on assessment processes used to gather the data upon which the evaluation of each Program Outcome is based indicating the frequency with which these processes are carried out)

POs Attainment :CAYm1

CAYm1 (2013-2017)												
Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
I Semester												
10MAT11	2.67	2.83	2.00	2.00	2.00	-	-	-	1.50	1.50	-	1.50
10PHY12	3.00	3.00	3.00	1.00	-	-	1.00	-	2.33	1.00	-	2.00
10CIV13	3.00	2.83	2.67	3.00	2.00	2.00	3.00	2.00	2.00	1.00	3.00	1.50
10EME14	2.67	2.17	2.00	2.17	2.00	1.00	1.00	-	-	-	-	2.17
10ELE15	3.00	3.00	2.00	-	1.00	1.00	1.00	-	-	-	-	2.00
10WSL16	2.83	2.00	3.00	2.17	-	1.00	1.00	-	2.50	1.17	1.00	1.50
10PHYL17	3.00	2.20	2.20	1.00	-	-	1.00	-	3.00	1.00	-	2.00
10CIP18	-	-	-	-	-	1.00	1.00	3.00	1.00	2.00	-	1.00

II Semester												
10MAT21	2.67	2.83	2.00	2.00	2.00	-	-	-	1.50	1.50	-	1.50
10CHE22	2.83	2.83	3.00	2.17	2.00	1.00	1.00	1.60	2.00	-	-	2.00
10CCP23	1.67	1.83	1.67	2.17	1.83	2.33	2.00	1.40	1.67	-	-	2.00
10CED24	3.00	2.00	2.00	2.00	2.83	1.00	-	-	-	-	-	2.00
10ELN25	3.00	2.83	2.00	1.00	1.00	1.67	1.50	1.00	2.17	1.00	1.25	2.00
10CPL26	1.33	1.50	1.83	2.00	1.50	2.20	1.50	-	2.00	-	-	1.40
10CHEL27	3.00	3.00	2.00	2.00	1.00	-	1.00	2.00	2.00	-	-	2.00
10CIV28	1.17	2.00	2.00	1.75	1.67	2.00	1.80	1.25	1.50	2.00	2.00	2.00

PO Attainment Level:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
PO Attainment	2.59	2.46	2.22	1.89	1.74	1.47	1.37	1.75	1.94	1.35	1.81	1.79

8.5.2. Actions taken based on the results of evaluation of relevant POs (5)

(The attainment levels by direct (student performance) are to be presented through program level course – PO matrix as indicated)

POs attainment levels and actions for improvement – CAY

POs	Target Level	Attainment Level	Observations
P01 : Engineering knowledge			
P01	2.0	2.08	Target Achieved
Action Taken: Role of Basic Sciences in Engineering – an Interactive session by Mr. Vikas Chellani on 17-08-2015			
P02 : Problem analysis			
P02	2.0	1.91	Target Marginally Missed
Action Taken: Organized Expert Lecture on Simplifying Complex problem on 24-08-2015 by Dr. Karunakar Nanda, IISC, Bangalore			
P03 :Design/development of solutions			
P03	1.7	1.78	Target Achieved
Action Taken: Safety measure on usage of electronic equipments by V. Dharmambal on 7-10-2015			
P04: Conduct investigations of complex problems			

P04	1.5	1.53	Target Achieved
Action Taken: Importance of literature survey for any research-lecture given Dr. Gangadhariah Y. Hon 21-08-2015			
P05: Modern tool usage			
P05	1.3	1.35	Target Achieved
Action Taken: Handling of electronic equipments – A hands on experience by Dr. Sanjay Jain on 22-08-2015			
P06 : The engineer and society			
P06	1.2	1.2	Target Achieved
Action Taken: Complimented by the course constitution of India and Professional ethics			
P07 : Environment and sustainability			
P07	1.1	1.13	Target Achieved
Action Taken: Talk on Ecological and Environmental consciousness by Dr. Ananda Vardhan on 19-08-2015			
P08 : Ethics			
P08	1.3	1.35	Target Achieved
Action Taken: Complimented by the course constitution of India and Professional ethics			
P09 : Individual and team work			
P09	1.5	1.53	Target Achieved
Action Taken: More group based activities like Quiz, GD, Group mini Projects conducted			
P010: Communication			
P010	1.0	1.08	Target Achieved
Action Taken: Soft skills enhanced via the course Business English communication			
P011: Project management and finance			
P011	1.5	1.5	Target Achieved
Action Taken: An Insight on Managerial skill set development – an interactive session on 24-08-2015			
P012 : Life-long learning			
P012	1.5	1.5	Target Achieved
Action Taken: Patenting the ideas an interactive session by Dr. Sheelan Mishra on 20-08-2015			

PO attainment levels and actions for improvement – CAYm1

POs	Target Level	Attainment Level	Observations
P01 : Engineering knowledge			
P01	2.5	2.59	Target Achieved
Action Taken: Deliberated the role of fundamental sciences in all branches of engineering by Dr. M.S. Ganesha Prasad on 16-08-2014			
P02 : Problem analysis			
P02	2.4	2.46	Target Achieved
Action Taken: Guest lecture on Mathematical Modelling by Dr. Rudraiah N on 06-09-2014			
P03 : Design/development of solutions			
P03	2.2	2.22	Target Achieved
Action Taken: Usage of solid edge softwares explained by Professor. Nagabhushan on 14-08-2014.			
P04: Conduct investigations of complex problems			
P04	1.8	1.89	Target Achieved
Action Taken: Importance of literature survey for any research-lecture given Dr. Joyce on 11-08-2014			
P05: Modern tool usage			
P05	1.7	1.74	Target Achieved
Action Taken: Lecture and Practice on Tools for simulation by Dr. Asha V on 11-08-2014			
P06 : The engineer and society			
P06	1.4	1.47	Target Achieved
Action Taken: Complimented by the course constitution of India and Professional ethics			
P07 : Environment and sustainability			
P07	1.3	1.37	Target Achieved
Action Taken: Visit to waste water treatment plant			
P08 : Ethics			
P08	1.7	1.75	Target Achieved
Action Taken: Complimented by the course constitution of India and Professional ethics			
P09 : Individual and team work			
P09	1.9	1.94	Target Achieved
Action Taken: More group based activities like Quiz, GD, Group mini Projects conducted			

P010: Communication			
P010	1.3	1.35	Target Achieved
Action Taken: Guest lecture on Communication Skills and techniques by Mr. Anoop Singh, Infosys on 13-08-2014			
P011: Project management and finance			
P011	1.8	1.81	Target Achieved
Action Taken: Principles of management by Mr. Manoj Jain EMC ² on 12-08-2014			
P012 :Life-long learning			
P012	1.75	1.79	Target Achieved
Action Taken: Patenting the ideas an interactive session by Dr. Sheelan Mishra on 14-08-2014			

POs attainment levels and actions for improvement – CAYm2

POs	Target Level	Attainment Level	Observations
P01 : Engineering knowledge			
P01	2.0	2.52	Target Achieved
Action Taken: Importance of Basic Sciences in the role of engineering & technology emphasized by Prof. Shivabalan on 19-8-2013			
P02 : Problem analysis			
P02	2.0	2.38	Target Acheived
Action Taken: Organized Expert Lectures by Dr. T. S. Natarajan, IIT- Madras on 22-08-2013			
P03 :Design/development of solutions			
P03	1.7	2.17	Target Achieved
Action Taken: Youtube videos related to modern design and development showed to students.			
P04: Conduct investigations of complex problems			
P04	1.5	1.83	Target Achieved
Action Taken: Importance of literature survey for any research-lecture given Dr. Suma on 19-08-2013			
P05: Modern tool usage			
P05	1.3	1.67	Target Achieved
Action Taken: Lecture on simulation tools and algorithms by Dr. Asha V on 20-08-2013			
P06 : The engineer and society			
P06	1.2	1.46	Target Achieved

Action Taken: Complimented by the course constitution of India and Professional ethics			
P07 :Environment and sustainability			
P07	1.1	1.36	Target Achieved
Action Taken: Talk on e-waste management and societal importance by Dr. Illango, on 23-08-2013			
P08 : Ethics			
P08	1.3	1.74	Target Achieved
Action Taken: Complimented by the course constitution of India and Professional ethics			
P09 : Individual and team work			
P09	1.5	1.89	Target Achieved
Action Taken: More group based activities like Quiz, GD, Group mini Projects encouraged among students			
P010: Communication			
P010	1.0	1.30	Target Achieved
Action Taken: Need for effective communication and interactive session by Ms Rasajna on 24-08-2013			
P011: Project management and finance			
P011	1.5	1.81	Target Achieved
Action Taken: Lecture on Principle of management by Mr. Alex Rajan on 24-08-2013			
P012 :Life-long learning			
P012	1.5	1.75	Target Achieved
Action Taken: Patenting the ideas an interactive session by Dr. Sheelan Mishra on 21-08-2013			

CRITERION : 9**STUDENT SUPPORT SYSTEMS****50****9.1. Mentoring system to help at individual level (5)**

Type of mentoring: Professional guidance / career advancement / course work specific / laboratory specific / all-round development.

Number of Faculty Mentors: 24

Number of Mentees / Mentor: 16-17

(The institution may report the details of the mentoring system that has been developed for the students for various purposes and also state the efficacy of such system.)

Mentoring system to help students at individual levels**I. Details of mentoring system:**

- Students are allotted a mentor based on the approach ability / personality of both involved- mentor and mentee. Each mentor maintains a Proctor Form / booklet with all details like parents/guardian's name, addresses, contact numbers, academic details and academic scores.
- Professional Counselors are available in the department who counsel the students individually and support students in their problematic areas like inert-personal problems, aspirations related to academics, career plans; other grievances to improve their progress in the above areas.
- All mentors encourage the students' participation in co-curricular, extra-curricular and other professional activities, along with the curricular guidance which motivates them, stimulate their growth and support in transforming them as employable young Professionals/Engineers.
- Parent Teacher Meetings (PTM) are conducted as one of the best practices to bring the parents into the mentoring system as key stakeholders.

**NEW HORIZON COLLEGE OF ENGINEERING
DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING**

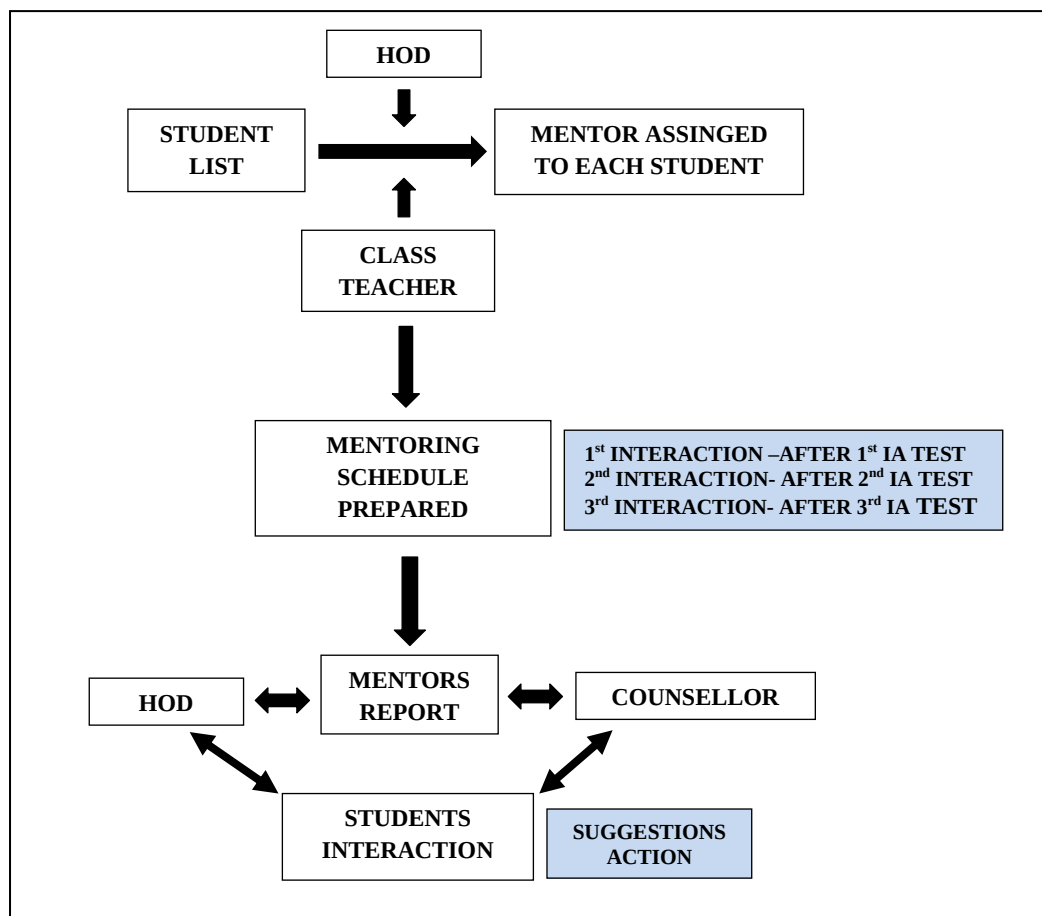


Figure 9.1a: Flow Chart of Student Mentoring System

Table 9.1a: Summary of mentoring system

Parameters	Description
Type of mentoring system	Professional guidance / career advancement / course work specific / laboratory specific / total development / personal development
Number of faculty mentors	24
Average number of students per mentor/	16-17
Frequency of meeting	Thrice in a semester, <i>in some cases, as and when needed</i>
Counselor available for specific number of students	One dedicated counselor for BE Information Science students

II. Description of mentoring system:

Table 9.1b:Description of mentoring system

Sl. No.	Type of mentoring system	Functions
1	Professional guidance	• Skill Enhancement for better employability: Support their learning and enhance their laboratory and research skills through attending technical workshops, hands on training programmes and student symposiums. Industry based training is offered to selected student so as to enhance their chances of employability • Publication in journals: Persuade them to upgrade their domain knowledge through active perusing and encourage them to publish review, research articles, and technical papers. • Enhancing the Research Ideas: Encourage students to develop and discuss their ideas as presentations in different National and International conferences. • Industry oriented VIII SEM projects: Projects are designed based on the needs of industry as a custom designed live projects to give the real time experience to the students to not only understand the expectations of the industry but also making them familiar with the working nature of the industry and mould them as per industry requirement.

2	Academic guidance	• To earn VTU Ranks: Highly capable and potential students are picked up by concerned mentor and referred to Head of the Department. They are further groomed and mentored by HOD for applying all positive approaches to work strategically to earn ranks. • To score FCDs and FCs: All potential students are supported meticulously with student centric teaching and in a few cases, hand-hold teaching methodologies to make them competent enough to earn appreciable results (FCDs- First Class with Distinction) and FCs • Information sharing: Share information of academic plan, academic schedules and e-learning resources to enhance their knowledge database. • Academic Counseling: Identify the students with less attendance and ensure that they improve their attendance by getting counseled in the presence of mentor, counselor and HOD. • Support to slow learners: More focus on academically weak students, by providing them with additional reading materials, model questions along with solutions and special make-up classes.
3	Career advancement	• Value added training programmes: Students undergone vigorous training programmes such as Cisco Certified Network Associate Certification (CCNA), Oracle Java certification, Python and Android Development Programme to increase the job opportunities in corporate. • MOOCs: Motivate and support the students to take up online certification courses to strengthen and build up their qualifications for their academic progression and to achieve higher career paths in the applied areas of Information Science & Engineering. *MOOC (Massive Open Online Course)

		• Funded Projects: To create awareness and to enhance the knowledge about the various activities and state of art research in the core and applied domains of Information Science Engineering, the students are encouraged and guided to take up projects in VGST. • Training & Placement Cell guidance: Provide Career Guidance and other Training apart from arranging campus recruitment drives by the Training & Placement Cell. Support their research into Industry, companies, job and candidate profiles.
4	Laboratory specific	• Laboratory manual: Providing the students with laboratory manual based on the course to make them understand and know about the different laboratory experiments. • Experiment demonstration: Faculty gives demonstration on the experiments to enhance their hands on skills to make them understand structure of the code, control flow and logic behind the working of code.
5	All – round development	• Encourage and support students towards all round development through participation in literary, cultural and sports activities which helps to develop leadership qualities, decision making abilities, team spirit, socio-psychological awareness, and shapes the student into an intellectually integrated person.
6	Personal development	• Empower and enable inner adjustments by individual students to counter and cope with physical, emotional, mental, social and environmental challenges through student-counselor interaction/ through other specialized workshops / activities. • Engage in counseling by Counselor/ Mentor/HOD to strengthen student's interpersonal relationships thereby improving their grades

III. Efficacy of mentoring/counseling system:

The mentoring/counseling system developed by the college has proved to be effective as defined by different parameters:

- *STUDENT'S ATTENDANCE: Improved*
- *THE INVOLVEMENT OF STUDENTS IN THE ACADEMICS, CO-CURRICULAR AND EXTRA-CURRICULAR: Improved*
- Individual student's talents/skills identified and nurtured towards excellence
- *STUDENTS' SELF-CONFIDENCE/SELF-ESTEEM: Improved* over the time, thus developing perseverance and ability to cope better in external professional environment and successfully tackling the external challenges. Some of the key deliverables recorded by department are – developed capacity to appear in job interviews/speaking in public/making presentations/even mentoring peers.
- **STUDENTS ACHIEVEMENTS:**
 - ✚ University ranks earned consistently in years 2015 and 2016
 - ✚ Received funding from the VGST agency
 - ✚ Maximum number of students placed in reputed companies such as VMware, Amazon Web Services, Wipro, Cerner, Sony, TCS and so on.
 - ✚ Maximum number of technical paper publications in various journals.
 - ✚ Notable extent of students' progression by the enhanced number of student admissions into higher education at reputed university/institutions abroad.



Sushma D S (1NH12IS113)

2016 pass out

VTU 2nd Rank



Shivangi Uniyal (1NH11IS097)

2015 pass out

VTU 2nd Rank



Figure9.1b: VTU Rank Certificate of Sushma D S(1NH12IS112)



Figure9.1c: VTU Rank Certificate of Shivangi Uniyal (1NH11IS097)



Figure9.1d: Sample Internship letters of the students got placed in the year 2016-17

9.2. Feedback analysis and reward / corrective measures taken, if any(10)

(Methodology being followed for analysis of feedback and its effectiveness and record of corrective measures taken)

Feedback collected for all faculty members handling the courses: **YES**

Specify the feedback collection process: **Through software**

Average Percentage of students who participate: **80-90%**

The feedback analysis process:

The minimum feedback for a faculty member from the students is 3.5 for 5 scale rating system. For faculty scoring less than the institution standard, necessary corrective actions are followed.

- Necessary advice by the Head of the department about handling and monitoring the class to the faculty.
- Deputing faculty to the Faculty Development Program (FDP)
- Counseling the faculty through counselors about building confidence in handling the subjects.

If there is no improvement seen even after the above mentioned activities, he/she can be terminated from the institution.

Feedback collection process for all faculty members handling the courses: **YES**

I. Methodology of feedback analysis:

- a. Feedback collection process
- b. Feedback assessment process
- c. System of reward / corrective measures

a. Feedback collection process

- Feedback mechanism is well organized system in the college for all courses.
- All the students are allowed to give feedback.
- Computerized feedback is collected from students for all the courses.

Table 9.2a: Feedback collection process

Items	Description
Feedback collection process	YES for all courses
Process	Computerized using Knowledge Pro software
Feedback receiver	Program coordinator / HOD
Frequency of feedback collection	Once in a semester
Metrics used for calculation	6-Not applicable 5-Excellent 4-Very good 3-Good 2-Satisfactory 1-Below average
Purpose of comment	For improving the quality of education
Number of Corrective actions taken in the last three years	Since the feedback obtained met the expectations of the institute requirements, no corrective measures were taken.

b. Feedback assessment process

- The feedback collected from students is first analyzed by an Assessment Committee headed by the Principal.
- The contents of the feedback are shared with each faculty member individually.
- Performance of each individual faculty is assessed by the concerned committee members.

All the courses mentioned in the feedback form will be analyzed as follows:

Step-1	Collection of feedback forms for all the subjects from the students based on parameters specified in questionnaire.
Step-2	Estimation of average for all the parameters and calculation of cumulative otherwise called threshold
Step-3	After the recommendations of IQAC (Internal Quality Assessment Committee), threshold value will be finalized. The normal value setup at present is 3.5
Step-4	If the threshold exceeds 3.5, it is considered as good to excellent and if lesser than 3.5; the faculty performance is considered as average to below average.
Step-5	If the faculty receives good performance, he is appreciated by the Principal and HOD @ Departmental appreciation meets and also rewarded with monetary benefits. If he / she receives average or below average performance, he / she gets counseling and allows them to get correct their performances.

c. System of reward / corrective measures

System of reward process: Best faculty award is given based on the following factors:

1. Student's feedback (Format enclosed)
2. The faculty's self-appraisal report (Format enclosed)
3. HOD's evaluation
4. The marks given by faculty appraisal committee, headed by principal
5. The increments and promotions also add some effect to these scores
6. If the faculty achieves 90% - 100%, an appreciation from the management is awarded along with a monetary benefit of increment.

II. Corrective measures:

- Explanation from the faculty will be demanded for the inappropriate result and subsequent action will be processed.
- Counseling will be given to the concerned faculty by HOD and Principal.
- Promoting and encouraging faculty to attend the faculty development programs (FDP) related to effective teaching methodologies.

FORMAT of Student Feedback on Faculty

NEW HORIZON COLLEGE OF ENGINEERING
Student Feedback October 2017

Faculty Name Ms. Rajeshwari														DEPARTMENT ISE				
We have consolidated the student feedback for the October, 2017 and find below the feedback received on the subject taught by you. We have advise you to discuss your ratings with HOD/immediate supervisor for further improvement.																		
SUB.CODE	a	c	d	e	f	g	i	j	k	l	m	n	52	54	55	Avg. Score		
10IS72 (n=47)	4.19	4.18	4.18	4.24	4.12	4.20	4.23	4.20	4.23	4.18	4.14	4.19	4.05	4.07	4.16	4.17		
Overall Rating	4.19	4.18	4.18	4.24	4.12	4.20	4.23	4.20	4.23	4.18	4.14	4.19	4.05	4.07	4.16	4.17		
Earlier Overall Rating																4.10		

a	Clarity in explaining the subject
b	Subject explained was easy to understand
c	Content quality is relevant and useful
d	Faculty answers to your queries/questions
e	Coverage of topic/subject is on time
f	The concepts were explained with examples
g	Faculty preparation for the class
h	Faculty guidance for preparation of seminar, conference and exam
i	Punctuality of the faculty for the class
j	Communicates distinctly and effectively
k	Treats students with respect and courtesy
l	Control of the classroom by faculty
m	Relevance of assignments to the subject
n	Overall satisfaction
52	Discussion of any interesting topic beyond the syllabus but relevant to the field
53	Usefulness of the question paper(s) of internal test(s) in your preparation for the examination
54	Helpfulness of the online course material (question bank, etc...) and assignments for you to understand and prepare for tests and examination
55	Accessibility and availability after the class hours in the college
Avg. Score	Average score of a to m

SCALE USED	
1	POOR
2	FAIR
3	GOOD
4	VERY GOOD
5	EXCELLENT
6	NA

Figure 9.2a: Sample Student Feedback on Faculty

FORMAT of Faculty Performance-Appraisal Report**PART-A (Personal Particular)**Name : Vandana C.PEducational Qualifications : M.Tech (Computer Networks Engg.)(If you possess a Doctorate degree,
state if you are a recognized guide): _____Department : Information Science & EngineeringDesignation : Assistant ProfessorNo of years served in NHCE till date : 4 yearsTotal Experience till date : 9 years.Any extraordinary achievement
during the assessment period

Authored the book "Adobe Experience Manager 6.2"
Conducted AEM & Java training for Wipro placed students
: Registered for Ph.D under VTU

Part - B**ACADEMIC DUTIES AND RESPONSIBILITIES ASSIGNED**

ODD Semester	Theory	Subject Assigned	No. of Classes	No. of Classes Conducted	Remarks
		10IS74	52	52	
	Lab	Laboratory	No. of Experiments	No. of Experiments	Remarks
		10CSL78	12	12	
EVEN Semester	Theory	Subject Assigned	No. of Classes	No. of Classes Conducted	Remarks
		10IS833	52	52	

	Lab	Laboratory	No. of Experiments	No. of Experiments	Remarks
					Remarks

APPLICABLE TO FACULTIES HANDLED AUTONOMOUS

ODD Semester	Subjects Assigned	Self Study / Sem / Student	Assignments / Semester	Quiz / Semester
EVEN				

PART - C

A brief pen picture of self, not exceeding in 5 to 6 lines, highlighting the administrative and support activities entrusted

Involved in Adobe Centre of Excellence activities, Wipro placed students training on AEM platform & project-based Java training. Certified Wipro trainer in PBL. Authored AEM 6.2 guide book. Published quality papers in journals. Conducted guest lectures, entrepreneurship activities, workshop. Internal Assessment Coordinator. Attended AEM training & in BOS activities in department. Worked towards Industry Institute interaction activities.

PART -D

Note: Please put a tick in the appropriate rating

- 1) Proper maintenance of course files and attendance registers (as per Check list) with necessary proof:

25	20	15	10	5
☒	☐	☐	☐	☐

 Outstanding

 Very
Good

 Good

 Fair

 Poor

2) Proper valuation & maintenance of blue books of Students with necessary proof:

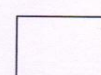
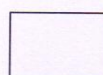
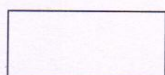
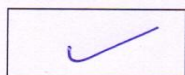
15

12

9

6

3



Outstanding

Very
Good

Good

Fair

Poor

3) Contribution in development of lab manuals, addition of new experiments and innovations and modernization of labs:

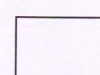
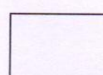
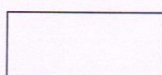
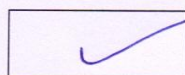
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4

3

2

1



Outstanding

Very
Good

Good

Fair

Poor

4) Participation in co-curricular activities:

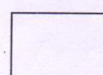
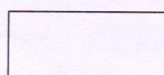
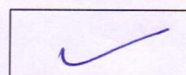
5

4

3

2

1



Outstanding

Very
Good

Good

Fair

Poor

(Here contributions in areas like ISTE, forum activities, arranging guest lectures, symposiums/ seminars, Workshops, blood donation, sports and other fruitful activities need to be taken into consideration.)

5) Initiatives taken towards counseling / Mentoring, guidance & overall character building of students:

10

8

6

4

2

☐	☒	☐	☐	☐
Outstanding	Very Good	Good	Fair	Poor

6) Initiatives and interest shown in acquiring and disseminating new knowledge and skill through publications, books, attending seminars etc:

Publications – Minimum 02 per Academic Year

5	4	3	2	1
☒	☐	☐	☐	☐
Outstanding	Very Good	Good	Fair	Poor

7) Initiatives and interest shown in acquiring and disseminating new knowledge and skill through publications, books, attending seminars etc:

FDP – Minimum 03 per Academic Year

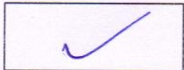
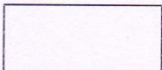
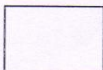
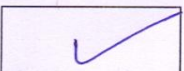
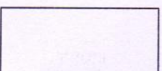
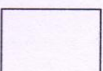
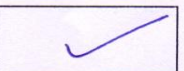
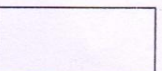
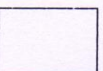
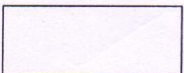
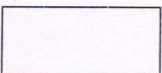
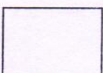
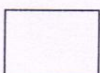
5	4	3	2	1
☒	☐	☐	☐	☐
Outstanding	Very Good	Good	Fair	Poor

8) Contribution in guiding students for completion of their projects:

5	4	3	2	1
☒	☐	☐	☐	☐
Outstanding	Very Good	Good	Fair	Poor

9) Efforts made in attending continuing education programmes:

5	4	3	2	1
☒	☐	☐	☐	☐

Outstanding	Very Good	Good	Fair	Poor
10) Initiative & involvement in curriculum development (Suggestions to improve the Curriculum):				
5	4	3	2	1
				
Outstanding	Very Good	Good	Fair	Poor
11) Endeavors towards self-development by upgrading/acquiring qualifications, gaining experience through professional activities, including membership of Professional societies.				
5	4	3	2	1
				
Outstanding	Very Good	Good	Fair	Poor
12) Contribution in promoting institute industry, R&D activities & consultancy services (Minimum 02 Proposals per Academic Year).				
5	4	3	2	1
				
Outstanding	Very Good	Good	Fair	Poor
13) The efforts made by individual to motivate & guide fellow faculty persons for acquiring higher education : (Guidance for M Sc., Eng, Ph D etc) (Applicable only for Ph.D Holders)				
5	4	3	2	1
				

 Outstanding

 Very
Good

 Good

 Fair

 Poor

14) Contribution in shouldering the administrative responsibilities pertaining to the institution

5

4

3

2

1

☐
☒
☐
☐
☐

Outstanding

Very
Good

Good

Fair

Poor

15) Initiatives & involvement in the field of policy planning, monitoring evaluation & promotional activities at departmental & institutional level:

5

4

3

2

1

☐
☒
☐
☐
☐

Outstanding

Very
Good

Good

Fair

Poor

16) Involvement in design & development of new academic/training programmes:

5

4

3

2

1

☒
☐
☐
☐
☐

Outstanding

Very
Good

Good

Fair

Poor

17) Efforts made towards judicious utilization, management & development of institutional facilities.

5

4

3

2

1

☐
☒
☐
☐
☐

Outstanding

Very
Good

Good

Fair

Poor

18)) Involvement in planning & implementation of staff development activities:

5	4	3	2	1
☐	☒	☐	☐	☐
Outstanding	Very Good	Good	Fair	Poor

19) Initiative taken towards Societal Development (adult literacy drives & bringing awareness in the society towards hygiene/moral & ethical value etc):

5	4	3	2	1
☐	☒	☐	☐	☐
Outstanding	Very Good	Good	Fair	Poor

20) Effort made in promotion of entrepreneurship & job creation:

5	4	3	2	1
☐	☒	☐	☐	☐
Outstanding	Very Good	Good	Fair	Poor

21) Degree of integrity, efficiency, effectiveness& dedication shown during the course of discharging assigned responsibilities:

5	4	3	2	1
☒	☐	☐	☐	☐
Outstanding	Very Good	Good	Fair	Poor

SUMMARY OF PART "D"

- ❖ Total points awarded to staff: (D1) 4.5357 (Points Obtained / Maximum Points *5)
- ❖ Points awarded with 60% weight age: (D1*0.6) 2.72

PART – E

Formula Used: (Grand Result % * 5) / 100

(Result Conversion Scale: 100% - 5, 80% - 4, 60% - 3, 40% - 2, 20% - 1, 0% - 0)

ODD Semester						
	Sub 1	Sub 2	Sub 3	Sub 4	Sub 5	Average
Student Feedback	4.23					
Result	97.2%					
EVEN Semester						
	Sub 1	Sub 2	Sub 3	Sub 4	Sub 5	Average
Student Feedback	4.24					
Result	100%					
Grand Average						
	ODD	EVEN	Grand			
Student Feedback	4.23	4.24	4.235			
Result	97.2%	100%	98.6%	= 5		

SUMMARY OF PART "E"

- ❖ Average of student Feedback and Result (E1)= $(4.235 + 5) / 2 = 4.6175$
- ❖ 40% weightage based on grand average: (E1*0.4) 1.847

OVERALL SUMMARY

❖ Annual performance index (D + E) = 4.567

**CORRESPONDING RANKING TAKING INTO ACCOUNT THE POINT SCORE
AND CONVERTING IT TO TOTAL WEIGHTAGE OF 60%+40%= 100**

Final Grade:

4.5 – 5.0: OUTSTANDING

3.0 – 3.9: Good

4.0 – 4.4: Very good

2.0 – 2.9: Fair

Less than 2: Poor

Signature of faculty member with date

Va
29/6/2017

Areas for improvement:

Signature of HOD with date

[Signature]
29/06/17

Head of the Department
Information Science and Engg.
New Horizon College of Engineering
Bangalore 560 103

REMARKS & SIGNATURE OF PRINCIPAL

Signature of the Principal with date

**GUIDELINES TO HEADS OF DEPARTMENT FOR FILLING UP
PERFORMANCE APPRAISAL FORM IN RESPECT OF TEACHING STAFF**

1. Every faculty person will be assessed on 21 items/areas of achievement on the pressure point rating scale. The concept of rating scale are given below:

- ❖ **Outstanding:** Excellent professional competence, unblemished track record, utmost efficiency & effectiveness, optimum human capacity utilization, punctuality, sincerity and dedication of highest order.
- ❖ **Very good:** Satisfactory professional competence with reasonable efficiency & effectiveness, reasonable extent of human capacity utilization and high order of punctuality, sincerity and dedication.
- ❖ **Good:** Just satisfactory performance with marginal level of efficiency and effectiveness. Medium human capacity utilization, punctuality, sincerity and dedication just adequate to deliver minimum satisfactory performance.
- ❖ **Fair:** Performance much below the level of expectations. Lack of efficiency and effectiveness, zeal and enthusiasm in performing his/her duties. Under utilization of capacity advertently or inadvertently (due to physical, mental disabilities)
- ❖ **Poor:** A deplorable performance devoid of initiative efforts, zeal or enthusiasm. A liability for the organization with either total lack of capacity, utilization to perform or advertently shirking from responsibilities.

2. PROCEDURE OF COMPUTATION OF GRADING

- ❖ 60% weightage of the total points awarded in performance appraisal.
- ❖ 40% weightage is given for points awarded in the faculty evaluation by students from both the semesters.

3. CORRESPONDING RANKING TAKING INTO ACCOUNT THE POINT SCORE AND CONVERTING IT TO TOTAL WEIGHTAGE OF 60%+40%= 100

Final Grade:

4.5 – 5.0: OUTSTANDING

3.0 – 3.9: Good

4.0 – 4.4: Very good

2.0 – 2.9: Fair

Less than 2: Poor

4. HOD's are required to fill up the performance appraisal Performa in presence of the concerned teaching staff by asking the staff explain item wise performance and their perceptions about the point grades. The HOD's after taking into account the submissions and expectations of the concerned staff & his own perceptions/ option about the capability of the staff, will put a tick on mark particular point scale. In case the ticked grade does not tally with the expectations of the staff, the reasons for variations must be told to staff by HOD in explicit terms.

5. The HOD ensures that assessment is based on the performance of the individual throughout the stipulated assessment period and not based on seasonal performance. Further biases, preferential treatment to selected ones are avoided to make the appraisal system totally transparent and purposeful.
6. Both the HOD and the staff put signatures in the appraisal performa at the appropriate place meant for the purpose. The employees should invariably sign even if they have some reservation on the assessment grades given by HOD's on certain items. They can mention the particular items where they have reservations/ disagreement below their signature at the appropriate place mentioned there in. These dissenting items/points or divergences are discussed by the staff with Principal at appropriate time after seeking interview or if otherwise automatically called by Principal.
7. The decision of the Principal on all dissenting matters is deemed as final & binding on employees. No further query or representations on the subject are entertained at later stages.

Figure 9.2b: Sample Faculty Self-Appraisal Form

Table 9.2b:Details of Reward / Corrective measures taken

Awards / rewards/ corrective actions	No. of corrective actions / awards / rewards in last 3 years		
	CAY(2016-17)	CAY m1(2015-16)	CAY m2 (2014-15)
No. of faculty received appraisal awards	2	2	2
No of faculty counselled for below average performance	Nil	Nil	Nil

9.3. Feedback on facilities (5)

Assessment is based on student feedback collection, analysis and corrective action taken.

Feedback on facilities (Format enclosed)

A standard procedure for feedback on facilities is taken up in the department as per the following steps:

Feedback is collected from the students on the facilities available in the college such as class room infrastructure, library, labs, canteen, hostel, transport, playground, internet facility, etc.

The feedback is analyzed and the necessary corrective measures are implemented after discussions with the management.

Following is the process of feedback on facilities.

- 1) Feedback collection process
- 2) Feedback analysis
- 3) Corrective measures

1) Feedback collection process:

Table 9.3a:Details of feedback collection process

Items	Description
Feedback collected on all facilities provided by the college.	YES
Feedback collection process	Computerized
Feedback receiver	Administrative officer / Admin manager
Frequency of feedback collection	Once in an academic year
Metrics used for calculation	6-Not applicable 5-Excellent 4-Very good 3-Good 2-Satisfactory 1-Below average
Purpose of comments	For improving the quality of facilities.

FORMAT of Student Feedback on Facility

New Horizon College of Engineering		
Feedback on Institution for October 2017 - ODD Sem		
SL.NO.	Question	Avg. Rating
Engineering		
1	Canteen facilities	3.92
2	Classroom Infrastructure	3.67
3	Cyber Lab facility	3.73
4	Extra-curricular activities at College	3.71
5	Hostel Facility	3.47
6	Lab facilities	3.90
7	Library facilities	4.17
8	Placement support provided	3.50
9	Responsiveness of Accounts office	3.30
10	Responsiveness of college admin office	3.30
11	Responsiveness of Exam office	3.49
12	Sports Facility	3.54
13	Toilet facilities and maintenance	3.66
14	Transport facilities of the College	3.49
Total Average:		3.63
No of Students:		3,650

Figure 9.3a: Sample Student Feedback on Facility**2) Feedback analysis**

The feedback given by the students is consolidated and analyzed. The Registrar / Principal discuss about the consolidated report with the management and come out with necessary actions.

3) Corrective measures

Some of the corrective actions initiated are:

- Student Recreation Centre
- Hostel welfare committee is created to monitor the food quality in boys and girls hostel.

9.4. Self – Learning (5)

(The institution needs to specify the facilities, materials and scope for self – learning / learning beyond syllabus, webinars, podcast, MOOCs etc., and evaluate their effectiveness)

Self-Learning

Self-Learning method is an individualized method of learning collecting information, processing it, and retaining it without the needs for another individual to teach it.

I. Scope of Self – Learning

- Central Library
- Digital library (centralized in college) for Literature Database i.e Science Direct/Pubmed central / Scirus / Medminer

Table 9.4a: E-journal details

Sl. No.	Database Name	Website Address
1	IEEE Xplore Digital Library	http://ieeexplore.ieee.org//
2	Science Direct	http://www.sciencedirect.com//
3	Taylor & Francis (E- Books)	http://crcnetbase.com//
4	Taylor & Francis (E- Journals)	http://www.tandfonline.com//
5	Springer (E- Journals & E- Books)	http://link.springer.com//
6	ASCE (American Society of Civil Engineers)	http://ascelibrary.org//
7	kNimbus Digital Library	http://www.knimbus.com//
8	Proquest (Engineering)	http://search.proquest.com//
9	Proquest (Management)	http://search.proquest.com//

- Web based learning i.e MOOCs, YouTube, Nat Geo etc (independently by students)
 - ✓ NPTEL, Link: <https://nptel.ac.in/course.php?disciplineId=112//>
 - ✓ SWAYAM, Link: <https://swayam.gov.in/Institutions//>
 - ✓ MOOC, Link: <https://www.edx.org//>
 - ✓ COURSERA, Link: <https://www.coursera.org//>
 - ✓ MIT Open course, Link: <https://ocw.mit.edu/index.htm//>
 - ✓ Udemy, <https://www.udemy.com//>
 - ✓ National Digital Library of India (NDL), <https://ndl.iitkgp.ac.in//>
- Club activities
 - ✓ i-SWET(G)
 - ✓ i-SCRUM
 - ✓ i-CSEH
 - ✓ VITA
- Assignments
- Seminars, workshops, Conferences and Symposiums
- Industrial visits

II. Detailed list of Self – Learning facilities:**Table 9.4b: Detailed list of self-learning facilities**

Sl. No.	Self – Learning process	Description
1	Central Library	- The college library provides information and ideas that are fundamental to functioning successfully in today's information and knowledge based society. - College library equips students with learning skills and develop the knowledge.
2	Digital Library	- Sufficient systems with multimedia facilities. - Institutional membership of DELNET, a library networking database. - Internet facility
3	Web based learning	- The internet is an open information system in which various sources of information, media and materials such as texts, images, video sequences can be linked together in diverse ways to form so-called self learning environment to structure and integrate various learning content and materials. - Availability of NPTEL videos. - Availability of Swayam.
4	Professional bodies / other association	- Joining a professional association will be one of the most important activities in a student's career. - To increase knowledge in their own fields, expand networking possibilities or jump start to job hunt, a professional association membership is an option which is worth exploring. - All career options are corresponding professional association that offers valuable information and resources for their career enhancement. - CSI,ISTE,IAENG,DSA,ICSES etc student chapters are established where the students get platform to achieve the knowledge about the advance engineering skills.

5	Club Activities	• i-SWET (Information Science Students club working on emerging technologies)- To enable the student members to discover their hidden talents and make complete usage of it. • i-SCRUM (Information Science students club for Research utilizing meta knowledge)- Raise awareness on key aspects of Research process. Motivate students to engage in research activities and publish a refined research paper. • i-CSEH (Information Science students Cyber Security and Ethical Hacking Club)-To explore technologies related to cyber security and ethical hacking and create awareness about the significance of cyber security • VITA(VMWARE IT Academy)- VMware academic recognition for students (equivalent to certification) and VMware vExperience (CoE)
6	Assignments	• It enabled students to go through the topics in a more elaborate manner in order to explore the academic topic which lead to an overall better learning experience for students. • Assignments help the students to understand the subject in a more detailed pattern. • Faculty will conduct assignments on regular basis with two units of every subject and these are graded.
7	Seminars, workshops, conferences and Symposiums	• A seminar is group meeting led by an expert that focuses on specific topic or discipline such as emerging technologies, job searches or a literature based field. • Presence in seminar will have numerous benefits to a student like improving communication skills, gaining expert knowledge, networking with others and renewing motivation and confidence. • Seminars are conducted frequently in the department level and the seminars offer students to interact with industry experts, research persons, entrepreneurs and small business partners.

		Workshops allow a student to further develop marketable business skills in an intensive interactive environment.
8	Industrial visits	- It helps students gain first-hand information regarding functioning of the industry. - Provides an opportunity to plan, organize and engage in active learning experiences both inside and outside class room. - Provides an inside into the real working world. - Helps them to see their future place in the working world. - Helps to enhance their interpersonal skills and communications. - Helps to understand the industrial practice. - Industrial visit is a part of college curriculum during which students visit companies and get insight regarding the internal working environment of a company.

III. Utilization and its effectiveness:

The overall aim of this review is to evaluate the effectiveness of self-directed learning on the professional development of students.

- Most of the students reached to a conclusion that self-learning process is an effective approach for learning but not more than the traditional method of teaching.
- Students are motivated to improve their initiation in reaching their goals.
- Students are able to scan through the reading material available to them.
- Many of the needs of students are best met by learning process. The students are encouraged to learn by themselves for their present and future needs.
- Students are able to do better in competitive examinations and get placed in suitable companies.

9.5. Career guidance, Training, Placement (10)

(The institution may specify the facility, its management and its effectiveness for career guidance including counseling for higher studies, campus placement support and industry interaction)

Career guidance, Training, Placement

NHCE offers career guidance and placement on all aspects of career planning, job searching and post-graduate studies. College will provide individual counseling for all the students towards reaching goals.

I. Availability of career guidance facilities:

- The college has career guidance and placement cell with 14 full time staff members, including a full time placement officer to provide career guidance and placement training to the students.
- The placement cell organizes on-campus and off-campus recruitments and pre placement training programs in aptitude test, group discussions, interviews and presentation.
- Mock interviews and GDs are conducted on a regular basis so as to equip final and pre-final students to face the challenges of recruitment scenario.

II. Career guidance, Training, Placement committee management

Table 9.5a: Details of Career guidance, Training, Placement committee members

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Dr.S.Sujitha	Assoc. Prof.- EEE	Member
3	Dr. Mohan Kumar Naik	Assoc.- ECE	Member
4	Prof. GirishTilak	Asst. Prof.- AU	Member
5	Prof. Govinda Raj	Asst. Prof.- MCA	Member
6	Prof.Sudharshan	Asst. Prof.- ME	Member
7	Prof. Bopanna K. D.	Asst. Prof.- ME	Member
8	Prof. Dasegowda	Assoc. Prof.- BT	Member
9	Mr.Sivabalan	Asst. Prof.- CSE	Member
10	Ms.Vandana C P	Asst. Prof.- ISE	Member
11	Ms. P. Suma	Asst. Prof. – CivilEngg.	Member
12	Dr.Sheelan Mishra	HOD-MBA	Member
13	Dr.Sainath	Professor- MBA	Member
14	Mr.Binod Kumar	Training & Placement Officer	Member

	Singh		
15	Mr. Mahesh Prasad	Training & Placement Officer	Member
16	Mr.RajendraDama	Training & Placement Officer	Member
17	Mr.Pavan Kumar M.	Training & Placement Officer	Member
18	Ms.Manisha Joshi	Training & Placement Officer	Member
19	Mr.AnisMirza	Training & Placement Officer	Member
20	Mr.Gopalakrishna	Training & Placement Officer	Member
21	Mr. Ravi Shankar	Training & Placement Officer	Member
22	Mr. Issac Gabrial	Training & Placement Officer	Member
23	Mr.Viswas	Student Representative	Member
24	Mr.Rajith Bose M.	Student Representative	Member
25	Mr.YashasBharadwaj	Student Representative	Member
26	Mr. Jai Kumar	Student Representative	Member
27	Dr.Lakshminarayana G.	Director- Training & Placements	Member-Secretary

III. Career guidance and placement cell activities:

1. Review of eligibility students and contact sessions with eligible non-placed students.
2. Internships, Internship – cum – Placements, placements for all the students are planned time to time.
3. Training and Placement Officer (TPO) orients students on core companies' opportunities and preparations required for placements.
4. TPO attempts to tap companies for remaining student's placements and invite them for internships, internship –cum – placements.
5. TPO with HOD identifies students who require Soft skills training that is forwarded to Head – Life skills for necessary training sessions. Similarly students who require aptitude development sessions are provided with additional sessions either through vendors and or internal resources.
6. Industry collaboration activities are with VMWARE, HP, SAP, ADOBE, SCHNEIDER ELECTRIC, CISCO SYSTEMS and QUEST GLOBAL IIOT etc.

IV. Pre-Placement Training

- Aptitude Development training sessions are conducted for all programmes of UG.
- VistaMind, Ethnus Consultants, Focus Academy for creative Education are engaged to conduct Aptitude Development training which is scheduled as part of academic schedules.

- Soft skills development sessions are scheduled for all UG programmes. PCC India handles Soft skills for all these students by the seasoned trainers experienced in corporate orientation.
- Technical and domain related sessions are conducted as Value Added Programmes in applied areas of Information Science and Engineering to empower the student with the essential skill to explore them in both academically and industrially.

Table 9.5b: Value added programme options offered at Information Science & Engineering Department

Sl. No.	Academic Year	Sem	No. of participants	Training
1	2017-18	5 th sem	49	Java with Android Application Development
2	2016-17	4 th sem	49	CCNA Training Programme
		6 th -7 th sem	31	Oracle Java Certification Programme
		8 th sem	27	Python Training Programme
3	2015-16	4 th sem	25	CCNA Training Programme
		6 th sem	31	Core Java (Oracle)
		8 th sem	50	Microsoft C# & .Net

Value Added Courses Increases placement-opportunities for our students in IT industry.

V. Career guidance, Training & Placement Department

Director (Training & Placement)	-	1
Senior Manager (Training & Placement)	-	1
Manager (Training & Placement)	-	1
Senior Training & Placement Officers	-	4
Training & Placement Officers	-	2
Assistant Training & Placement Officers	-	1
Office Assistant	-	1

NEW HORIZON SCHOLAR PROGRAM has focused an initiative to tap potential students at 2nd & 3rd year level and groom them to the best possible opportunities in Corporate, Government or Higher Education purposes. The following interventions are provided for the selected students.

- Conduct problem solving and troubleshooting sessions by highly accomplished people in industry / institutions.
- Expose them on areas beyond the engineering textbooks – such as economy, emerging business areas, international affairs, social and ethical issues etc.,.
- Focused technology sessions such as Big Data Analytics, SMAC (Social Media – Mobility Analytics – Cloud Computing), Digital marketing etc.
- Motivation sessions by high achievers in business, placement, entrepreneurship etc.
- Sessions on emerging technologies like Internet of Things (IOT), Artificial Intelligence (Artificial Neural Network), Cyber Security and Ethical Hacking, Big data.
- Fundamental training and application skills for non-circuit branches.

Selection of students: Students are selected at 3rd / 4th semester level by heads of departments. The criteria for selection of students is broadly based on academic performance and exceptionally good students who may not be top in class but have the potential to excel in studies if they are given required support.

Operational arrangements: Identified students are provided an environment for each other to discuss debate and interact on their thoughts at regular intervals. An exclusive space of about one class room size is provided with necessary aids within the room such as journals, some latest books on innovation, creativity. Two computers with internet connectivity and Air Conditioning facility provided. This space can be branded and showcased for other students to aspire to belong this group.

VI. Career counseling for higher studies

Career guidance and motivational lectures by Alumni, entrepreneurs, External guests and faculty are organized frequently.

Organizing coaching classes for competitive exams

- The placement cell organizes seminars on higher studies and conduct aptitude training sessions.
- Many books and periodicals are available in the library for the students to enable them to prepare for various Civil service and competitive exams.

Skill development (Spoken English, Computer Literacy etc.)

Communicative English has been additionally incorporated into the curriculum. The English Language communication lab with a capacity of 30 consoles has been set up with innovation.

VII. Industry interaction for training / Internship / Placement

- 1) Department arranges industrial visits every semester for students to make them enriched with the required skills for the placements and academic progression.
- 2) A separate industrial visit coordinator is deputed to organize all the activities related to industry.
- 3) Experts are called from various MNCs and other industries to give lectures on recent domain based advancements, high throughput and cutting edge technologies & mechanisms; the state of art research topics, latest software's to bring enhance the knowledge in applied areas of information science.
- 4) Industry academia interactions are further strengthened by sending the students for internship in companies according to MOUs signed by both college and industry.
- 5) There is industry interaction cell at college taking care of all the activities related to industry. This cell is sending students during semester break to various companies for internships.

Industry – Institute Collaboration Activities: The purpose of Industry Institute Collaboration cell which shall be referred to as IIC hereon is to ensure a paradigm shift in the thought process of a New Horizon student from J2C (Job to Career). This should lead a student towards identification of a SMART CAREER GOAL. Taking a step further, IIC would endeavor to establish connect between eminent faculty members and the relevant industries to join hands and work towards mutually and beneficial and relevant Assignments/projects. The prime aim of IIC is to work towards making New Horizon College of Engineering, a respectable and most sort after Engineering college which provides the best amalgamation of innovation, entrepreneurship development, skill up gradation, passion and aptitude along with sound theoretical subject knowledge which in turn makes our student industry ready and innovators of tomorrow so that they can pursue their passion and think beyond job.

Table9.5c:MOUs from the Institute

Sl. No.	Description of MoU	Area of collaboration	PO'S and PSO's attained
1.	VMware Software India Private Limited, Bengaluru	VMware Virtualization Essentials	PO1, PO2, PO3, PO4, PO5, PO9, PO10, PO11, PO12 PSO1, PSO2

2.	Hewlett-Packard, Bengaluru	Big Data and Data Analytics	PO1, PO2, PO3, PO4, PO5, PO9, PO10, PO11, PO12 PSO1, PSO2
3.	Wipro-Adobe Digital Initiative, Bengaluru	Digital Marketing Communication	PO1, PO2, PO3, PO4, PO5, PO9, PO10, PO11, PO12 PSO1, PSO2
4.	SAP Labs India, Bengaluru	SAP software for Academic Research and Teaching	PO1, PO2, PO3, PO4, PO5, PO9, PO10, PO11, PO12 PSO1, PSO2
5.	Schneider Electric, Bengaluru	Modern Technical Platform for training in Electricity, Automation and Energy Management	PO1, PO2, PO3, PO4, PO5, PO9, PO10, PO11, PO12 PSO1, PSO2
6.	CISCO Systems, Bengaluru	Networks	PO1, PO2, PO3, PO4, PO5, PO9, PO10, PO11, PO12 PSO1, PSO2
7.	Quest Global IIOT, Bengaluru	Software Application Development and Testing of IIOT stack for Ready to Deploy (R2D) Resources	PO1, PO2, PO3, PO4, PO5, PO9, PO10, PO11, PO12 PSO1, PSO2

VIII.Placement process and support for students

1) Eligibility for campus placements

- a) Standard companies such as product companies, software solution companies. Core companies allow students with 60% and above marks in their current course without any backlogs as on the date of recruitment and minimum aggregate of 70% attendance in all the training programs conducted by New Horizon.

- b) Dream company opportunities for students are given at the discretion of NHCE. However students can submit a letter to placement office indicating their choice of 'Dream Company' at least one day before the dream company's campus recruitment event at NHCE.
- c) The following category of students will be provided opportunities in Technical support, Technical writing, Techno-Commercial sales, Technical service, Business Analytics and other profiles.
- Students with less than 60% marks but cleared all subjects in their current course.
 - Those who have less than 70 aggregate attendance in all training programs.
 - Those students with year backs.
 - Students, who skip participating recruitment drives two times for 1 category companies above, would be brought under category 3 companies.
- d) Students who have more than ONE backlog at 7th semester Engineering level are provided with some opportunities.

2) NHCE Training & Placement team

- a) Each department has a faculty placement coordinator for a better coordination and timely flow of information about the training and placements to the concerned.
- b) Each department (section wise) has two student coordinators (one male and one female)
- c) A training coordinator monitors the task assigned to all the department faculty coordinators and the student coordinator

IX. Efficacy of career Guidance, Training, Placement

Table 9.5d: Impact of career guidance, training, placement and certification

Sl. No.	Academic year	Total no. of students	No. of students placed	No. of students admitted to higher studies	No. of Entrepreneurs
1	2016-17	94	83	6	4
2	2015-16	97	86	3	2
3	2014-15	106	92	6	1

9.6 Entrepreneurship Cell (5)

(The institution may describe the facility, its management and its effectiveness in encouraging entrepreneurship and incubation)

Entrepreneurship cell

- NH-EDC was established in August 2011, under the aegis of Department of Management Studies. NH-EDC is headed by Dr. Sheelan Mishra, Prof. & HoD - MBA with a team of faculty coordinators from other departments of the college.
- The goal of NH-EDC is to assist students, entrepreneurs, including Institutes' faculty, with pre-venture, start-up or existing business with financial management, marketing, technology and product development and commercialization issues.
- Working in collaboration with National Entrepreneurship Network (NEN), since its inception, NH-EDC has conducted various activities for the college students creating and promoting entrepreneurship awareness at the campus. E-week is one of such initiatives where array of activities are conducted raising the spirit of innovation and creativity which are considered as sparkplugs of entrepreneurship.
- The students are given latest inputs about the industry, the changes happening and the expectations just to make them understand the employability options and opportunities to control unemployment and create better opportunities for youngsters.

I) Entrepreneurship Initiatives

- a) To create an environment for self-employment, promote innovation, incubation and Entrepreneurship development through formal and non-formal programs
- b) To introduce the concept of Entrepreneurship in curriculum at degree levels
- c) To develop management personnel at appropriate levels for non-corporate and unorganized sectors like education, rural development, small-scale industry etc
- d) To utilize the infrastructure facilities and technically trained manpower for the development of non-corporate and unorganized sectors.
- e) To promote employment opportunities
- f) Technology Commercialization Assistance and Management Evaluation
- g) Intellectual Property Rights/Management
- h) Help with Regulatory Compliance
- i) Feasibility Study (Technical and Financial)
- j) Help with Business Basics
- k) Marketing Assistance/Market Research/Pilot Study/Test Marketing.

- l) Enhancement of Marketing Skills, Commercialization/: Access to Bank Loans, Loan Funds and Guarantee Programs and Access to Angel Investors or Venture Capital etc
- m) Business Structuring Advisory: Help with Accounting/Financial Management/ Company Formation/Management Team Identification/HR Services
- n) Help with Presentation Skills and Business Etiquettes
- o) Comprehensive Business Training Programs

II) Entrepreneurship Development Cell facilities:

Table 9.6a: List of Entrepreneurship Development Cell facilities and physical infrastructure at NHCE

Sl. No.	Description	Number
1	Computer	3
2	Printer	3
3	Scanner	1
4	LCD Projector	1
5	Interactive White Board	1
6	Furniture	Tables-5, Chairs-30
7	Seminar Halls/Conference Rooms	1
8	Discussion Rooms	1
9	Video Conferencing Facilities	50 Seats
10	Incubation Space (Cubicles)	1000 Sq.mt
11	Office Space	250 Sq.mt

III) Entrepreneurship Development Cell Committee Management

Table 9.6b: Details of Entrepreneurship Development Cell committee members

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr. Manjunatha	Principal	Chairman
2	Dr. Gopala Krishnan	Dean R&D	Member
3	Mrs. Smitha B S	Asst. Prof.-AU	Member
4	Dr. H Ananda Vardhan	HOD-BT	Member
5	Mr. Surendra B V	Professor-Civil	Member
6	Mrs. Gagan Mithra	Asst. Prof.-CSE	Member
7	Mr. Aravinda K	HOD-ECE	Member
8	Mr. Mohan B S	Asst. Prof.-EEE	Member
9	Mrs. Preethi	Asst. Prof.-ISE	Member
10	Dr. V Asha	Asso. Professor- MCA	Member
11	Dr. Sheelan Mishra	HOD-MBA	Member-Secretary

IV) Effectiveness of EDC cell

Following list provide the effectiveness of the EDC cell in developing the student skills to a level of Entrepreneur. List of Entrepreneurs is given below:

Table 9.6c: List of Student Entrepreneurs from Department of Information Science and Engineering

Sl. No	Academic Year	Name of the Entrepreneur	USN	Type of Business Started	Type of Process/Product	Company Name & Place
1.	2013-2017	Shishir Umesh	1NH13IS099	Digital Marketing, Branding and Promotions	Video and Graphic Production and Content Creation	Overnight Ventures, Bangalore.
2		Sumanth Reddy	1NH13IS116	Mobile Application Development	Software	Quickconnect, Delhi.
3		Kaushik Reddy	1NH13IS045	Industrial Electronics Repair and Services	Service	Esskay Industries, Bangalore.
4		Suman Thapa	1NH13IS115	Web Development	Service	Domy solutions, Kolkata.
5	2012-16	Ashwin J M	1NH12IS018	IT Solutions	Service	Incredible Solutions Pvt. Ltd, Bangalore.
		Subhadip Mondal	1NH12IS111	IT Solutions	Service	Incredible Solutions Pvt. Ltd, Bangalore.
6	2011-15	Anjan Nicholas	1NH11IS011	Project Training and Development	Service	Seacross info solutions, Bangalore.

9.7 Co-curricular and Extra-curricular activities (10)

(The institution may specify the co-curricular and extra-curricular activities) (Quantify activities such as NCC, NSS etc.)

The college encourages the students to take part in both co-curricular and extra-curricular activities.

i) Co-curricular Activities

As a part of co-curricular activities the students are allowed to take part in paper publications, attend Technical Workshops, Conferences, Symposiums, Guest Lectures and Industrial visits.

Table 9.7a: List of co-curricular activities conducted in the Information Science and Engineering Department

Sl. No.	Name of the activity	No. of events conducted		
		CAY (2017-18)	CAY m1 (2016-17)	CAY m2 (2015-16)
1	Paper publications	-	52	21
2	Technical workshops	1	2	3
3	Industrial Visit	2	1	2
4	Guest Lectures and Invited Talks	8	6	6
5	Conferences	-	1	1
6	Symposiums	-	1	-



Figure 9.7a: Industrial Visit to SAP Labs, ITPL, Bangalore in the academic year 2016-17



Figure 9.7b: Snapshots of Technical Workshop on Cyber Security and Ethical Hacking in the year 2017



Figure 9.7c: Snap shots of Expert Talks and Guest Lectures from Industry Experts

ii) Extra-Curricular Activities

As a part of Extra-curricular activities students are allowed to participate in sports, cultural events. At the institute level, NHCE celebrates Kannada Rajyosthava, Independence day, Republic day, Engineers day, Teachers day, Dr. A P J Abdul Kalam Birthday, Deepavali

celebrations, World Food Day, Ozone Day, International Water day, Earth Day and so on. The details of various categories of activities conducted every year are listed below:

Table 9.7b: Summary of achievements of Information Science students in sport activities

Sl. No.	Name of the sport	USN of the student	Name of the student of ISE Department in	No. of tournaments participated and won in VTU/State level		
				CAY (2017-18)	CAY m1 (2016-17)	CAY m2 (2015-16)
1	Volley ball	1NH15IS112	S Baba Abhinay Charan	Winners- 5 times Runners- 3 times	Winners- 7 times Runners- 2 times	Winners- 3 times Runners- 3 times
2	Cricket	1NH15IS095	Rohith Kumar B	Winners- 1 time Runners- 2 times	Winners- 1 time	---
		1NH14IS070	Malli Venkatesh			
3	Handball	1NH14IS027	D K Ramachandra Chowdary	Winners- 1 time Runners- 1 time	Winners- 1 time Runners- 1 time	Winners-2 time
		1NH12IS027	C U Kushalappa			



Figure 9.7d: From Right to left- VI Sem ISE students Baba Abhinay Charan (1NH15IS112) and Rohit Kumar (1NH15IS094) (2015-16 Batch) with HOD –ISE and Senior Professors with Volley Ball winners trophy and Cricket runners trophy.



Figure 9.7e: New Horizon Cricket team at AMC College of Engineering with Runners Trophy - Cricket Tournament 2017

Available sports facilities in the institute:

Table 9.7c: List of outdoor games available in the campus

Sl. No.	Name of the sport facility	Place of availability	Whether available beyond regular timings
1	Volley ball	Open ground	YES
2	Basket ball		
3	Foot ball		
4	Hand ball		
5	Kabaddi		
6	Throw ball		
7	Kho-kho		
8	Cricket		
9	Shot put		
10	Badminton		



Figure 9.7f: Open Ground in the campus

Table 9.7d: List of indoor games available in the campus

Sl. No.	Name of the sport facility	Place of availability	Whether available beyond regular timings
1	Carrom	Students Recreation Centre	YES
	Chess		
	Table tennis		
2	Basket ball	Indoor stadium	YES
	Volley ball		
	Badminton		



Figure 9.7g: Indoor Stadium in the campus



Figure 9.7h: Table Tennis Court and Carrom game set up in Student's Recreation Centre

Gym facility at the campus:

Indoor and outdoor gym are also available in the campus with a state-of-art equipments catering the students



Figure 9.7i: Indoor Gym in the Campus



Figure 9.7j: Outdoor Gym in the Campus

Table 9.7e: Summary of Annual Intercollegiate Cultural fest “IMPETUS” in Information Science and Engineering department

Sl. No.	Year	Date	Participants	Chief Guest
1	2015-16	6 th May 2016	Students from Engineering colleges across city	Ms. Shravya Rao (Model & South Indian Actress)
2	2014-15	28 th April 2015	Students from Engineering colleges across city	Ms. Sindhu Lokanath (South Indian Actress)
3	2013-14	9 th April 2014	Students from Engineering colleges across city	Ms. Sanjana (Model & South Indian Actress)





Figure 9.7k: Glimpses of Intercollegiate Cultural fest “IMPETUS” at ISE Department.

Table 9.7f: List of Annual activities in the Institute

Sl. No.	Event	Participants	Months of Conduction
1	State level Annual Cultural Fest- SARGAM	Students from Engineering colleges across city and state	2015-16 (Sept 2015) 2016-17 (Sept 2016) 2017-18 (Sept 2017)
2	National level Project Exhibition “TechHorizon”	Students from Engineering Institutions	2015-16 (21 st May 2016) 2016-17 (27 th May 2017)





Figure 9.7l: Glimpses of State level Inter-collegiate Fest ‘Sargam’



Figure 9.7m: Glimpses of Technical Project exhibition- ‘Techhorizon’

Table 9.7g: List of Extra-Curricular activities organized every year in the Institute.

Sl. No.	Name of the Event	Date of the event
1	Republic Day	26 th January
2	Independence day	15 th August
3	Teachers Day	5 th September
4	Engineers Day (Birthday of Sir. M Visvesvaraya)	15 th September
5	Kannada Rajyotsava Day	1 st November
6	Birthday of Dr. APJ Abdul Kalam	15 th October
7	Birthday of Subhas Chandra Bose	23 rd January
8	Birthday of Sardar Vallabhai Patel	31 st October

9	Birthday of Rani Channamma	14 th October
10	Birthday of Jhansi Rani	19 th November
11	International Women's Day	8 th March
12	Birthday of Shaheed Bhagat Singh	23 rd September
13	Birthday of Swami Vivekananda	12 th January
14	Birthday of Shaheed Hemu Kalani	23 rd March
15	Birthday of Major Sandeep Unni Krishnan	15 th March
16	Founders' Day	6 th July
17	Graduation day	Every year for graduated students
18	Deepavali Celebration	During Deepavali



Figure 9.7n: Republic day celebration



Figure 9.7o: Kannada Rajyotsava Celebration



Figure 9.7p: Dr.APJ Abdul Kalam Birthday



Figure 9.7q: Graduation Day



Figure 9.7r: Deepavali celebrations at campus



Figure 9.7s: Subhas Chandra Bose Birthday

iii) Student Clubs at the Institute level

New Horizon Student clubs objective is to bring engaging, stimulating, and fun events to the student body to enjoy in their recreational time, as well as to provide support and promotions for student activities on campus. It is our goal to get students engaged in their passions and interests outside of the classroom.

Table 9.7h: List of Student clubs available at the Institute

Club	Club Name	Club Logo
Dance Club	<u>EXTANTUS</u> http://newhorizonindia.edu/extra-curricular/dance/	
Music Club	<u>EXPRESSIVO</u> http://newhorizonindia.edu/extra-curricular/music/	
Art Club	<u>VIBGYOR</u> http://newhorizonindia.edu/extra-curricular/art/	
Literary Club	<u>LIT</u> http://newhorizonindia.edu/extra-curricular/literary/	
Photography Club	<u>MERAKI</u> http://newhorizonindia.edu/extra-curricular/photo/	
NSS Club	<u>NSS</u> http://newhorizonindia.edu/extra-curricular/nss/	
Socio-Political Club	<u>POLITIKOS</u> http://newhorizonindia.edu/extra-curricular/socio-political/	

Adventure Club	<u>DAUNTLESS</u> http://newhorizonindia.edu/extra-curricular/adventure/	
Fitness Club	<u>FITNESS BEAT</u> http://newhorizonindia.edu/extra-curricular/fitness/	
Media Club	<u>NHCE MEDIA</u> http://newhorizonindia.edu/extra-curricular/media/	
Fashion Club	<u>FASHIONISTA</u> http://newhorizonindia.edu/extra-curricular/fashion/	
Leo Club	<u>LEO</u> http://newhorizonindia.edu/extra-curricular/leo/	
Green Club	<u>Green Warriors</u> http://newhorizonindia.edu/extra-curricular/green/	

iv) National Service Scheme (NSS):

NSS is a voluntary association of young people in Colleges, Universities and at +2 level working for a campus-community linkage. New Horizon College of Engineering has a NSS student club which involves in various social service related activities.

Table 9.7i: Summary of NSS events conducted from the year 2015-2017

Sl. No.	Event Name	No. of students participated	Date
1	Kannada Rajyothsava celebration	Students of NHCE	3/11/2017
2	Visit to ISKCON temple	50	14/08/2017
3	Sapling plantation at Chikkulakshmaiah Layout	70	09/05/2017
4	Visit to Snehalaya, school for specially-abled students	20	17/03/2017
5	The Green Campus	100	16/03/2017
6	Kannada Rajyothsava celebration	Students of NHCE	05/11/2016
7	Blood donation camp (Lions club)	210	4/11/2016
8	Women Empowerment	70	17/10/2016
9	Orphanage Visit	25	02/10/2016
10	Tree Plantation	102	31/03/2016
11	Blood donation camp (NIMHANS & Kidwai Hospital, Bangalore)	143	12/9/2015
12	Blood donation camp (NIMHANS)	203	3/4/2015
13	Blood donation camp (Grace Blood Bank)	127	4/3/2015



Figure 9.7t: Kannada Rajyosthava Celebration



Figure 9.7u: Green Campus Awareness program



Figure 9.7v: Sapling plantation at Chikkulakshmaiah layout



Figure 9.7w: Prasadam distribution at ISKCON temple



Figure 9.7x: Leo Club activity-Blood Donation Camp

CRITERION : 10	Governance, Institutional Support and Financial Resources	120
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10. GOVERNANCE, INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES (120)**10.1.Organization, Governance and Transparency (40)****10.1.1. State the Vision and Mission of the Institute (5)**

(Vision statement typically indicates aspirations and mission statement states the broad approach to achieve aspirations)

VISION OF THE INSTITUTE

To achieve total quality in education and excellent knowledge management through specific, measurable, attainable, relevant, time-bound goals and continuous improvement methods.

MISSION OF THE INSTITUTE

To mould our students into a holistic personality accomplished in emotional, moral, intellectual, social and mental capabilities, besides inculcating a capacity for critical and lateral thinking.

MINUTES OF MEETING OF REVISED VISION AND MISSION OF INSTITUTE

At the outset the principal Dr. Manjunatha Member Secretary, welcomed and greeted the members which was followed by a formal introduction of all the members of the Governing Council. This was the first Governing Council for Dr. Visilious- Controller of Examinations.

The principal presented the agenda of the 07th Governing Council meeting.

PROCEEDINGS OF PREVIOUS GOVERNING COUNCIL:-

The principal with the permission of the Hon'ble chairperson read out the minutes of the 06th Governing Council meeting and the same was passed by the members unanimously after a brief discussion.

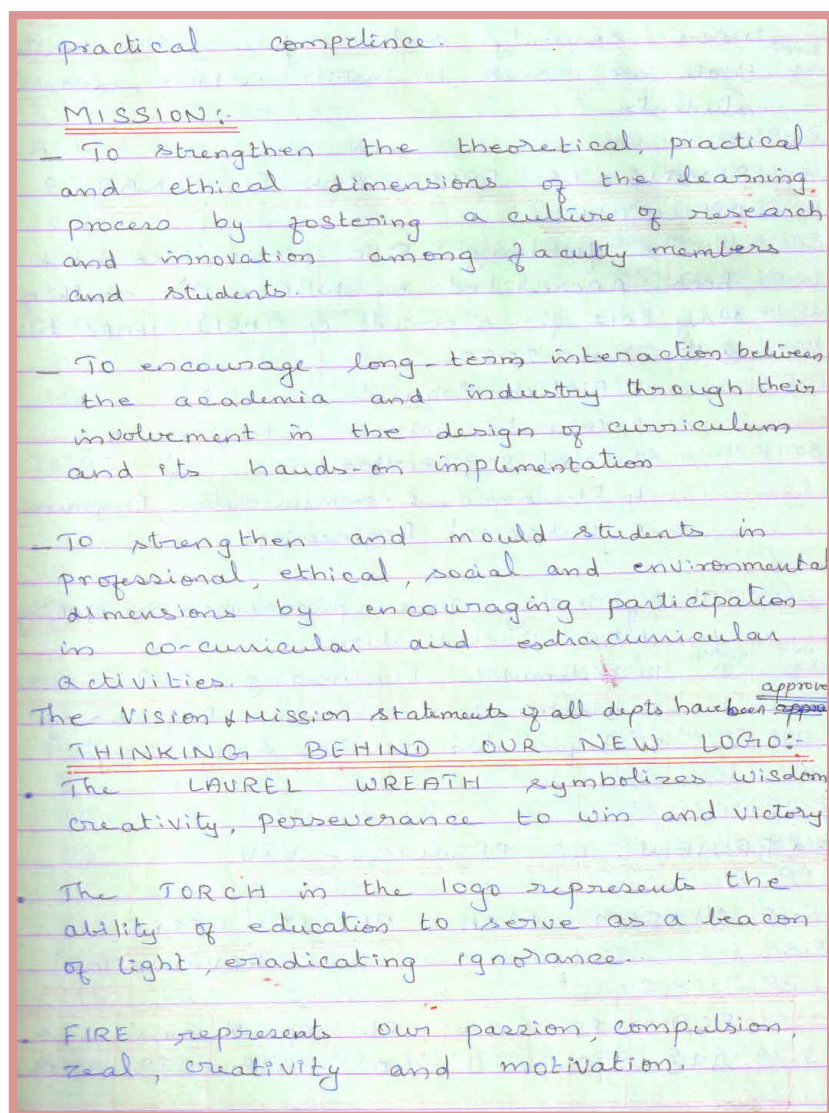
THE AGENDA OF THE MEETING ARE AS FOLLOWS:-

REVISION OF VISION, MISSION & LOGO:-

The New vision and Mission are:

VISION:-

To emerge as an institute of eminence in the fields of engineering, technology and management in serving the industry and the nation by empowering students with a high degree of technical, managerial and



10.1.2. Governing Body, Administrative Setup, Functions of Various Bodies, Service Rules, Procedures, Recruitment and Promotional Policies (10)

List the governing, senate and all other academic and administrative bodies; their memberships, functions and responsibilities; frequency of the meetings and attendance therein, in a tabular form. A few sample minutes of the meetings and action-taken reports should be annexed.

The published rules including service rules, policies and procedures; year of publication shall be listed. Also state the extent of awareness among the employees/students.

❖ **Governing Council**

The composition of the Governing Council is as follows:

Table 10.1.2.1:Governing Council

SL. NO.	MEMBER	ADDRESS	DESIGNATION	POSITION
1	Mrs. Renuka Manghnani	New Horizon College of Engineering, Marathalli, Outer Ring Road, Kadubisanahalli, Bangalore- 560 103	Executive Director, NHEI	Chairperson
2	Mr. H N Surya Prakash		Registrar	Member
3	Dr.R Bodhisatvan		Principal-NHC(M)	Member
4	Dr. Edwin Christopher		Principal-NHC(K)	Member
5	Dr. M. S. Ganesha Prasad		Dean-Student Affairs & HOD-ME	Member
6	Dr. Prashanth C S R		Dean-Academics & HOD-CSE	Member
7	Dr. Vijilius H Raj		Deputy Controller of Examinations	Member
8	Prof. S K Sinha	Professor, CEDT, IISc.,Bangalore- 560007	Educationist	Member
9	Dr. Mathew Maniwala	Professor, IIM (B), Bannerghatta Road, Bangalore- 560076	Educationist	Member
10	Prof. H. Devraj UGC Nominee	New No. 23/2 III Main Road, Gandhi Nagar, Adyar, Chennai- 600020	Commission (UGC) Nominee	Member
11	AICTE Nominee	Director, AICTE, Palace Road, Bangalore- 560001	Council (AICTE) Nominee	Member
12	DTE Nominee	Directorate of Technical Education, Bangalore – 560001	State Government Nominee	Member
13	Sri. S. B. Jangannavar	Visveswaraya Technological University, Jnana Sangama Belgavi- 590018	University (VTU) Nominee	Member
14	Dr. Manjunatha	New Horizon College of Engineering, Marathalli, Outer Ring Road, Kadubisanahalli, Bangalore- 560 103	Principal	Ex Officio Member Secretary

- The Governing Council of the college is the supreme administrative body.
- It is constituted as per the norms fixed by AICTE, New Delhi; Affiliating University and Govt. Of Karnataka.
- The Governing Council is ambitious and converts aspirations into outcomes with a rigorous framework of governance.
- The Governing Council approves the mission and strategic vision of the institution, long term business plans and annual budgets in accordance to meeting the interests of the stakeholders.
- The Head of the Institution is appointed as the Chief Executive of the Institution and suitable arrangements are made to monitor his/ her performance.
- The council ensures the establishment and monitoring systems of control and accountability including financial & operational controls and risk assessment; clear procedure for handling internal grievances.
- Governing Council monitors the institutions performance against the plans approved; and also benchmarks this against other institutions wherever possible.
- The Governing Council should ensure the achievement of the mission and vision of the organization; future academic plans and research activities should be promoted by providing direction of implementation and overall monitoring of the activities.
- Governing Council must approve the budgetary allocation towards infrastructure, staffing and R & D.
- The Chairperson is responsible for leading the governing body, is also responsible for its effectiveness and should ensure that the institution is well connected with the stakeholders.
- The Chairperson should support the head of the institution in execution of the programmes.
- Frequency of meeting of the Governing Council is minimum two times a year or whenever needed.

Major Responsibilities of the Governing Council

- To uphold the legal stature of the college in view of AICTE, UGC, State Government and affiliating University (VTU) or any other body or agency.
- To take decisions regarding the intake and addition or discontinuation of any program accordingly recommending the Principal to take formal steps with the affiliating body to put this into action.

- Fix the fee structure and any charges applicable in accordance with the recommendation of the Central Planning and Budgeting Committee and prescribed fee structure of affiliating university.
- Extension, Renovation or Procurement plans recommended by Central Planning and Budgeting Committee.
- Decide the promotions or penalties as recommended by Central Academic Monitoring Committee.
- Approve the budget and recommend necessary corrections.
- Nominate and constitute other central committees for smooth discharge of responsibilities.

Powers and Functions of the Governing Council

The Governing Council shall exercise powers and discharge the functions as follows:

- Ensure proper management, maintenance and custody of the institution in relation to land, infrastructure, equipment and funds, including loans and grants received from AICTE, Central Government and Government of Karnataka.
- To ensure good condition of the campus.
- Instructions are imparted in accordance with norms and standards prescribed by Government of Karnataka and affiliating University.
- To ensure approval of appointment of staff by way of selection committee of the institute in accordance with the norms prescribed by AICTE and Government of Karnataka.
- To ensure implementation of provision of acts, instructions , rules and regulations prescribed by AICTE and Government of Karnataka in matters of service conditions of staff relating to appointment, leave, Provident Fund, age of retirement and disciplinary actions.
- To ensure observance and compliance of instructions issued by AICTE, Government of Karnataka and affiliating University.
- To ensure that the building, land, furniture and facilities are not being used for any other purpose (such as holding political meetings, communal meetings), except for running AICTE approved courses in the institute.
- To submit reports and returns from time to time to AICTE, Government of Karnataka and affiliating University.
- Create peaceful and favourable atmosphere for study free from ragging.

Powers and Functions of Chairperson of Governing Council

- The Chairperson shall intimate the date of the Governing Council meeting to the Principal-cum-Member Secretary for arrangement of Governing Council meeting. In case the Principal-cum-Member Secretary fails or ignores to arrange Governing Council meeting, the Chairperson can call for Governing Council meeting.
- In the event of taking vote on any decision and if a tie occurs, then decision of Chairperson shall be final.
- The Chairperson shall ensure that the decisions taken in Governing Council meeting are implemented by Member Secretary.
- The Chairperson shall ensure that the Governing Council is functioning properly to meet the mission of the Institute.

Powers and Functions of Member Secretary of Governing Council

- Member Secretary of Governing Council of the Institute shall be the Principal, who executes the decisions taken in the Governing Council on behalf of the Governing Council.
- By the order of the Chairperson, Member Secretary shall arrange the Governing Council meeting. In case of unfavouring situations, he/she will intimate the cancellation of the meeting the Chairperson and other members of the Governing Council.
- He would take correspondence on behalf of the Governing Council meeting in relation with the decisions taken in it and get it confirmed by the Chairperson and members present. With confirmation, the proceedings would be forwarded to AICTE, Government of Karnataka and affiliating University.
- The Member Secretary would maintain the properties of the institution and remain in-charge of it, the title deeds and papers related to the need of the institution.
- He will exercise powers and functions as maybe imposed and assigned by the Governing Council from time to time.
- The Member Secretary would issue appointment letters to the staffs selected by the Recruitment Committee after the approval from the sponsoring trust and the Governing Council of the institute.

❖ College Committees

A number of committees are present in the college that are formed taking into the considerations of the students and faculties. There is diversification that ensures that the committees address any issues faced by the stake holders and also aims for the

improvements under the purview of the respective committees. The various committees and their in-charges are as follows:

Table 10.1.2.2: College Committees

SL. NO.	COMMITTEES	IN-CHARGES	DESIGNATION
1	Accreditation Committee	Dr. M. S. Ganesha Prasad	Dean-Student Affairs &HOD-ME
2	Admission Committee	Mr. H N Suryaprakash	Registrar
		Ms. Aruna	Head- Admissions
3	Alumni Committee	Dr. M. S. Ganesha Prasad	Dean-Student Affairs &HOD-ME
4	Anti- Ragging Committee	Mr. H N Suryaprakash	Registrar
		Dr. M. S. Ganesha Prasad	Dean-Student Affairs & HOD-ME
5	Anti- Sexual Harassment Committee	Mrs. Padma Narayanamurthy	Asso. Professor- Chemistry
6	Co- Curricular Committee	Dr. Asha V	Assoc. Prof. - MCA
7	Community Development Centre(Public Welfare Committee)	Mr. H N Suryaprakash	Registrar
		Ms. Deepa Ganesh	HOD- Marketing & Branding
8	Counselling Committee	Dr. M. S. Ganesha Prasad	Dean-Student Affairs & HOD-ME
9	Cultural Committee	Dr. Anitha S. Rai	Head- Library & Information Centre
10	Curriculum Development Committee	Dr. C S R Prashanth	Dean- Academics & HOD-CSE
11	Disciplinary Committee	Dr. M. S. Ganesha Prasad	Dean-Student Affairs & HOD-ME
12	Energy Conservation Audit Committee	Dr. R Elumalai	HOD-EEE
		Mr. Karthik	Estate Manager
13	Examination Committee	Dr. Vijilius Helena Raj	Deputy Controller of Examinations (Autonomous)
14	Finance Committee	Mrs. Malathi Madhusudan	Director- Accounts and Finance
15	Hostel (Boys) Development & Welfare Committee	Mr. H N Suryaprakash	Registrar
16	Girls Hostel Development & Welfare Committee	Ms. Aruna	Head- Admissions
17	Infrastructure Development Committee	Dr. P S Niranjan	Head- GPE Program & HOD- Civil Engg.
		Mr. Rao	Project Manager

18	In-Plant Training/ Industrial/ Career Guidance/ Placement Committee	Dr. Lakshminarayana G.	Director- Training & Placements
19	Instrumentation Cell	Prof. Mani Laxman Aiyar	HOD- ECE
20	Internal Quality Assurance Cell	Dr. K. Gopala Krishnan	Dean- R & D
		Dr. M. S. Ganesha Prasad	Dean-Student Affairs & HOD-ME
21	Library Committee	Dr. Anitha S. Rai	Head- Library & Information Centre
22	NCC Committee	Dr. M. S. Ganesha Prasad	Dean-Student Affairs & HOD-ME
		Mr. H N Suryaprakash	Registrar
23	NSS Committee	Dr. Anitha S. Rai	Head- Library & Information Centre
24	News Letter Committee	Dr. Chinnaiyan	Assoc. Prof. ISE
25	Physical Education & Sports Committee	Mr. Suryaprakash H.N	Registrar
		Mr. Vinay J.T.	Physical Education Director
26	Professional Societies	Dr. K. Gopala Krishnan	Dean- R & D
27	Public Relations & Marketing Committee	Ms. Deepa Ganesh	HOD- Marketing & Branding
28	Purchase Committee	Mrs. Malathi Madhusudan	Director- Accounts & Finance
		Mr. H N Suryaprakash	Registrar
29	Recruitment Cell	Ms. Manjula V.	Head- HR
30	Research & Development Committee	Dr. K. Gopala Krishnan	Dean- R & D
31	SC/ST Welfare Cell	Mr. H N Suryaprakash	Registrar
32	Software / Hardware Training Committee	Dr. C S R Prashanth	Dean- Academics & HOD-CSE
33	Staff Grievances Redressal Committee	Ms. Manjula V.	Head- HR
34	Staff Welfare Committee	Ms. Manjula V.	Head- HR
35	Student Mentoring Committee	Dr. M. S. Ganesha Prasad	Dean-Student Affairs & HOD-ME
36	Students Grievances Redressal Committee	Dr. M. S. Ganesha Prasad	Dean-Student Affairs & HOD-ME
37	Value Added Programs Committee	Dr. P S Niranjana	Head- GPE Program & HOD- Civil Engg.
38	Women Empowerment Committee	Mrs. Padma Narayanamurthy	Asso. Professor- Chemistry
39	Entrepreneurship Development Cell Committee	Dr. Sheelan Mishra	Head- MBA

❖ **Accreditation Committee**

As an upcoming engineering college in Bangalore as well as in Karnataka, the college which is already recognised by accreditation councils has formed this committee to look into the requirements for upcoming state and national level accreditations.

Table 10.1.2.3: Accreditation Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Mr. H N Suryaprakash	Registrar	Member
3	Dr. C S R Prashanth	Dean- Academics	Member
4	Dr. K. Gopala Krishnan	Dean- R & D	Member
5	Dr.Sheelan Mishra	HOD- MBA	Member
6	Dr.Anitha S Rai	Head- Library & Information Centre	Member
7	Dr. M. S. Ganesha Prasad	Dean-Student Affairs &HOD-ME	Member-Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	08-08-2017	5	2
	12-06-2017	7	Nil
CAYm1 (2016-17)	10-02-2017	7	Nil
	19-08-2016	7	Nil
	05-07-2016	7	Nil
CAYm2 (2015-16)	25-02-2016	6	1
	19-08-2015	All	Nil
CAYm3 (2014-15)	11-05-2015	All	Nil
	17-10-2014	All	Nil
CAYm4 (2013-14)	10-04-2014	All	Nil
	20-08-2013	06	1
CAYm5 (2012-13)	01-02-2013	6	1
	25-07-2012	All	Nil

❖ **Admission Committee**

This is an integral committee of the institute that deals with the admission of the students into the various undergraduate and postgraduate programs. Based on the students' qualifications and rankings in entrance exams, this committee provides admissions to the students to pursue their course of choice.

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Mr. H N Suryaprakash	Registrar	Member
3	Mrs.MalathiMadhusudan	Director- Accounts & Finance	Member
4	Ms.Manjula V.	Head- HR	Member
5	Ms.Aruna	Head- Admissions	Member-Secretary

Table 10.1.2.4: Admission Committee

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	09-04-2018	All	Nil
CAYm1 (2016-17)	04-04-2017	All	Nil
CAYm2 (2015-16)	20-04-2016	All	Nil
CAYm3 (2014-15)	13-04-2015	All	Nil
CAYm4 (2013-14)	22-04-2014	All	Nil
CAYm5 (2012-13)	18-04-2013	All	Nil

❖ **Alumni Committee**

Alumina of an educational institute contributes a lot to the growth of the organization. Besides being a major stakeholder of the institute, they give guidance and feedback to their juniors with respect to their career opportunities. This committee was constituted to keep constant rapport with the alumni.

Table 10.1.2.5: Alumni Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Dr.C S RPrashanth	Dean- Academics	Member
3	Dr. P S Niranjan	Head- GPE Program &HOD- Civil Engg.	Member
4	Dr. R Elumalai	HOD- EEE	Member
5	Dr.JitendranathMungara	HOD- ISE	Member
6	Dr.SheelanMishra	HOD- MBA	Member
7	Dr.Ilango V.	HOD- MCA	Member
8	Dr.Revathi V.	HOD- Physics	Member
9	Dr. M S Ganesha Prasad	Dean-Student Affairs & HOD-ME	Member-Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	04-08-2017	7	2
	05-07-2017	5	4
CAYm1 (2016-17)	11-01-2017	8	1
	14-12-2016	9	Nil
	10-08-2016	8	1
CAYm2 (2015-16)	12-05-2016	19	02
	19-11-2015	18	03
CAYm3 (2014-15)	09-04-2015	20	01
	15-10-2014	20	01
CAYm4 (2013-14)	06-05-2014	All	Nil
	19-11-2013	19	02
CAYm5 (2012-13)	06-02-2013	20	01
	28-07-2012	17	04

❖ **Anti-Ragging Committee**

Ragging is a very common problem faced by students in the campus during and after college hours. The consequences of students who faced ragging are very serious and shocking. Thus this committee was constituted to control ragging and provide relief to students who come under this shadow. The committee has the powers to take stringent action on students involving in such activities. Committee comprises of the following members.

Table 10.1.2.6: Anti-Ragging Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Mr. H N Suryaprakash	Registrar	Member
3	Ms.Aruna	Head- Admissions	Member
4	Dr. C S R Prashanth	Dean- Academics	Member
5	Dr.Revathi V.	HOD- Physics	Member
6	Ms.HariniGovindan	Student Counsellor	Member
7	Mr.Devraj R.	Senior Warden- Boys Hostel	Member
8	Ms. Shanti P.	Senior Warden- Girls Hostel	Member
9	Mr. Harish	Student Representative	Member
10	Ms.Bhavana	Student Representative	Member
11	Ms.Sreeja	Parent	Member
12	Mr.Karthik	Parent	Member
13	Mr.Nanjundiah	BEO (Retd.)	Member
14	Police Inspector- Marathalli Police Station		Member
15	Dr. M S Ganesha Prasad	Dean-Student Affairs & HOD-ME	Member-Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	22-01-2018	14	01
	20-07-2017	13	02
CAYm1 (2016-17)	11-01-2017	14	01
	23-07-2016	13	02
CAYm2 (2015-16)	21-01-2016	14	01
	22-07-2015	13	02
CAYm3 (2014-15)	20-01-2015	14	01
	16-07-2014	All	Nil
CAYm4 (2013-14)	27-01-2014	14	01
	31-07-2013	All	Nil
CAYm5 (2012-13)	21-01-2013	13	02
	26-07-2012	14	02

❖ **Anti-Sexual Harassment Committee**

Sexual Harassment is a very sensitive issue and the students facing such problems will not be in a mind-set to address these issues. Thus this committee was constituted to tackle such problems and help the students. Powers are vested in the hands of the committee to take stringent action on students involving in such activities. The committee is constituted as follows.

Table 10.1.2.7: Anti-Sexual Harassment Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Ms.Manjula V.	Head- HR	Member
3	Ms.Aruna	Head- Admissions	Member
4	Dr.Revathi V.	HOD- Physics	Member
5	Ms.RevathiSrinivasan	Student Counselor	Member
6	Ms.Shanthi P.	Senior Warden- Girls Hostel	Member
7	Ms.Vijaya	Advocate	Member
8	Police Inspector- MarathalliPolice Station		Member
9	Ms.Bhavana	StudentRepresentative	Member
10	Mrs. Padma Narayanamurthy	Asso. Professor- Chemistry	Member- Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	02-01-2018	All	Nil
	20-09-2017	09	01
CAYm1 (2016-17)	17-09-2016	All	Nil
	10-08-2016	09	01
	06-08-2016	09	01
CAYm2 (2015-16)	22-09-2015	07	03
CAYm3 (2014-15)	16-02-2015	09	01
	25-09-2014	All	Nil
CAYm4 (2013-14)	28-03-2014	09	01
	20-09-2013	All	Nil
CAYm5 (2012-13)	21-02-2013	09	01
	22-10-2012	09	01

❖ **Co-curricular Committee**

This committee of the college is constituted to look into the likes of the students, besides academics. Aimed at ensuring an overall development of the youngsters, the committee promotes various activities by forming clubs involving students, helping them excel in competitions.

Table 10.1.2.8: Co-Curricular Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Dr.Anitha S. Rai	Head- Library & Information Centre	Member
3	Prof. Krishna Chandra	Asst. Professor-MCA	Member
4	Prof. Rakesh C.	Asst. Professor-ME	Member
5	Prof. Aravinda	HOD - ECE	Member
6	Akarsh R.	Student Representative	Member
7	Chandan Kumar V.T.	Student Representative	Member
8	Santhosh Kadali	Student Representative	Member
9	Dr.Asha V.	Asso. Professor - MCA	Member- Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	17-01-2018	All	Nil
	14-08-2017	08	01
CAYm1 (2016-17)	19-01-2017	All	Nil
	11-10-2017	08	01
CAYm2 (2015-16)	18-07-2016	08	01
	08-12-2015	06	02
CAYm3 (2014-15)	15-12-2014	All	Nil
	04-07-2014	06	02
CAYm4 (2013-14)	18-12-2013	All	Nil
	18-07-2013	08	01
CAYm5 (2012-13)	21-05-2013	06	03
	18-12-2012	08	01

❖ **Community Development Centre (Public Welfare Committee)**

This committee looks into the interest and development of the faculties and students of the college. Issues pertaining to campus facilities are addressed to this committee who resolve it.

Table 10.1.2.9: Community Development Centre (Public Welfare)

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Mr. H N Suryaprakash	Registrar	Member
3	Mrs.MalathiMadhusudan	Director- Accounts & Finance	Member
4	Ms.Manjula V.	Head- HR	Member
5	Ms.Deepa Ganesh	Head- Marketing & Branding	Member- Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	24-01-2018	All	Nil
CAYm1 (2016-17)	23-01-2017	All	Nil
CAYm2 (2015-16)	11-01-2016	All	Nil
CAYm3 (2014-15)	12-01-2015	All	Nil
CAYm4 (2013-14)	03-01-2014	All	Nil
CAYm5 (2012-13)	07-01-2013	All	Nil

❖ **Counselling Committee**

An essential committee in the college addressing issues of students. This committee was constituted to help distracted, diverted and students who lack concentration in studies to get back to studying. The committee includes the counsellors who assist and guide the students to get back to the curriculum.

Table 10.1.2.10: Counselling Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Ms.HariniGovindan	Student Counsellor	Member
3	Ms.RevathiSrinivasan	Student Counsellor	Member
4	Dr.Sudha Thomas	Student Counsellor	Member
5	Ms. Cynthia M. War	Student Counsellor	Member
6	Ms.Rakhi N. Gopan	Student Counsellor	Member
7	Ms.Sunitha	Student Counsellor	Member
8	Dr. M. S. Ganesha Prasad	Dean-Student Affairs &HOD-ME	Member- Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	05-02-2018	07	01
	08-11-2017	07	01
	02-08-2017	06	02
CAYm1 (2016-17)	23-01-2017	05	03
	26-10-2016	08	Nil
	15-09-2016	07	01
	03-08-2016	07	01
CAYm2 (2015-16)	10-05-2016	07	01
	18-10-2015	06	02
CAYm3 (2014-15)	23-04-2015	07	01
	16-10-2014	All	Nil
CAYm4 (2013-14)	29-04-2014	All	Nil
	30-10-2013	All	Nil
CAYm5 (2012-13)	28-03-2013	All	Nil
	28-09-2012	All	Nil

❖ **Cultural Committee**

Based on the lines of the Co-curricular committee, the Cultural committee helps the students to distinguish themselves apart from their curriculum. Students are encouraged to take part in various cultural events in college and other colleges and showcase their talents.

Table 10.1.2.11: Cultural Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Dr.Revathi V.	HOD-Physics	Member
3	Dr.Asha V.	Asso. Professor-MCA	Member
4	Prof. Kavitha	Asst. Professor-ISE	Member
5	Prof. Shailaja	Asst. Professor-Life Skills	Member
6	Prof. Rakesh C.	Asst. Professor-ME	Member
7	Mr.Amrithnath	Student Representative	Member
8	Ms.Harshitha	Student Representative	Member
9	Dr.Anitha S. Rai	Head- Library & Information Centre	Member- Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	05-02-2018	08	01
CAYm1 (2016-17)	01-08-2017	All	Nil
CAYm2 (2015-16)	11-08-2016	08	01
	07-10-2015	08	01
CAYm3 (2014-15)	21-08-2015	All	Nil
	17-11-2014	08	01
CAYm4 (2013-14)	05-08-2014	All	Nil
	19-11-2013	08	01
CAYm5 (2012-13)	22-07-2013	All	Nil
	19-01-2013	All	Nil

❖ Curriculum Development Committee

This committee is essential with respect to the framing of the academic syllabus for undergraduate and postgraduate courses across all departments. The committee involving the Heads of all the Departments aims at framing a curriculum that brings out syllabus that meets the outside/ industry requirements and at the same time ensures teaching is done in a very effective way.

Table 10.1.2.12: Curriculum Development Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Dr. M. S. Ganesha Prasad	Dean-Student Affairs &HOD-ME	Member
3	Dr. P S Niranjana	Head- GPE Program &HOD- Civil Engg.	Member
4	Dr.JitendranathMungara	HOD- ISE	Member
5	Prof. C.K.Aravindha	HOD - ECE	Member
6	Dr. R Elumalai	HOD- EEE	Member
7	Dr.AnandaVardhan	HOD-BT	Member
8	Dr.SheelanMishra	HOD- MBA	Member
9	Dr.Ilango V.	HOD- MCA	Member
10	Dr.RevathiV.	HOD- Physics	Member
11	Dr. V.S. Anusuya Devi	HOD- Chemistry	Member
12	Dr. C S R Prashanth	Dean- Academics	Member- Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	08-02-2018	All	Nil
CAYm1 (2016-17)	16-10-2017	All	Nil
CAYm2 (2015-16)	20-01-2016	All	Nil
	10-06-2015	All	Nil
CAYm3 (2014-15)	02-02-2015	All	Nil
	27-10-2014	All	Nil
CAYm4 (2013-14)	20-01-2014	11	01
	29-07-2013	All	Nil
CAYm5 (2012-13)	16-01-2013	All	Nil
	10-09-2012	All	Nil

❖ **Disciplinary Committee**

Indiscipline is a serious aspect of concern amongst students owing to peer pressure and other kinds of distractions around them. Their behaviour changes and they react differently to various situations. This committee monitors the students and ensures that no indiscipline happens. Also, in the event of any indiscipline activities, action is taken by the committee.

Table 10.1.2.13: Disciplinary Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Mr. H N Suryaprakash	Registrar	Member
3	Dr.Lakshminarayana G.	Director- Training & Placements	Member
4	Dr. C S R Prashanth	Dean- Academics	Member
5	Dr. P S Nirajan	Head- GPE Program &HOD- Civil Engg.	Member
6	Dr. R Elumalai	HOD- EEE	Member
7	Dr.JitendranathMungara	HOD- ISE	Member
8	Dr.SheelanMishra	HOD- MBA	Member
9	Dr.Ilango V.	HOD- MCA	Member
10	Dr.Revathi V.	HOD- Physics	Member
11	Dr. V.S. Anusuya Devi	HOD- Chemistry	Member
12	Ms.Manjula V.	Head- HR	Member
13	Dr. M. S. Ganesha Prasad	Dean-Student Affairs & HOD-ME	Member- Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	02-02-2018	12	01
	16-08-2017	All	Nil
CAYm1 (2016-17)	09-05-2017	All	Nil
CAYm2 (2015-16)	07-04-2016	11	02
	10-09-2015	All	Nil
CAYm3 (2014-15)	13-05-2015	All	Nil
	04-09-2014	All	Nil
CAYm4 (2013-14)	07-05-2014	All	Nil
	06-11-2013	All	Nil
CAYm5 (2012-13)	21-03-2013	All	Nil
	29-08-2012	All	Nil

❖ **Energy Conservation Audit Committee**

This committee constituted by the Electrical department, is responsible of an eco- friendly campus. They are responsible for conservation of electricity in the college campus buildings and ensure that there is no wastage for power, thus saving it for the future.

Table 10.1.2.14: Energy Conservation Audit Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Mr.Karthik	Estate Manager	Member
3	Mr. Mohan	Asst. Professor- EEE	Member
4	Mr.Inbasakaran	Asst. Professor- EEE	Member
5	Mr. Sunil	Asst. Professor- EEE	Member
6	Mr.Lithesh	Asst. Professor- EEE	Member
7	Dr. Mahesh K.	Professor- EEE	Coordinator
8	Dr. R Elumalai	HOD- EEE	Member- Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	24-08-2017	All	Nil
CAYm1 (2016-17)	31-03-2017	All	Nil
	13-02-2017	All	Nil
	13-10-2016	All	Nil
	07-10-2016	All	Nil
CAYm2 (2015-16)	02-02-2016	07	01
	06-01-2016	All	Nil
	03-08-2015	All	Nil
CAYm3 (2014-15)	16-02-2015	06	02
	10-09-2014	07	01
CAYm4 (2013-14)	06-01-2014	All	Nil
	08-07-2013	All	Nil
CAYm5 (2012-13)	07-01-2013	07	01
	23-08-2012	All	Nil

❖ **Examination Committee**

This committee monitors the autonomous examinations conducted in the college. Starting from the notification of the exam till the declaration of the results, the committee manages all the activities in co-ordination with the heads of the departments ensuring smooth running of the entire process.

Table 10.1.2.15: Examination Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Dr.Revathi V.	HOD- Physics	Member
3	Dr.Guruprasad	Professor- ISE	Member
4	Prof. Aravinda	HOD - ECE	Member
5	Dr.Vijilius Helena Raj	Deputy Controller of Examinations (Autonomous)	Member-Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	23-02-2018	05	Nil
	26-09-2017	05	Nil
CAYm1 (2016-17)	13-02-2017	05	Nil
	01-09-2016	05	Nil
CAYm2 (2015-16)	27-01-2016	All	Nil
	08-09-2015	All	Nil
CAYm3 (2014-15)	NA	NA	NA
CAYm4 (2013-14)	NA	NA	NA
CAYm5 (2012-13)	NA	NA	NA

❖ **Finance Committee**

This committee is responsible for all the monetary activities in the institution. Students' fee collection, funds for procurement of equipment, dispatching salaries and remuneration are under the purview of this committee.

Table 10.1.2.16: Finance Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Mr. H N Suryaprakash	Registrar	Member
3	Dr. M. S. Ganesha Prasad	Dean-Student Affairs & HOD-ME	Member
4	Dr. C S R Prashanth	Dean- Academics	Member
5	Dr. K. Gopala Krishnan	Dean- R & D	Member
6	Dr.Sheelan Mishra	HOD- MBA	Member
7	Ms.Geetha	Senior Accounts Executive	Member
8	Mrs.MalathiMadhusudan	Director- Accounts & Finance	Member- Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	19-03-2018	All	Nil
	20-09-2017	All	Nil
CAYm1 (2016-17)	14-03-2017	All	Nil
	19-09-2016	All	Nil
CAYm2 (2015-16)	18-03-2016	All	Nil
	15-09-2015	All	Nil
CAYm3 (2014-15)	19-03-2015	All	Nil
	08-09-2014	All	Nil
CAYm4 (2013-14)	10-03-2014	All	Nil
	13-09-2013		
CAYm5 (2012-13)	11-03-2013	All	Nil
	10-09-2012	All	Nil

❖ **Hostel (Boys) Development & Welfare Committee**

This committee looks into the requirement of the students (boys) staying on the campus, in the hostel. Aspects that this committee look into are the food, accommodation and the discipline in the hostel.

Table 10.1.2.17: Hostel (Boys) Development Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Dr. M. S. Ganesha Prasad	Dean-Student Affairs &HOD-ME	Member
3	Mr.Devraj R.	Senior Warden	Member
4	Mr.SambashivaRao	Warden	Member
5	Mr.SundaraRao	Warden	Member
6	Mr.Pankajaksaan	Warden	Member
7	Mr. H N Suryaprakash	Registrar	Member- Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	29-01-2018	All	Nil
	25-07-2017	All	Nil
CAYm1 (2016-17)	20-01-2017	06	01
	06-10-2016	All	Nil
CAYm2 (2015-16)	25-02-2016	All	Nil
	28-07-2015	06	01
CAYm3 (2014-15)	30-01-2015	All	Nil
	23-07-2014	All	Nil
CAYm4 (2013-14)	20-01-2014	All	Nil
	23-07-2013	All	Nil
CAYm5 (2012-13)	22-01-2013	All	Nil
	23-07-2012	All	Nil

❖ **Hostel (Girls) Development & Welfare Committee**

On the same lines as the Boys hostel, this committee looks into the requirement of the students (girls) staying on the campus, in the hostel. Aspects that the committee look into are the food, accommodation and the discipline in the hostel.

Table 10.1.2.18: Hostel (Girls) Development Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Mr. H N Suryaprakash	Registrar	Member
3	Dr. M. S. Ganesha Prasad	Dean-Student Affairs & HOD-ME	Member
4	Ms. Shanti	Senior Warden	Member
5	Ms.Yogita	Warden	Member
6	Ms.Aruna	Head- Admissions	Member- Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	30-01-2018	All	Nil
	24-07-2017	05	01
CAYm1 (2016-17)	23-01-2017	All	Nil
	06-10-2016	05	01
CAYm2 (2015-16)	27-01-2016	All	Nil
	27-07-2015	All	Nil
CAYm3 (2014-15)	13-02-2015	05	01
	24-07-2014	All	Nil
CAYm4 (2013-14)	23-01-2014	All	Nil
	18-07-2013	All	Nil
CAYm5 (2012-13)	28-01-2013	All	Nil
	24-07-2012	All	Nil

❖ **Infrastructure Development Committee**

All hardware infrastructure requirements of the college are taken care by this committee. Furniture & furnishings, lights & fans, other essential infrastructure in the buildings and on the campus are provided by this committee.

Table 10.1.2.19: Infrastructure Development Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Mr.Rao	Project Manager	Member
3	Ms.Shailee	Quantity Surveyor	Member
4	Dr. P S Niranjan	Head- GPE Program &HOD- Civil Engg.	Member- Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	04-10-2017	All	Nil
	05-06-2017	All	Nil
CAYm1 (2016-17)	05-04-2017	All	Nil
	10-02-2017	All	Nil
	02-12-2016	All	Nil
	10-08-2016	All	Nil
CAYm2 (2015-16)	06-05-2016	All	Nil
	01-02-2016	All	Nil
	05-10-2015	All	Nil
CAYm3 (2014-15)	25-02-2015	All	Nil
	20-08-2014	All	Nil
CAYm4 (2013-14)	10-08-2013	All	Nil
CAYm5 (2012-13)	24-05-2013	All	Nil
	05-02-2013	All	Nil
	15-09-2012	All	Nil
	09-08-2012	All	Nil

❖ **In-Plant Training/ Industrial/ Career Guidance/ Placement Committee**

This committee is very essential for the graduating undergraduate and postgraduate students, aspiring to get placed in companies as well as to start companies of their own. In-Plant Training and Career Guidance are given to the students in their pre-final year and pre-final semester respectively, preparing them for the forthcoming campus interviews.

Table 10.1.2.20:In-Plant Training/Industrial/Career Guidance/Placement Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Dr.S.Sujitha	Assoc. Prof.- EEE	Member
3	Dr. Mohan Kumar Naik	Assoc.- ECE	Member
4	Prof. GirishTilak	Asst. Prof.- AU	Member
5	Prof. Govinda Raj	Asst. Prof.- MCA	Member
6	Prof.Sudharshan	Asst. Prof.- ME	Member
7	Prof. Bopanna K. D.	Asst. Prof.- ME	Member
8	Prof. Dasegowda	Assoc. Prof.- BT	Member
9	Mr.Sivabalan	Asst. Prof.- CSE	Member
10	Ms.Vandana C P	Asst. Prof.- ISE	Member
11	Ms. P. Suma	Asst. Prof. – CivilEngg.	Member
12	Dr.Sheelan Mishra	HOD-MBA	Member
13	Dr.Sainath	Professor- MBA	Member
14	Mr.Binod Kumar Singh	Training & Placement Officer	Member
15	Mr. Mahesh Prasad	Training & Placement Officer	Member
16	Mr.RajendraDama	Training & Placement Officer	Member
17	Mr.Pavan Kumar M.	Training & Placement Officer	Member
18	Ms.Manisha Joshi	Training & Placement Officer	Member
19	Mr.AnisMirza	Training & Placement Officer	Member
20	Mr.Gopalakrishna	Training & Placement Officer	Member
21	Mr. Ravi Shankar	Training & Placement Officer	Member
22	Mr. Gabriel Issac	Training & Placement Officer	Member
23	Mr.Viswas	Student Representative	Member
24	Mr.Rajith Bose M.	Student Representative	Member
25	Mr.YashasBharadwaj	Student Representative	Member
26	Mr. Jai Kumar	Student Representative	Member
27	Dr.Lakshminarayana G.	Director- Training & Placements	Member- Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2015-16)	02-02-2018	25	02
	10-11-2017	All	Nil
CAY (2016-17)	04-02-2017	26	01
	07-11-2016	All	Nil
	18-07-2016	All	Nil
CAY (2015-16)	06-02-2016	All	Nil
	07-11-2015	All	Nil
	18-07-2015	All	Nil
CAY (2014-15)	07-11-2014	All	Nil
	17-07-2014	All	Nil
CAY (2013-14)	08-11-2013	All	Nil
	15-07-2013	All	Nil
CAY (2012-13)	09-01-2013	All	Nil
	16-07-2012	All	Nil

❖ **Instrumentation Cell**

This body constituted in the college plays a very important role with respect to the laboratory equipment's. Timely calibrations and preventive maintenance ensures that the machines (electrical) do not come for repairs or come in less numbers. Thus this cell is responsible for keeping a check on the machines and certifying the same.

Table 10.1.2.21: Instrumentation Cell

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Dr. M. S. Ganesha Prasad	Dean-Student Affairs &HOD-ME	Member
3	Dr.Elumalai	HOD- EEE	Member
4	Mr. Krishna Prakash	Systems Head	Member
5	Prof. C.K.Aravindha	HOD - ECE	Member-Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	11-10-2017	All	Nil
CAYm1 (2016-17)	15-05-2017	All	Nil
	19-08-2016	All	Nil
CAYm2 (2015-16)	19-05-2016	All	Nil
CAYm3 (2014-15)	22-05-2015	All	Nil
CAYm4 (2013-14)	23-05-2014	All	Nil
CAYm5 (2012-13)	24-05-2013	All	Nil

❖ Internal Quality Assurance Cell (IQAC)

This committee was constituted to ensure that all the standards with regard to curriculum are met. Any discrepancies with respect to internal valuation, methods of teaching-learning are addressed by this committee. The Principal is the Chairman of this committee and it is constituted as follows.

Table 10.1.2.22: Internal Quality Assurance Cell (IQAC)

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Dr. M. S. Ganesha Prasad	Dean-Student Affairs & HOD-ME	Member
3	Dr. C S R Prashanth	Dean- Academics	Member
4	Dr. P. S. Niranjan	Head- GPE Program & HOD- Civil Engg.	Member
5	Dr.Sheelan Mishra	HOD- MBA	Member
6	Dr.Ilango V.	HOD- MCA	Member
7	Dr.Anitha S. Rai	Head- Library & Information Centre	Member
8	Mr. Raghu Ram	Student Representative	Member
9	Dr. K. Gopala Krishnan	Dean- R & D	Member-Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	09-08-2017	All	Nil
CAYm1 (2016-17)	10-05-2017	All	Nil
	22-03-2017	All	Nil
	25-01-2017	All	Nil
	06-09-2016	All	Nil
	07-07-2016	All	Nil
CAYm2 (2015-16)	05-05-2016	All	Nil
	28-03-2016	All	Nil
	16-01-2016	All	Nil
	09-07-2015	All	Nil
CAYm3 (2014-15)	17-04-2015	All	Nil
	26-02-2015	All	Nil
	10-12-2014	All	Nil
	15-10-2014	All	Nil
	05-02-2014	All	Nil
CAYm4 (2013-14)	29-10-2013	All	Nil
	28-05-2013	All	Nil
CAYm5 (2012-13)	14-11-2012	All	Nil

❖ **Library Committee**

Books and other e-learning media are very essential for gaining knowledge as learning is a continuous process. Faculties and students require resources to attain knowledge for the day-to-day requirements. The Library Advisory Committee headed by the Principal ensures all these requirements are fulfilled through the Member Secretary and the inputs from the other members. Procuring books, Technical Journals, Technical Magazines, Applying for access to E-Journals, Providing good reference books and adequate reading spaces are provided by this committee, which comprises the following members.

Table 10.1.2.23: Library Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Mr. H N Suryaprakash	Registrar	Member
3	Dr. M. S. Ganesha Prasad	Dean-Student Affairs &HOD-ME	Member
4	Dr. C S R Prashanth	Dean- Academics	Member
5	Prof. C.K.Aravindha	HOD - ECE	Member
6	Dr.Revathi V.	HOD- Physics	Member
7	Dr.Sheelan Mishra	HOD-MBA	Member
8	Dr.Siddamallaiiah	Principal Librarian(Retd.), NIMHANS	External Member
9	Ms.Priya	Student Representative	Member
10	Mr.Avi Goyal	Student Representative	Member
11	Dr.Anitha S Rai	Head – Library & Information Centre	Member-Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	11-12-2017	All	Nil
CAYm1 (2016-17)	13-05-2017	All	Nil
CAYm2 (2015-16)	03-05-2016	All	Nil
	14-12-2015	All	Nil
CAYm3 (2014-15)	05-05-2015	09	02
	13-12-2014	All	Nil
CAYm4 (2013-14)	09-04-2014	All	Nil
	13-12-2013	10	01
CAYm5 (2012-13)	15-04-2013	All	Nil
	12-09-2012	All	Nil

❖ **NCC Committee**

This committee in the college is constituted to look into the students interests inclined towards National Cadet Corps (NCC). NCC is the Indian military cadet corps, which is open to school and college students on voluntary basis. National Cadet Corps is a Tri-Services Organization, comprising the Army, Navy and Air Force, engaged in grooming the youth of the country into disciplined and patriotic citizens. The National Cadet Corps in India is a voluntary organization which recruits cadets from high schools, colleges and universities all over India. The committee in college has the same motto.

Table 10.1.2.24: NCC Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Mr. H N Suryaprakash	Registrar	Member
3	Mr.Vinay J.T.	Physical Education Director	Member
4	Mr.PavanPrabhakar	Asst. Professor- ME	Member
5	Dr. M. S. Ganesha Prasad	Dean-Student Affairs &HOD-ME	Member- Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	02.02.2018	All	Nil
CAY (2016-17)	25.01.2017	All	Nil
CAY (2015-16)	19-04-2016	All	Nil
	21-09-2015	All	Nil
CAY (2014-15)	12-05-2015	All	Nil
	06-10-2014	All	Nil
CAY (2013-14)	15-05-2014	All	Nil
	17-09-2013	All	Nil
CAY (2012-13)	04-05-2013	All	Nil
	09-08-2012	All	Nil

❖ **NSS Committee**

The National Service Scheme is an Indian government-sponsored public service program conducted by the Department of Youth Affairs and Sports of the Government of India. Popularly known as NSS, the scheme was launched in 1969. Aimed at developing student's personality through community service, NSS is a voluntary association of young people in Colleges, Universities and at +2 level working for a campus-community linkage. The committee in college aims at moulding interested students on the same lines.

Table 10.1.2.25:NSS Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Mr. H N Suryaprakash	Registrar	Member
3	Dr. M. S. Ganesha Prasad	Dean-Student Affairs &HOD-ME	Member
4	Dr.Mahesh K.	Professor- EEE	Member
5	Prof. Krishna Chandra	Asst. Prof.- MCA	Member
6	Mr.Santhosh	Student Representative	Member
7	Ms.Pratiksha	Student Representative	Member
8	Dr.Anitha S Rai	Head – Library & Information Centre	Member Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	19-01-2018	All	Nil
CAYm1 (2016-17)	08-07-2017	All	Nil
	09-01-2017	All	Nil
CAYm2 (2015-16)	04-01-2016	All	Nil
	07-07-2015	All	Nil
CAYm3 (2014-15)	01-01-2015	All	Nil
	04-07-2015	07	01
CAYm4 (2013-14)	08-01-2014	All	Nil
	09-07-2013	All	Nil
CAYm5 (2012-13)	03-01-2013	All	Nil
	04-07-2012	All	Nil

❖ News Letter Committee

Events and other happenings on the campus and off the campus with regard to the students and college is brought out in the college newsletter. The committee constituted helps to achieve this. Besides getting articles and covering the relevant issues; compiling, editing, printing and publishing of the newsletter is taken care by this committee.

Table 10.1.2.26: News Letter Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Mr. H N Suryaprakash	Registrar	Member
3	Ms.Deepa Ganesh	HOD- Marketing & Branding	Member
4	Mr.Md. Yasin	Student Representative	Member
5	Mr.Sumukh	Student Representative	Member
6	Dr.Chinnaiyan	Asso. Professor- ISE	Member- Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	02-02-2018	All	Nil
	07-08-2017	05	01
CAYm1 (2016-17)	03-01-2017	All	Nil
CAYm2 (2015-16)	03-05-2016	05	01
	02-01-2016	All	Nil
	14-12-2015	All	Nil
CAYm3 (2014-15)	05-05-2015	All	Nil
	13-12-2014	All	Nil
CAYm4 (2013-14)	09-04-2014	All	Nil
	13-12-2013	All	Nil
CAYm5 (2012-13)	15-04-2013	All	Nil
	12-09-2012	All	Nil

❖ **Physical Education & Sports Committee**

Parallel to studies, in order to give motivation and an opportunity to excel in sports to interested students, this committee looks into the needs of budding sports persons. The college campus has facilities and equipment for a number of sports, for which there is good participation & boys and girls, pursuing undergraduate and postgraduate programs. Students participate in the sports, helping them to perform well in college events at state and national levels.

Table 10.1.2.27: Physical Education & Sports Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Mr. H N Surya Prakash	Registrar	Member
3	Mr.PrasannaVenkatesh	Coach	Member
4	Sanjay H. R.	Student Representative	Member
5	Ms. Monica Yadav	Student Representative	Member
6	Mr.Vinay J.T.	Physical Education Director	Member- Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	17-01-2018	All	Nil
	27-06-2017	All	Nil
CAYm1 (2016-17)	16-01-2017	All	Nil
	20-06-2016	All	Nil
CAYm2 (2015-16)	20-01-2016	All	Nil
	10-06-2015	All	Nil
CAYm3 (2014-15)	02-02-2015	All	Nil
	27-10-2014	All	Nil
CAYm4 (2013-14)	20-01-2014	All	Nil
	29-07-2013	All	Nil
CAYm5 (2012-13)	16-01-2013	All	Nil
	10-09-2012	All	Nil

❖ **Professional Societies**

Membership in Professional Societies is very essential to and individual as well as an institute as a whole. Amongst the various state, national and international professional societies, the same is reflected, where faculties as well as students and student groups are members. The committee encourages and promotes in obtaining memberships for faculties and students.

Table 10.1.2.28: Professional Societies

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Dr. M. S. Ganesha Prasad	Dean-Student Affairs &HOD-ME	Member
3	Dr. C S R Prashanth	Dean- Academics	Member
4	Dr. P S Niranjan	Head- GPE Program & HOD- Civil Engg.	Member
5	Dr. R Elumalai	HOD- EEE	Member
6	Dr.JitendranathMungara	HOD- ISE	Member
7	Prof. C.K.Aravindh	HOD - ECE	Member
8	Dr.AnandaVardhan	HOD-BT	Member
9	Dr.Sheelan Mishra	HOD-MBA	Member
10	Dr.Ilango V.	HOD- MCA	Member
11	Dr.Anitha S. Rai	Head- Library & Information Centre	Member
12	Dr.Revathi V.	HOD- Physics	Member
13	Dr.V.S.Anusuya Devi	HOD- Chemistry	Member
14	Dr.Vijilius Helena Raj	Deputy Controller of Examinations (Autonomous)	Member
15	Dr. K. Gopala Krishnan	Dean- R & D	Member-Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	17-10-2017	All	Nil
	09-08-2017	All	Nil
CAYm1 (2016-17)	10-04-2017	All	Nil
CAYm2 (2015-16)	05-05-2016	All	Nil
	08-03-2016	All	Nil
	20-10-2015	14	01
CAYm3 (2014-15)	10-05-2015	All	Nil
	06-04-2015	All	Nil
	16-09-2014	All	Nil
CAYm4 (2013-14)	23-04-2014	13	02
	05-11-2013	All	Nil
CAYm5 (2012-13)	17-04-2012	All	Nil

❖ **Public Relations & Marketing Committee**

An essential committee in the running of the organization, this committee is a preface for the admission committee. This committee is required to have a constant rapport with the public and must ensure that people know about the institution so as to help students who want to pursue undergraduate and postgraduate programs to get admission to the college.

Table 10.1.2.29: Public Relations & Marketing Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Mr. H N Suryaprakash	Registrar	Member
3	Dr. M. S. Ganesha Prasad	Dean-Student Affairs &HOD-ME	Member
4	Ms.Manjula	Head- HR	Member
5	Mr. Deepak Kumar	Web Developer	Member
6	Ms.Deepa Ganesh	Head- Marketing & Branding	Member- Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	26-03-2018	All	Nil
	12-08-2017	All	Nil
CAYm1 (2016-17)	28-02-2017	All	Nil
CAYm2 (2015-16)	03-05-2016	All	Nil
	14-12-2015	All	Nil
CAYm3 (2014-15)	05-05-2015	All	Nil
	13-12-2014	All	Nil
CAYm4 (2013-14)	09-04-2014	All	Nil
	13-12-2013	All	Nil
CAYm5 (2012-13)	15-04-2013	All	Nil
	12-09-2012	All	Nil

❖ **Purchase Committee**

This committee of the college is constituted to meet all the hardware requirements for the smooth running of the institute. Requisitions given by all the departments for its running are provided by this committee.

Table 10.1.2.30: Purchase Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Mr. H N Suryaprakash	Registrar	Member
3	Mr.Umesh	Purchase Officer	Member
4	Mr.Premnathan	Stores In-charge	Member
5	Mrs.MalathiMadhusudhan	Director- Accounts & Finance	Member- Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAYm1 (2016-17)	05-04-2017	All	Nil
CAYm2 (2015-16)	18-04-2016	All	Nil
CAYm3 (2014-15)	15-04-2015	All	Nil
CAYm4 (2013-14)	10-04-2014	All	Nil
CAYm5 (2012-13)	16-04-2013	All	Nil

❖ **Recruitment Committee**

This committee of the college is responsible for the recruitment of staff for the college, which includes the non-teaching faculty also. The preliminary interview takes place at the department level under the HoD. The final round and selection comes under the purview of this committee.

Table 10.1.2.31: Recruitment Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Mr. H N Suryaprakash	Registrar	Member
3	Dr. M. S. Ganesha Prasad	Dean-Student Affairs & HOD-ME	Member
4	Dr. C S R Prashanth	Dean- Academics	Member
5	Dr.Mahendra	External Expert	Member
6	Ms.Manjula V.	Head-HR	Member- Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	22-02-2018	All	Nil
	12-02-2018	All	Nil
	18-10-2017	All	Nil
	10-10-2017	All	Nil
	21-08-2017	All	Nil
CAYm1 (2016-17)	26-07-2017	All	Nil
	17-04-2017	All	Nil
	20-02-2017	All	Nil
	12-12-2016	All	Nil
	22-08-2016	All	Nil
CAYm2 (2015-16)	14-01-2016	All	Nil
CAYm3 (2014-15)	14-01-2015	All	Nil
CAYm4 (2013-14)	09-12-2014	All	Nil
	11-11-2014	All	Nil

❖ **Research and Development Committee**

Research and Development (R & D) plays a major role in the development of any organization, which also includes educational institutions. The research committee headed by the Principal was constituted for the same reason. The committee encourages faculties and students to publish technical papers and articles, write textbooks, apply for support for project work, get grants for research, apply for patents, etc. The committee Co-ordinator oversees all the activities. The members of this committee are as follows.

Table 10.1.2.32: Research & Development Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Dr. M. S. Ganesha Prasad	Dean-Student Affairs &HOD-ME	Member
3	Dr. C S R Prashanth	Dean- Academics	Member
4	Dr. P S Niranjana	Head- GPE Program &HOD- Civil Engg.	Member
5	Dr. R Elumalai	HOD- EEE	Member
6	Dr.JitendranathMungara	HOD- ISE	Member
7	Prof. C.K.Aravindha	HOD - ECE	Member
8	Dr.AnandaVardhan	HOD-BT	Member
9	Dr.Sheelan Mishra	HOD-MBA	Member
10	Dr.Ilango V.	HOD- MCA	Member
11	Dr.Anitha S. Rai	Head- Library & Information Centre	Member
12	Dr.Revathi V.	HOD- Physics	Member
13	Dr.V.S.Anusuya Devi	HOD- Chemistry	Member
14	Dr.Vijilius Helena Raj	Deputy Controller of Examinations (Autonomous)	Member
15	Dr. K. Gopala Krishnan	Dean- R & D	Member-Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	09-02-2018	All	Nil
	01-12-2017	All	Nil
	17-10-2017	All	Nil
	17-08-2017	All	Nil
CAYm1 (2016-17)	19-04-2017	All	Nil
	27-03-2017	All	Nil
	09-02-2017	All	Nil
	28-10-2016	All	Nil
CAYm2 (2015-16)	03-06-2016	All	Nil
	18-05-2016	All	Nil
	27-04-2016	All	Nil
	31-03-2016	All	Nil
	16-02-2016	All	Nil
	29-02-2016	All	Nil
	13-01-2016	14	01
	09-11-2015	All	Nil
	13-10-2015	All	Nil
CAYm3 (2014-15)	04-09-2015	All	Nil
	06-05-2015	All	Nil
	13-04-2015	All	Nil
	06-03-2015	All	Nil
	31-10-2014	All	Nil
CAYm4 (2013-14)	02-09-2014	13	02
	24-04-2014	All	Nil
	11-03-2014	All	Nil
CAYm5 (2012-13)	10-10-2013	All	Nil
	20-03-2013	All	Nil
	27-09-2012	All	Nil

❖ **SC/ST Welfare Cell**

This committee in the college is set up to look into the welfare of the SC/ST students admitted for the various courses. Besides this, the committee allocates monetary assistance to the students in the form of scholarship so as to help them pursue their education.

Table 10.1.2.33: SC/ST Welfare Cell

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Dr.Vishwanath Y.	Professor- ISE	Member
3	Mr. Ravi Kumar M.	Asst. Professor- ME	Member
4	Mr.Madhusudan	Asst. Professor- ME	Member
5	Mr. H N Suryaprakash	Registrar	Member- Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	26-02-2018	All	Nil
	01-09-2017	All	Nil
CAYm1 (2016-17)	20-02-2017	All	Nil
	17-08-2016	All	Nil
CAYm2 (2015-16)	10-02-2016	All	Nil
	25-08-2015	All	Nil
CAYm3 (2014-15)	24-02-2015	All	Nil
	08-09-2014	All	Nil
CAYm4 (2013-14)	12-02-2014	All	Nil
	12-08-2013	All	Nil
CAYm5 (2012-13)	11-02-2013	All	Nil
	21-08-2012	All	Nil

❖ **Software/ Hardware Training Committee**

This committee is responsible for given training to the staff (technical) who have been newly recruited on using the laboratory equipment in the respective departments. Besides, training is also given to them on operating any newly procured machines, so as to facilitate the smooth running of the laboratory sessions.

Table 10.1.2.34: Software/Hardware Training Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Dr.JitendranathMungara	HOD- ISE	Member
3	Prof. C.K.Aravindh	HOD - ECE	Member
4	Dr. R Elumalai	HOD- EEE	Member
5	Dr.Ilango V.	HOD- MCA	Member
6	Dr. C S R Prashanth	Dean- Academics	Member- Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	08-03-2018	All	Nil
	11-12-2017	All	Nil
CAYm1 (2016-17)	13-04-2017	All	Nil
	13-12-2016	All	Nil
CAYm2 (2015-16)	05-03-2016	05	01
	14-12-2015	All	Nil
CAYm3 (2014-15)	05-05-2015	All	Nil
	13-12-2014	All	Nil
CAYm4 (2013-14)	09-04-2014	All	Nil
	13-12-2013	All	Nil
CAYm5 (2012-13)	15-04-2013	All	Nil
	12-09-2012	All	Nil

❖ College Internal Complaint Committee

This committee in the college was formed to address all the internal issues of the faculties, so that they get solutions to the various problems. Suggestions and remedies are given by the members so that the problems are tackled by the faculties.

Table 10.1.2.35: College Internal Complaint Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Girija Srinivasalu	Director- NHQASDC	Chairman
2	Dr.Manjunatha	Principal	Member
3	Mr. H N Suryaprakash	Registrar	Member
4	Ms. Vijaya A	Asst Prof	Member (With Legal Knowledge)
5	Ms. Jagdeeswari	Chief- Training AWAKE (Association of Women Entrepreneurs of Karnataka)	Member (NGO)
6	Ms.Manjula V.	Head-HR	Member-Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	22-06-2017	All	Nil
CAYm2 (2016-17)	07-03-2017	All	Nil
	06-02-2017	All	Nil
CAYm2 (2015-16)	16-04-2016	All	Nil
	22-03-2016	All	Nil
	01-03-2016	All	Nil
	27-01-2016	All	Nil
	22-12-2015	All	Nil

❖ **Staff Welfare Committee**

This committee constituted on the similar lines of the Staff Grievances Redressal Committee looks into providing welfare schemes to all the staff of the college. The committee addresses the requirements of the staff and takes necessary steps of action.

Table 10.1.2.36: Staff Welfare Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Mr. H N Suryaprakash	Registrar	Member
3	Mrs.MalathiMadhusudhan	Director- Accounts & Finance	Member
4	Ms.Manjula V.	Head-HR	Member- Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAYm1 (2016-17)	27-03-2017	All	Nil
	08-03-2017	All	Nil
	23-01-2017	All	Nil
CAYm2 (2015-16)	02-04-2016	All	Nil
	13-10-2015	All	Nil
	11-08-2015	All	Nil
	09-06-2015	All	Nil
CAYm3 (2014-15)	09-12-2014	All	Nil
	11-11-2014	All	Nil

❖ **Student Mentoring Committee**

This committee of the college is responsible for keeping a constant track of the students' performance at the department level. The heads of the department along with the class teachers allocate a group of students to a mentee (faculty) who keeps track of the academic performance of the student. Extreme cases are dealt in the presence of parents; some are referred to the Counsellors by the committee to resolve the issue.

Table 10.1.2.37: Student Mentoring Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Dr.C S R Prashanth	Dean- Academics	Member
3	Dr. P S Niranjana	Head- GPE Program &HOD- Civil Engg.	Member
4	Dr. R Elumalai	HOD- EEE	Member
5	Dr.JitendranathMungara	HOD- ISE	Member
6	Dr.Sheelan Mishra	HOD-MBA	Member
7	Dr.Ilango V.	HOD- MCA	Member
8	Dr.Revathi V.	HOD- Physics	Member
9	Dr.V.S.Anusuya Devi	HOD- Chemistry	Member
10	Dr. M. S. Ganesha Prasad	Dean-Student Affairs &HOD-ME	Member- Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	17-01-2018	07	03
	01-08-2017	08	02
CAYm1 (2016-17)	09-01-2017	067	03
CAYm2 (2015-16)	12-04-2016	All	Nil
	20-10-2015	All	Nil
CAYm3 (2014-15)	30-04-2015	All	Nil
	14-10-2014	11	01
CAYm4 (2013-14)	13-05-2014	All	Nil
	23-10-2013	All	Nil
CAYm5 (2012-13)	02-04-2013	All	Nil
	04-10-2012	All	Nil

❖ **Students Grievances Redressal Committee**

Adolescence students who come from various backgrounds to study face a lot of problems. Besides a number of distractions are available to take them off their path of learning. Thus to address the numerous problems of the diverse students from varied backgrounds, the students grievance redressal cell was formed to resolve the issues of the students. The committee is as follows.

Table 10.1.2.38: Students Grievances Redressal Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Mr. H N Suryaprakash	Registrar	Member
3	Dr. C S R Prashanth	Dean- Academics	Member
4	Dr. P S Niranjana	Head- GPE Program &HOD- Civil Engg.	Member
5	Dr. R Elumalai	HOD- EEE	Member
6	Dr.JitendranathMungara	HOD- ISE	Member
7	Dr.Sheelan Mishra	HOD-MBA	Member
8	Dr.Ilango V.	HOD- MCA	Member
9	Dr.RevathiV.	HOD- Physics	Member
10	Dr. V.S. Anusuya Devi	HOD- Chemistry	Member
11	Mr.Rakesh S.	Student Representative	Member
12	Mr.TanmayTiwari	Student Representative	Member
13	Mr.Vishwambhar R.K.	Student Representative	Member
14	Mr.Gaurav K. R. Gupta	Student Representative	Member
15	Ms.UtshaSaha	Student Representative	Member
16	Ms. G. AnkitaShetty	Student Representative	Member
17	Ms.AshaYadav	Student Representative	Member
18	Dr. M. S. Ganesha Prasad	Dean-Student Affairs & HOD-ME	Member-Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	01-02-2018	17	01
	29-08-2017	16	02
CAYm1 (2016-17)	17-01-2017	All	Nil
	27-10-2016	16	02
CAYm2 (2015-16)	01-03-2016	All	Nil
	04-11-2015	All	Nil
CAYm3 (2014-15)	02-04-2015	All	Nil
	07-11-2014	12	01
CAYm4 (2013-14)	07-05-2014	All	Nil
	05-09-2013	All	Nil
CAYm5 (2012-13)	12-03-2013	11	02
	04-09-2012	All	Nil

❖ Value Added Programs Committee

The college has a number of streams of study- Global, Professional & Executive. The streams are distinct and provide exclusive training to help in the overall development of the students. Organizing industrial trips at International and National levels, providing industry enriched training are some of the responsibilities of this committee.

Table 10.1.2.39: Value Added Programs Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Dr. M. S. Ganesha Prasad	Dean-Student Affairs &HOD-ME	Member
3	Dr.C S R Prashanth	Dean- Academics	Member
4	Prof. C.K.Aravindha	HOD - ECE	Member
5	Dr.AnandaVardhan	HOD-BT	Member
6	Dr.JitendranathMungara	HOD- ISE	Member
7	Dr.R Elumalai	HOD- EEE	Member
8	Dr.Sheelan Mishra	HOD-MBA	Member
9	Dr.Ilango V.	HOD- MCA	Member
10	Dr. Sridhar Kurse	HOD – AU	Member
11	Dr.P S Niranjan	Head- GPE Program &HOD- Civil Engg.	Member-Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	05-10-2017	All	Nil
CAYm1 (2016-17)	08-05-2017	10	01
	05-10-2016	All	Nil
CAYm2 (2015-16)	05-05-2016	10	01
	05-10-2015	All	Nil
CAYm3 (2014-15)	02-05-2015	10	01
	10-02-2015	All	Nil
	26-10-2014	All	Nil
CAYm4 (2013-14)	08-05-2014	10	01
	12-02-2014	10	01
	20-09-2013	All	Nil
CAYm5 (2012-13)	18-02-2013	All	Nil
	10-09-2012	All	Nil

❖ **Women Empowerment Committee**

This committee of the college addresses issues regarding to the empowerment of the women staff on the campus. The committees' role is in ensuring that the powers are also vested in the hands of the women.

Table 10.1.2.40: Women Empowerment Committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Dr.Anitha S. Rai	Head- Library & Information Centre	Member
3	Dr.Sheelan Mishra	HOD-MBA	Member
4	Dr. V. S. Anusuya Devi	HOD-Chemistry	Member
5	Ms.Dharmambal	Asso. Professor- ECE	Member
6	Ms.Rajeswari	Asst. Professor- ECE	Member
7	Dr.Sudha Thomas	Student Counselor	Member
8	Ms.Shanthi	Warden (Girls Hostel)	Member
9	Ms.Bhavana	Student Representative	Member
10	Mrs. Padma Narayanamurthy	Asso. Professor- Chemistry	Member-Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY (2017-18)	12-02-2018	All	Nil
	11-10-2017	All	Nil
	12-08-2017	09	01
CAYm2 (2016-17)	15-10-2016	All	Nil
CAYm2 (2015-16)	31-03-2016	09	01
	11-09-2015	08	02
CAYm3 (2014-15)	27-03-2015	All	Nil
	22-09-2014	09	01
CAYm4 (2013-14)	29-03-2014	All	Nil
	23-09-2013	All	Nil
CAYm5 (2012-13)	06-03-2013	All	Nil
	28-09-2012	All	Nil

❖ **Entrepreneurship Development Cell Committee**

Entrepreneurship Development Cell [EDC] was established to assist students, entrepreneurs, including Institutes' faculty, with pre-venture, start-up or existing business with financial management, marketing, technology and product development and commercialization issues.

Table 10.1.2.41: Entrepreneurship Development Cell committee

SL. NO.	NAME	DESIGNATION	POSITION
1	Dr.Manjunatha	Principal	Chairman
2	Dr. Gopala Krishnan	Dean R&D	Member
3	Mrs. Smitha B S	Asst. Prof.-AU	Member
4	Dr. H AnandaVardhan	HOD-BT	Member
5	Mr. Surendra B V	Professor-Civil	Member
6	Mrs. Gagan Mithra	Asst. Prof.-CSE	Member
7	Mr. Aravinda K	HOD-ECE	Member
8	Mr. Mohan B S	Asst. Prof.-EEE	Member
9	Mrs. Preethi	Asst. Prof.-ISE	Member
10	Dr. V Asha	Asso. Professor- MCA	Member
11	Dr. Sheelan Mishra	HOD-MBA	Member-Secretary

Meetings:

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAYm1 (2016-17)	15-05-2017	All	Nil
CAYm2 (2015-16)	19-05-2016	All	Nil
CAYm3 (2014-15)	22-05-2015	All	Nil
CAYm4 (2013-14)	23-05-2014	All	Nil
CAYm5 (2012-13)	24-05-2013	All	Nil

At least once in a semester, Committee meetings are convened by the Member-Secretary to review the progress/developments in the college under the purview of the respective committees. Further, meetings are conducted more than once a semester, if needed.

Published rules, including service rules, policies and procedures is available in the college website. Extent of awareness about the same among employees/students is through electronic media-college website.

10.1.3. Decentralization in working and grievance redressal mechanism(10)

List the names of the faculty members who have been delegated powers for taking administrative decisions. Mention details in respect of decentralization in working. Specify the mechanism and composition of grievance redressal cell including Anti Ragging Committee & Sexual Harassment Committee.

Table 10.1.3.1: Delegation of Powers

SL. NO.	DEPARTMENT	DELEGATION OF POWER TO	COMMON RESPONSIBILITY	EXCLUSIVE RESPONSIBILITY
1	Mechanical Engg.	Prof. & HOD	Administrative work of the Respective Department	Student Counselling & Mentoring, Student Medical Leaves
2	Civil Engg.			Global Trips& GPE Program
3	Electronics & Communication Engg.			College Club Activities
4	Computer Science & Engineering			IT Infrastructure
5	Bio- Technology			Waste Segregation & Management
6	Electrical and Electronics Engineering			Energy Management
7	Information Science and Engineering			SC/ST Welfare Cell
8	Automobile Engineering			College Club Activities
9	Basic Sciences			College News Letter
10	Library & Information Center	Head		Procurement of Books, eResources and Journals; College Newsletter

Composition of Grievance Redressal Cell, Anti Ragging Committee & Anti- Sexual Harassment Committee has been mentioned in 10.1.2

At least once in a semester, Committee meetings are convened by the Member-Secretary to review the progress/developments in the college under the purview of the respective committees. Further, meetings are conducted more than once a semester, if needed.

Published rules, including service rules, policies and procedures is available in the college website. Extent of awareness about the same among employees/students is through electronic media-college website.

10.1.4. Delegation of financial powers (10)

Institution should explicitly mention financial powers delegated to the Principal, Heads of Departments and relevant in-charges. Demonstrate the utilization of financial powers for each year of the assessment years.

Budgets for running the department are very essential. These are prepared by every department before the commencement of the academic year. In this regard, Heads of the Departments, with senior faculties give the requisition to the Principal with regard to stationery, lab requirements, etc, for which budget allocations are approved by the Principal in discussion with the Management.

On the same lines, proposals are sent to the Principal for procuring new equipment for the labs, interactive technologies in the classrooms, conduction of workshops/ conferences/ seminars by the Heads of Departments for which fund allocations are made.

Table 10.1.4.1: Financial Powers

SL.NO.	DESIGNATION	FINANCIAL POWER (in Rs.)
1	Principal	50,000/-
2	Registrar	10,000/-
3	HODs of Engineering Departments	10,000/-
4	HODs of Basic Sciences	10,000/-
5	HODs of PG Studies	10,000/-
6	Head- Library & Information Center	10,000/-
7	Dean- Accounts & Finance	5,00,000/-
8	Dean- R & D	50,000/-

- The Finance Committee has the power to approve bills worth Rs. 10,00,000/- (Rupees Ten Lakhs only)
- Further, bills worth more than Rs. 10,00,000/- (Rupees Ten Lakhs) will be approved by the NEW HORIZON EDUCATIONAL & CULTURAL TRUST (NHCET)

10.1.5. Transparency and availability of correct/unambiguous information in public domain (5)

(Information on policies, rules, processes and dissemination of this information to Stakeholders is to be made available on the web site)

Information on policies, rules, processes and its dissemination is made available to the stakeholders on the college website. Besides, the same is there in the college brochure also.

10.2. Budget Allocation, Utilization, and Public Accounting at Institute level (30)

Summary of current financial year's budget and actual expenditure incurred (for the institution

exclusively) in the three previous financial years.

Total Income at Institute level: For CFY, CFYm1, CFYm2 & CFYm3

CFY: Current Financial Year, CFYm1 (Current Financial Year minus 1), CFYm2 (Current Financial Year minus 2) and CFYm3 (Current Financial Year minus 3)

Table 10.2.1:Institute Income and expenditure for CFY 2016-17

Total Income				Actual Expenditure (till 31/03/16)			Total No. of Students 4876
Fee(In INR)	Govt.	Grant (s) (In INR)	Other Sources (Placement Training, Bus Fees, etc.,) (In INR)	Recurring Including Salaries(In INR)	Non-recurring(In INR)	Special Projects (Land, Building, WIP) (In INR)	Expenditure per student(In INR)
519390450	NIL	204500	61427871	421819930	35200582	4744489	94702

Table 10.2.2:Institute Income and expenditure for CFYm1 2015-16

Total Income				Actual Expenditure (till 31/03/16)			Total No. of Students 4772
Fee(In INR)	Govt.	Grant (s) (In INR)	Other Sources (Placement Training, Bus Fees, etc.,) (In INR)	Recurring Including Salaries(In INR)	Non-recurring(In INR)	Special Projects (Land, Building, WIP) (In INR)	Expenditure per student(In INR)
464908560	NIL	4573615	47819165	395703591	25693559	49826733	98748

Table 10.2.3:Institute Income and expenditure for CFYm2 2014-15

Total Income				Actual Expenditure (till 31/03/15)			Total No. of Students 4255
Fee(In INR)	Govt.	Grant (s) (In INR)	Other Sources (Placement Training, Bus Fees, etc.,) (In INR)	Recurring Including Salaries(In INR)	Non-recurring(In INR)	Special Projects (Land, Building, WIP) (In INR)	Expenditure per student(In INR)
408043400	NIL	3321000	31258473	334756762	29039003	102830523	109665

Table 10.2.4: Institute Income and expenditure for CFYm3 2013-14

Total Income				Actual Expenditure (till 31/03/14)			Total No. of Students 3845
Fee(In INR)	Govt.	Grant (s) (In INR)	Other Sources (Placement Training, Bus Fees, etc.,) (In INR)	Recurring Including Salaries(In INR)	Non-recurring(In INR)	Special Projects (Land, Building, WIP) (In INR)	Expenditure per student(In INR)
350549515	NIL	4746681	17271560	246182080	9696970	88908602	89672

Table 10.2.5: Institute Budget and expenditure for assessment years 2016-17, 2015-16, 2014-15, 2013-14

Items	Budgeted In CFY(In INR)	Actual expenses in CFY (31/03/17) (In INR)	Budgeted in CFYm1(In INR)	Actual expenses in CFYm1 (till 31/03/16) (In INR)	Budgeted In CFYm2(In INR)	Actual expenses in CFYm2 (till 31/03/15) (In INR)	Budgeted In CFYm3(In INR)	Actual expenses in CFYm3 (till 31/03/14) (In INR)
Infrastructure Built- Up	30000000	23875237	60000000	60775909	120000000	116011657	100000000	91971609
Library	3500000	2969855	3650000	3663981	1200000	1114137	2500000	2037442
Laboratory Equipment	16500000	15569663	14100000	14207983	15000000	14907600	6500000	6280414
Laboratory Consumables	4500000	3962939	6500000	6884372	5000000	5130605	2500000	2844566
Teaching & Non-Teaching	230000000	228149600	215000000	217105888	175000000	175367843	150000000	147675210

Staff salary								
Maintenance and Spares	147500000	146651509	140000000	134705543	125000000	128806742	78000000	77043935
Research & Development	11000000	10173740	10000000	9248855	8200000	8158500	6500000	6153000
Training & Travel	15000000	13049675	15000000	13967288	8000000	7549353	6000000	6001042
Others (Global & Professional Training)	19000000	17362782	11000000	10664064	9550000	9579851	5000000	4780437
Total	477000000	461765000	475250000	471223883	466950000	466626288	357000000	344787655

10.2.1. Adequacy of budget allocation (10)

(The institution needs to justify that the budget allocated during assessment years was adequate)

Table 10.2.1.1:Institute planned budget and expenditure

SL. NO.	ASSESSMENT YEAR	BUDGET ALLOCATED (In INR)	ACTUAL EXPENDITURE (In INR)	ADEQUATE/ NON ADEQUATE
1	CFY	477000000	461765000	Adequate
2	CFYm1	475250000	471223883	Adequate
3	CFYm2	466950000	466626288	Adequate
4	CFYm3	357000000	344787655	Adequate

10.2.2. Utilization of allocated funds (15)

(The institution needs to state how the budget was utilized during assessment years)

Table 10.2.2.1:Utilization of funds

SL. NO.	ASSESSMENT YEAR	BUDGET ALLOCATED (In INR)	ACTUAL EXPENDITURE (In INR)	PERCENTAGE OF UTILIZATION
1	CFY	477000000	461765000	96.80%
2	CFYm1	475250000	471223883	99.15%
3	CFYm2	466950000	466626288	99.93%
4	CFYm3	357000000	344787655	96.57%

10.2.3. Availability of the audited statements on the institute's website (5)

(The institution needs to make audited statements available on its website)

The audited statement is available on the institution website www.newhorizonindia.edu

10.3. Program Specific Budget Allocation, Utilization (30)

Total Budget at program level: For CFY, CFYm1, CFYm2 & CFYm3

CFY: Current Financial Year, CFYm1 (Current Financial Year minus 1), CFYm2 (Current Financial Year minus 2) and CFYm3 (Current Financial Year minus 3).

Table 10.3.1:Program specific budget allocation for CFY 2016-17

Total Budget :41100000(In INR)		Adequate Expenditure (till 31/03/17) :40911091(In INR)		Total No of Students : 432
Non-Recurring(In INR)	Recurring(In INR)	Non-Recurring(In INR)	Recurring(In INR)	Expenditure per student(In INR)
3600000	37500000	3539022	37372069	94702

Table 10.3.2:Program specific budget allocation for CFYm1 2015-16

Total Budget(In INR) :42800000		Adequate Expenditure (till 31/03/16) (In INR) :42362751		Total No of Students : 429
Non-Recurring(In INR)	Recurring(In INR)	Non-Recurring(In INR)	Recurring(In INR)	Expenditure per student(In INR)
6800000	36000000	6789230	35573521	98748

Table 10.3.3:Program specific budget allocation for CFYm2 2014-15

Total Budget(In INR) :49100000		Adequate Expenditure (till 31/03/15) (In INR) :48910770		Total No of Students : 446
Non-Recurring(In INR)	Recurring(In INR)	Non-Recurring(In INR)	Recurring(In INR)	Expenditure per student(In INR)
14000000	35100000	13822282	35088488	109665

Table 10.3.4:Program specific budget allocation for CFYm3 2013-14

Total Budget (In INR):40000000		Adequate Expenditure (till 31/03/14) (In INR):39903903		Total No of Students : 445
Non-Recurring(In INR)	Recurring(In INR)	Non-Recurring(In INR)	Recurring(In INR)	Expenditure per student(In INR)
11500000	28500000	11412088	28491814	89672

Table 10.3.5:Program specific budget and expenses for assessment years 2016-17, 2015-16, 2014-15, 2013-14

Items	Budgeted In CFY(In INR)	Actual expenses in CFY (31/03/17) (In INR)	Budgeted in CFYm1(In INR)	Actual expenses in CFYm1 (till 31/03/16) (In INR)	Budgeted In CFYm2(In INR)	Actual expenses in CFYm2 (till 31/03/15) (In INR)	Budgeted In CFYm3(In INR)	Actual expenses in CFYm3 (till 31/03/14) (In INR)
Infrastructure Built-Up	2175000	2115279	5545000	5463719	12200000	12160094	10650000	10644308
Library	270000	263121	330000	329390	115000	116781	236000	235803
Laboratory Equipment	1380000	1379429	1280000	1277289	1570000	1562583	730000	726862
Laboratory Consumables	360000	351105	620000	618901	545000	537779	330000	329215
Teaching & Non-Teaching Staff Salary	20300000	20213418	19700000	19517692	18400000	18381682	17100000	17091149
Maintenance and Spares	13000000	12992915	12250000	12109946	13600000	13501247	8980000	8916658
Research & Development	915000	901365	845000	831467	860000	855157	720000	712116
Training & Travel	1160000	1156165	1260000	1255651	800000	791307	700000	694529
Others (Global & Professional Training)	1540000	1538294	970000	958693	1010000	1004140	554000	553263
TOTAL EXPENSES	41100000	40911091	42800000	42362751	49100000	48910770	40000000	39903903
PER STUDENT EXPENSE		94702		98748		109665		89672
No. of students		432		429		446		445

10.3.1. Adequacy of budget allocation (10)

(Program needs to justify that the budget allocated over the assessment years was adequate for the program)

Table 10.3.1.1: Program budget and expenditure

SL. NO.	ASSESSMENT YEAR	BUDGET ALLOCATED (In INR)	ACTUAL EXPENDITURE (In INR)	ADEQUATE/ NON ADEQUATE
1	CFY	41100000	40911091	Adequate
2	CFYm1	42800000	42362751	Adequate
3	CFYm2	49100000	48910770	Adequate
4	CFYm3	40000000	39903903	Adequate

10.3.2. Utilization of allocated funds (20)

(Program needs to state how the budget was utilized during the last three assessment years)

Table 10.3.2.1: Utilization of allocated funds

SL. NO.	ASSESSMENT YEAR	BUDGET ALLOCATED (In INR)	ACTUAL EXPENDITURE (In INR)	PERCENTAGE OF UTILIZATION
1	CFY	41100000	40911091	99.54%
2	CFYm1	42800000	42362751	98.97%
3	CFYm2	49100000	48910770	99.61%
4	CFYm3	40000000	39903903	99.75%

10.4. Library and Internet (20)

(Indicate whether zero deficiency report was received by the Institution for all the assessment years. Effective availability/purchase records and utilization of facilities/equipment etc. to be documented and demonstrated)

- Library Services : Yes
- Carpet Area of library (in m²) : 4055
- Reading Space (in m²) : 6703
- Number of seats in reading space : 441
- Number of users (issue book) per day : 220
- Number of users (reading space) per day : 600
- Timings: Ground Floor
 - 24 hours, 365 days
- Timings: Lower Level
 - On Working Days : 8:00 am- 06:30 pm

- On Holidays : 9:00 am- 05:00 pm
- During Examination : 8:00 am- 06:30 pm
- During Vacation : 8:00 am- 06:00 pm
- Number of Library Staff :10
- Number of Library Staff with degree in Library :08
- Management Computerization for Search, Indexing, Issue/Return records- Bar coding used : Yes
- Bar Coding : Yes
- Library Additional Services- Internet, Journals, Conference Proceedings, Technical Magazines, Science Direct, Springer, ASCE, ProQuest, Taylor & Francis, K- Nimbus.

10.4.1. Quality of learning resources (hard/soft) (10)

- ❖ Relevance of available learning resources including e-resources
- ❖ Accessibility to students
- ❖ Support to students for self-learning activities

- Digital Library services :Yes
- Availability of Digital Library contents : Yes
 - Number of Courses : 11
 - Number of eBooks :14736
- Availability of Exclusive Server : Yes
- Availability of intranet/ Internet : Yes
- Availability of Exclusive Space/Room : Yes
- Number of users per day : 250
- Digital Library is provided in the Central Library where students can access all kinds of e-journals.
 - <http://ieeexplore.ieee.org/>
 - <http://www.sciencedirect.com/>
 - <http://www.crcnetbase.com/>
 - <http://www.tandfonline.com/>
 - <http://link.springer.com/>
 - <http://ascelibrary.org>
 - <http://www.knimbus.com/>
 - <http://search.proquest.com/>
 - <http://nlist.inflibnet.ac.in/>
 - <http://www.asmedl.org>
 - <http://saeintl.org>
- Students can access eBooks/journals using internet in the Library.
- Ground Floor section of the Library is open 24 hours a day for utilization. They are spacious, well ventilated, having power sockets, lights & fans and Wi-Fi connectivity. The Digital Library, Video Conference Room, Reading

Rooms are all located here. Lower level contains the Main Books Stock, Reference Section, Library Office and Photocopier Room.

- Library has resources for Undergraduate, Postgraduate and PhD students.
- Textbooks, Journals, Bound Volumes, Conference Proceedings, General Reference Material, Technical Magazines, Newspapers and CDs-DVDs are available for reference.
- Video course online
 - NPTEL-<http://nptel.iitm.ac.in/>
 - NDL (National Digital Library) by MHRD
 - Gnana Sangama by Govt. of Karnataka

10.4.2. Internet (10)

- ❖ Name of the Internet provider:
- ❖ Available bandwidth:
- ❖ Wi-Fi availability:
- ❖ Internet access in labs, classrooms, library and offices of all Departments:
- ❖ Security arrangements:

- ❖ Name of the Internet provider:
 - City online and Jio Communication

- ❖ Available bandwidth:
 - 200 Mbps

- ❖ Wi-Fi availability: Yes
 - Campus is Wi-Fi enabled
 - About 40 access points are available in the campus

- ❖ Internet access in labs, classrooms, library and offices of all Departments: Yes
 - Internet can be accessed in labs through Wi-Fi. Few systems provided with internet connection.
 - Wi-Fi at the corridors gives access to internet in the classrooms.
 - Library has a designated browsing centre with about 50 systems having internet connection. Wi-Fi accessibility also available
 - Departments have designated systems with internet connection. Wi-Fi accessibility as well as Ethernet available.

- ❖ Security arrangements: Yes
 - Well trained electricians are available on campus for wiring and installation and constant monitoring. Safety measures like earthing are done to avoid electrical shocks.
 - Around 65 security guards are working in the college campus in shifts. Chief Security Officer (CSO) monitors the guards. Security guards are deployed at all blocks, hostels and at open spaces in the campus.



NEW HORIZON COLLEGE OF ENGINEERING

AUTONOMOUS COLLEGE Permanently Affiliated to VTU, Approved by AICTE & UGC
Accredited by NAAC with 'A' Grade

Declaration

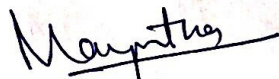
(The head of the institution needs to make a declaration as per the format given)

I undertake that, the institution is well aware about the provisions in the NBA's accreditation manual concerned for this application, rules, regulations, notifications and NBA expert visit guidelines in force as on date and the institute shall fully abide by them.

It is submitted that information provided in this Self Assessment Report is factually correct. I understand and agree that an appropriate disciplinary action against the Institute will be initiated by the NBA, in case any false statement/information is observed during pre-visit, visit, post visit and subsequent to grant of accreditation.

Date: 20-03-2018

Place: Bangalore


Signature & Name
(Dr. MANJUNATHA)
Head of the Institution with seal
Principal
New Horizon College of Engineering
Bangalore

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