ACS College of Engineering

Electronics & Communication Engg.

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Part A : Institutional Information

1   Name and Address of the Institution

ACS College of Engineering,
ACS College of Engineering, No. 207, Kambi Pura, Mysore Road, Bangalore -560074.

2   Name and Address of Affiliating University

Visvesvaraya Technological University Belgaum Karn

3   Year of establishment of the Institution:

2009

4   Type of the Institution:

☐ University	☐ Autonomous
☐ Deemed University	☑ Affiliated
☐ Government Aided	

5   Ownership Status:

☐ Central Government	☑ Trust
☐ State Government	☐ Society
☐ Government Aided	☐ Section 25 Company
☐ Self financing	☐ 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
Rajarajeswari Medical College & Hospital	2005	MBBS,PG	BENGALURU
Rajarajeshwari Dental College and Hospital	1992	BDS,PG	BENGALURU
Rajarajeswari College of Engineering	2006	UG,PG	BENGALURU
Rajarajeswari College & Schoolof Nursing	2004	NURSING	BENGALURU
Rajarajeswari College of Physiotheraphy	2006	Physiotherapy	BENGALURU

7   Details of all the programs being offered by the institution under consideration:

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	To	Program for consideration	Program for Duration
B.E	UG	2009	2009	60	Yes	60	Granted accreditation for 3 years for the period (specify period)	2019	2022	Yes	4

Sanctioned Intake for Last Five Years for the B.E	
Academic Year	**Sanctioned Intake**
2022-23	60
2021-22	60
2020-21	60
2019-20	120
2018-19	120
2017-18	60

8 Programs to be considered for Accreditation vide this application:

S No	Level	Discipline	Program
1	Under Graduate	Engineering & Technology	Electronics & Communication Engg.
2	Under Graduate	Engineering & Technology	Aerospace Engineering

9 Total number of employees in the institution:

A. Regular* Employees (Faculty and Staff):

Items	2022-23		2021-22		2020-21	
	MIN	MAX	MIN	MAX	MIN	MAX
Faculty in Engineering (Male)	72	72	79	79	68	68
Faculty in Engineering (Female)	33	33	54	54	48	48
Faculty in Maths, Science & Humanities (Male)	14	14	16	16	16	16
Faculty in Maths, Science & Humanities (FeMale)	8	8	10	10	11	11
Non-teaching staff (Male)	58	58	58	58	48	48
Non-teaching staff (FeMale)	67	67	67	67	65	65

B. Contractual* Employees (Faculty and Staff):

Items	2022-23		2021-22		2020-21	
	MIN	MAX	MIN	MAX	MIN	MAX
Faculty in Engineering (Male)	0	0	0	0	0	0
Faculty in Engineering (Female)	0	0	0	0	0	0
Faculty in Maths, Science & Humanities (Male)	0	0	0	0	0	0
Faculty 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 and Technology- UG	☑ Shift1	☐ Shift2
Engineering and Technology- PG	☑ Shift1	☐ Shift2
Engineering and Technology- Polytechnic	☐ Shift1	☐ Shift2
MBA	☐ Shift1	☐ Shift2
MCA	☐ Shift1	☐ Shift2

Engineering and Technology- UG Shift-1

Items	2022-23	2021-22	2020-21
Total no. of Boys	658	799	600
Total no. of Girls	782	476	674
Total	**1440**	**1275**	**1274**

Engineering and Technology- PG Shift-1

Items	2022-23	2021-22	2020-21
Total no. of Boys	3	15	11
Total no. of Girls	1	4	15
Total	**4**	**19**	**26**

11 Vision of the Institution:

Engineering the future of the nation by transforming the students to be technically skilled managers, innovative leaders and environmentally receptive citizens.

12 Mission of the Institution:

To implement holistic approach in curriculum and pedagogy through Industry Integrated Interactions to meet the needs of Global Engineering Environment. To develop students with knowledge, attitude and skill of employability, entrepreneurship (Be Job creators than job seekers), research potential and professionally ethical citizens.

13 Contact Information of the Head of the Institution and NBA coordinator, if designated:

Head of the Institution	
Name	Dr.M.S.MURALI
Designation	PRINCIPAL
Mobile No.	9900028024
Email ID	principal@acsce.edu.in

NBA Coordinator, If Designated

Name	DR T SENTHIL KUMARAN
Designation	PROFESSOR AND DEAN
Mobile No.	8884000900
Email ID	senthilkumaran@acsce.edu.in

PART B: Criteria Summary

Critera No.	Criteria	Total Marks	Institute Marks
1	VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES	60	60.00
2	PROGRAM CURRICULUM AND TEACHING - LEARNING PROCESSES	120	120.00
3	COURSE OUTCOMES AND PROGRAM OUTCOMES	120	120.00
4	STUDENTS' PERFORMANCE	150	113.96
5	FACULTY INFORMATION AND CONTRIBUTIONS	200	172.56
6	FACILITIES AND TECHNICAL SUPPORT	80	80.00
7	CONTINUOUS IMPROVEMENT	50	50.00
8	FIRST YEAR ACADEMICS	50	45.75
9	STUDENT SUPPORT SYSTEMS	50	50.00
10	GOVERNANCE, INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES	120	120.00
	Total	**1000**	**933**

Part B

1 VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES (60)	Total Marks 60.00

1.1 State the Vision and Mission of the Department and Institute (5)

Total Marks 5.00

Institute Marks : 5.00

Vision of the institute	**Engineering the future of the nation by transforming the students to be technically skilled managers, innovative leaders and environmentally receptive citizens.**
Mission of the institute	**To implement holistic approach in curriculum and pedagogy through Industry Integrated Interactions to meet the needs of Global Engineering Environment. To develop students with knowledge, attitude and skill of employability, entrepreneurship (Be Job creators than job seekers), research potential and professionally ethical citizens.**
Vision of the Department	Impart quality education to create world class technocrats and entrepreneurs with new ideas and innovations to meet industry expectations through advanced research.
Mission of the Department	<table><tr><th>Mission No.</th><th>Mission Statements</th></tr><tr><td>M1</td><td>Develop and deliver Quality academic programmes in Emerging and innovative field of Engineering to empower the students to meet Industry Standards.</td></tr><tr><td>M2</td><td>To build student community with high ethical standards to undertake R&D in thrust areas of national and international needs.</td></tr><tr><td>M3</td><td>To create Centre of Excellence by establishing the incubation centres to meet global research challenges</td></tr></table>

1.2 State the Program Educational Objectives (PEOs) (5)

Total Marks 5.00

Institute Marks : 5.00

PEO No.	Program Educational Objectives Statements
PEO1	To develop the ability among students to understand the concept of core electronics subjects that will facilitate understanding of new technology.
PEO2	To embed a strong foundation in the engineering fundamentals to solve, analyze and design real time engineering products.
PEO3	To give exposures to emerging edge technologies, adequate training and opportunities to work as team on multidisciplinary projects with effective communication skills and leadership qualities.

1.3 Indicate where the Vision, Mission and PEOs are published and disseminated among stakeholders (10)

Total Marks 10.00

Institute Marks : 10.00

The Vision, Mission and PEOs are published at:

1. Institute website https://www.acsce.edu.in/department/electronics-and-communication-engineering/
2. Course file
3. Alumni Meeting
4. Displayed in HOD's room, Faculty Room and Seminar Hall
5. Displayed on notice boards of laboratories, classrooms and corridors.
6. Departmental Newsletter

Process of dissemination among stakeholders

The institution and departments Vision, Mission, and Program Educational Objectives (PEOs) are communicated to new faculty and students during the introductory meeting and Faculty were informed about these matters through regular meetings and discussions in the Departmental Advisory Board (DAB)/ Program Assessment Committee (PAC) meetings. The faculty incorporates the Vision, Mission, and PEOs into their course files and shares them with their students. Information brochures, departmental Newsletter, and parent-teacher meetings are utilized to inform employers, parents, and alumni about these essential elements. Additionally, Faculty Development Programs (FDP) is organized to focus on Outcome-Based Education (OBE) as needed.

The Vision and Mission Statements are published

Particulars	Internal Stake Holders	External Stake Holders
Departmental Newsletter	✓	
College Website (www.acsce.edu.in (file:///C:/Users/Master/Desktop/16-8-16/www.acsce.edu.in))	✓	✓
Department website (https://www.acsce.edu.in/department/electronics-and-communication-engineering/)	✓	✓
College Brochure	✓	
Progress Report	✓	

Particulars	Internal Stake Holders	External Stake Holders
Faculty rooms	✓	
Class rooms	✓	
Departmental notice boards	✓	
Laboratories	✓	
Departmental	✓	
Seminar Hall	✓	✓

The Vision and Mission Statements are disseminated

1.4 State the process for defining the Vision and Mission of the Department, and PEOs of the program (25)   Total Marks 25.00

Institute Marks : 25.00

1.4.1 Description of process involved in defining Vision and Mission of the Department:

The vision and mission statements of the department are established through a consultation process by involving the stakeholders (internal and external) of the department. The inputs from Alumni Interaction, Departmental Advisory Board (DAB) / Program Assessment Committee (PAC) and department Strengths & Statistics are used in framing the **Vision & Mission Statements** of the dept. aligned with the institutional **Vision & Mission Statements.**

Step 1: During the first stage, gather input from stakeholders and with the department head, as well as the Departmental Advisory Board (DAB) / Program Assessment Committee (PAC) meeting, to establish the vision and mission statements that are consistent with those of the institute.

Step 2: The vision and mission statements, defined as stated in step-1 are shared with faculty, students, alumni, management and IQAC for the feedback.

Step 3: The feedback obtained from stakeholders in step 2 is discussed among DAB / PAC members before being finalized.

Step 4: The new vision and mission statements (outcome of the DAB / PAC meeting) are placed before IQAC for recommendation.

Step 5: Once the vision and mission statements are recommended by the IQAC they are published in the web site and other places stated in 1.3. Any comments by the Internal / External stakeholders are noted and considered for next cycle of revising the vision and mission statements.
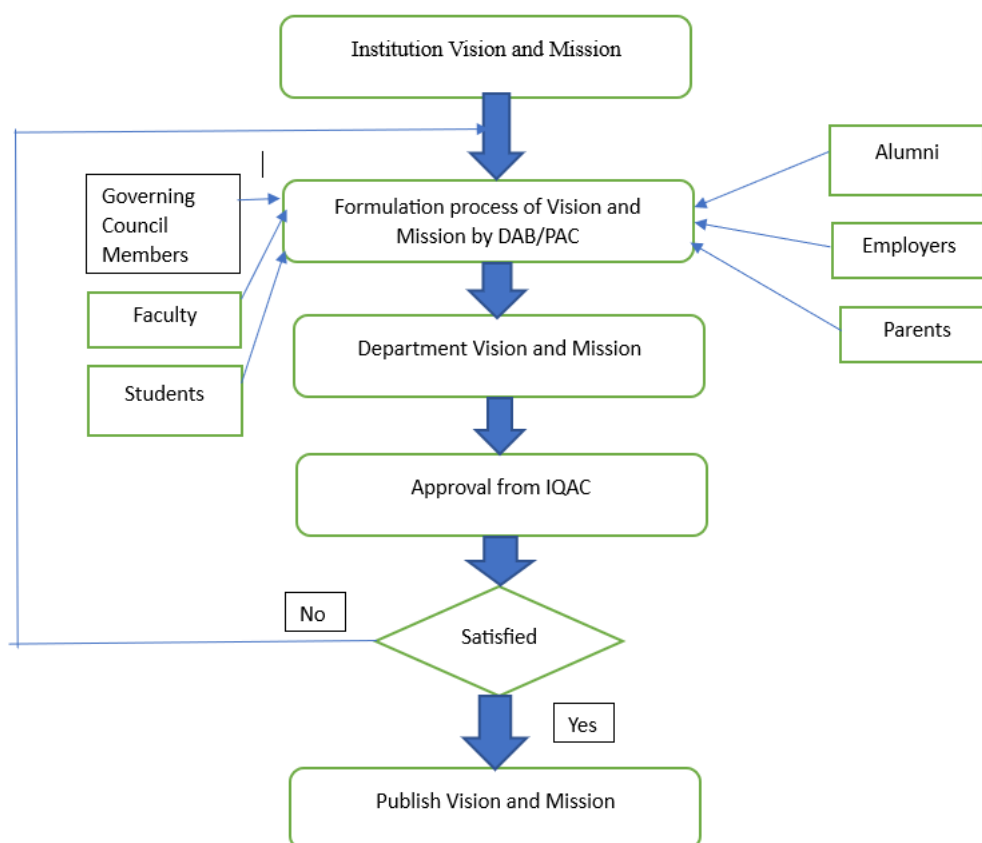

Fig.1.4.1 Process to establish department vision & mission.

1.4.2 Description of process involved in defining PEOs of the Department:

The Program Educational Objectives are established through a consultation process involving the core constituents such as students, alumni, industries, and faculty members.

The PEOs are established through the following steps:

Step1: The PEOs are initially defined considering the following:

- Vision, mission statements of the institute/department program outcomes
- Feedback from alumni and industry requirement
- Expectations of parents/aspirants of the program.
- The placement record of the graduates from the Training and Placement cell and higher education records
- Curriculum analysis

Step 2: The defined PEOs are discussed among faculty, current students, alumni, parents, and DAB / PAC members. The feedback received from all stakeholders is carefully considered to refine the PEOs.

Step 3: The PEOs from step 2 are put before IQAC for discussion and feedback. Once the IQAC approve the PEOs they will be published.

Step 4: Attainment of the stated PEOs is checked through surveying views of employers of Our students and alumni. Their views are considered while modifying PEOs in next cycle.
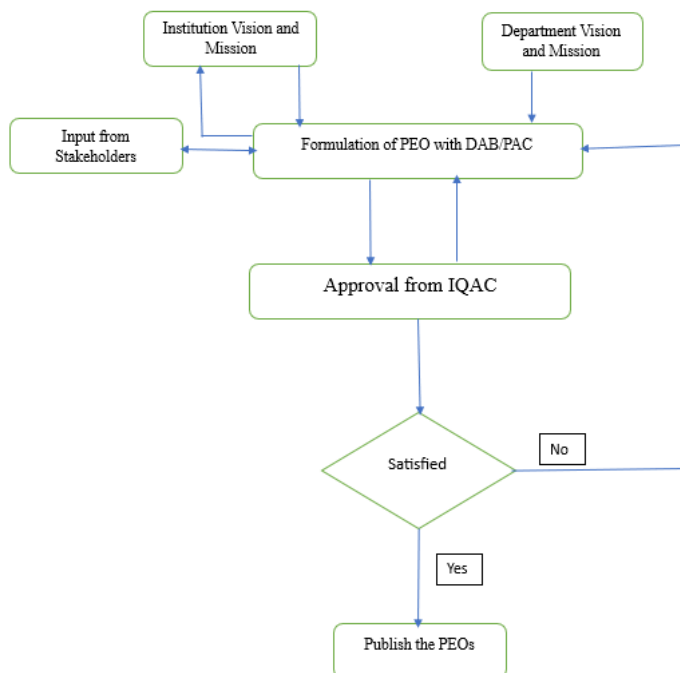
1.4.3

Figure 1.4.2: PEO Definition & Assessment Process

1.4.3 Administrative system helps in ensuring the achievement of PEOs,POs,PSOs

The following administrative systems are functioning in the department to ensure the attainment of POS, PSOs and PEOS:

Program Assessment Committee (PAC)

Department Advisory Board (DAB)

Program Assessment Committee (PAC)

PAC consists of faculty representatives and is chaired by the Program Coordinator. The functions of PAC include:

- Monitors the attainment of COs, POs, PSOs and PEOs.
- Motivates the faculty and students towards attending workshops, developing projects, working models, paper publications and research. Interact with students, faculty, Program Coordinator and outside/community agencies (through their representation) in facilitating program educational objectives
- PAC meets at least once in 6 months to review the program and submits periodic report to Department Advisory Board to make necessary changes in the program to improve effectiveness.

Sl.No.	Name	Designation
1	Dr. M.S. Murali	Principal
2	Dr. Bharathi Gururaj	Assoc.Prof & HOD
3	Dr. A.M. Prasanna Kumar	Professor
4	Dr. Prajith Prakash Nair	Associate Professor
5	Dr. Mathivanan M	Associate Professor

Department Advisory Board (DAB):

DAB consists of the Head of the Department, Program Co-ordinators, and the representatives of some key stake holders.

DAB is chaired by Head of the department, who receives the input from the Program Assessment Committee (PAC) and monitors the progress of the program. DAB analyze present issues and future trends and opportunities related to the program periodically. The DAB develops and recommends new or revised program goals and objectives.

Sl.No.	Name	Designation	Role
1	Dr. Bharathi Gururaj	Assoc.Prof & HOD	Chairperson
2	Dr. A.M. Prasanna Kumar	Professor	Key Resource Person
3	Dr. Prajith Prakash Nair	Associate Professor	NBA Coordinator

4	Mr. Nagesh H B	Assistant Professor	Member
5	Mrs. Vijaya Dalawai	Assistant Professor	Member
6	Mr. Srinivas	Parent	Member
7	Ms. Swathi S	Alumni Student	Member
8	Mr. Satyanarayan	Employer	Member
9	Ms. Brunda	III Year Student	Member

1.5 Establish consistency of PEOs with Mission of the Department (15)   Total Marks 15.00

Institute Marks : 15.00

PEO Statements	M1	M2	M3	Justification
PEO1	H	M	L	(Mission 1) strongly support to achieve PEO1, as objective is to develop the ability among students and understand concepts of core graduate electronics which can be accomplished, if graduates are facilitates understanding of new technology. (Mission 2) moderately support PEO1 to embed a strong foundation in Engineering to meet global research challenges. (Mission 3) slightly support in achieving PEO1 as global concern. Overall, a department mission reasonably supports PEO1.
PEO2	H	H	M	Quality Academic programmes (Mission 1) highly supports for overall development of graduates and to strengthen their technical skills & interest. With high ethical standards to undertake R&D (Mission 2) strongly helps in fulfilling needs of industries and society. To meet global research challenges (Mission 3) moderately supports in industrial growth. Overall, a department mission highly supports PEO2.
PEO3	M	M	H	Mission 1 and 2 moderately support to achieve PEO3 with respect effective communication skill and leadership qualities. Mission 3 highly support to achieve PEO3 for establishing the incubation centers to meet global research challenges.

H-High　　　　　**M-Medium**　　　　　**L-Low**

PEO Statements	M1	M2	M3
To develop the ability among students to understand the concept of core electronics subjects that will facilitate understanding of new technology.	3	2	2
To embed a strong foundation in the engineering fundamentals to solve, analyze and design real time engineering products.	3	3	2
To give exposures to emerging edge technologies, adequate training and opportunities to work as team on multidisciplinary projects with effective communication skills and leadership qualities.	2	2	3

2 PROGRAM CURRICULUM AND TEACHING - LEARNING PROCESSES (120)　　　Total Marks 120.00

2.1 Program Curriculum (20)　　　Total Marks 20.00

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 AnnexureI. Also mention the identified curricular gaps, if any (10)

Institute Marks : 10.00

ACS College of Engineering is an affiliated institution under the Visvesvaraya Technological University, Belagavi, Karnataka, and recognized by All India Council for Technical Education (AICTE), New Delhi. The VTU follows the AICTE model curriculum in designing a university curriculum that complies with AICTE norms. The Department of Electronics and Communication Engineering (ECE) follows the curriculum designed by the university. In general, the curriculum comprises of Humanities and Basic Science, Engineering Science, Professional courses and their distribution as Core and Elective courses with the specified breadth and depth of learning, Open Electives, Major and Minor Project Work, Internship and Technical seminar. Courses are mapped with twelve Program Outcomes (POs) and gaps are identified. The curriculum is formulated and reviewed once in 4 years or sometimes even earlier as demanded through the Board of Studies (BoS) of VTU comprising a chairman, senior professors of ECE discipline and industry representatives. The analysis is done for attaining the PO and Program Specific Outcomes (PSO) through the curriculum. The suggestions collected are shared with the BoS of the university during the meetings as and when required based on Course Outcome CO / PO / PSO attainment and gap analysis. With the implementation of National Education Policy-2020 by the VTU effective from the academic year 2021-22, the department of ECE, ACS is geared up to provide a new curricular and pedagogical structure, holistic, multidisciplinary education for realizing the aspiration articulated in NEP-2020 to nurture young minds.

Process used to identify extent of compliance of the University Curriculum for attaining the Program Outcomes and Program Specific Outcomes

Department of Electronics & Communication Engineering is following revised scheme of the choice-based credit system (CBCS). All course outcomes are defined by the VTU, and these are mapped to Program Outcomes which is prescribe by NBA. The Program specific Outcomes are defined by the department.

The process used to identify the extent of compliance of the university curriculum for attaining the PSOs is as follows:

- The Head of Department and Faculty members have a couple of meeting 's to draft the PSOs statements.
- The final statements of PSOs are framed by HOD with Department Advisory Board (DAB) members.
- Finalized PSO statements at departmental level, it is communicated to all the stakeholders.The PSOs are revised whenever University /institution vision, Mission, and PEOs are revised.

The PSOs are revised whenever University /institution vision, Mission, and PEOs are revised.
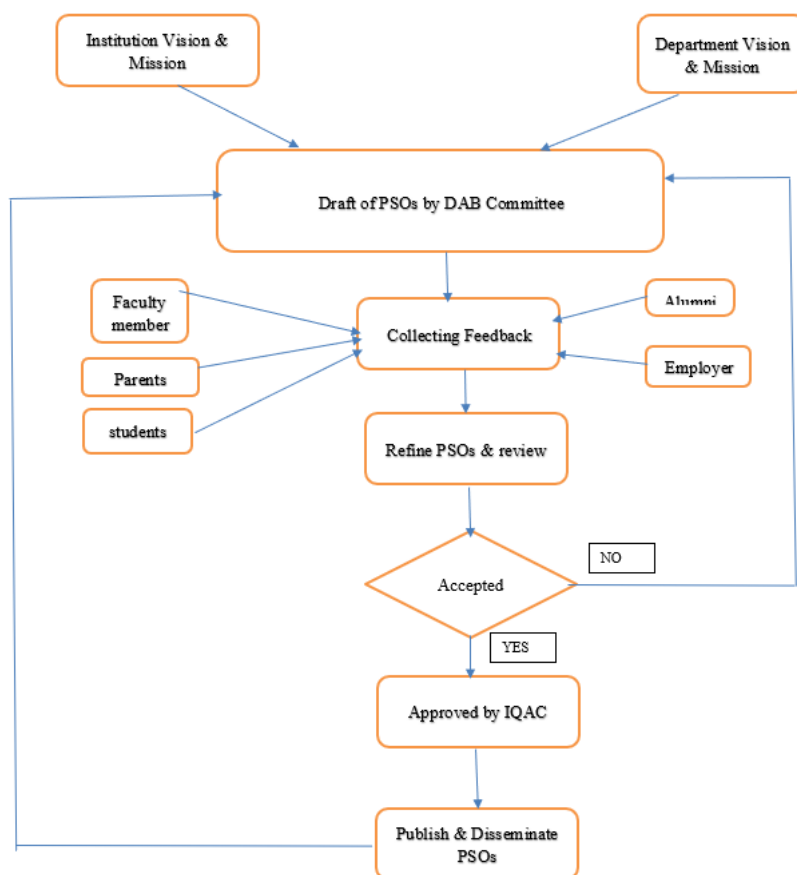

Figure 2.1.1.1: Process of Defining PSOs

Table 2.1.1.1 Program Outcomes defined by NBA

PO1	Engineering Knowledge	Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2	Problem analysis	Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3	Design/development of solutions	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, and environmental considerations.
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.
PO5	Modern Tool Usage	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.
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.
PO7	Environment and Sustainability	Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8	Ethics	Apply ethical principles and commit to professional ethics and responsibilities and norms of the 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 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.

Table 2.1.1.2: PSO of Electronics and Communication Engineering Program

PSO1	To analyze ,design and develop solutions by applying fundamental concepts of Electronics and Communication Engineering.
PSO2	Design and implement the products using cutting edge technologies in hardware and Software, to demonstrate leadership qualities among students, to promote research and development activities for betterment of organization and society.

TABLE 2.1.1.3 STRUCTUE OF VTU CURRICULUM

Sl.No.	Course code	Course Title	Lecture(L)	Tutorial (T)	Practical(P)	Total Hrs	Theory Credits	Practical Credits	Total

		I SEMESTER(PHYSICS GROUP)						
1	18MAT11	CALCULUS AND LINEAR ALEGBRA	3	2	-	3	4	-	4
2	18PHY12	ENGINEERING PHYSICS	3	2	-	3	4	-	4
3	18ELE13	BASIC ELECTRICAL ENGINEERING	2	2	-	2	3	-	3
4	18CIV14	ELEMENTS OF CIVIL ENGINEERING AND MECHANICS	2	2	-	2	3	-	3
5	18EGDL15	ENGINEERING GRAPHICS	2	-	-	2	3	-	3
6	18PHYL16	ENGINEERING PHYSICS LABORATORY	-	-	2	-	-	1	1
7	18ELE17	BASIC ELECTRICAL ENGINEERING LABORATORY	-	-	2	-	-	1	1
8	18EGH18	TECHNICAL ENGLISH-I	-	2	-	-	1	-	1

		I SEMESTER(CHEMISTRY GROUP)						
9	18MAT11	CALCULUS AND LINEAR ALEGBRA	3	2	-	3	4	-	4
10	18CHE12	ENGINEERING CHEMISTRY	3	2	-	3	4	-	4
11	18CPS13	C PROGRAMMING FOR PROBLEM SOLVING	2	2	-	2	3	-	3
12	18ELN14	BASIC ELECTRONICS	2	2	-	2	3	-	3
13	18ME15	ELEMENTS OF MECHANICAL ENGINEERING	2	2	-	2	3	-	3
14	18CHEL16	ENGINEERING CHEMISTRY LABORATORY	-	-	2	-	-	1	1
15	18CPL17	C PROGRAMMING LABORATORY	-	-	2	-	-	1	1
16	18EGH18	TECHNICAL ENGLISH-I	-	2	-	-	1	-	1

		II SEMESTER(PHYSICS GROUP)						
17	18MAT21	ADVANCED CALCULUS AND NUMERICAL METHODS	3	2	-	3	4	-	4
18	18PHY22	ENGINEERING PHYSICS	3	2	-	3	4	-	4
19	18ELE23	BASIC ELECTRICAL ENGINEERING	2	2	-	2	3	-	3
20	18CIV24	ELEMENTS OF CIVIL ENGINEERING AND MECHANICS	2	2	-	2	3	-	3
21	18EGDL25	ENGINEERING GRAPHICS	2	-	-	2	3	-	3
22	18PHYL26	ENGINEERING PHYSICS LABORATORY	-	-	2	-	-	1	1
23	18ELE27	BASIC ELECTRICAL ENGINEERING LABORATORY	-	-	2	-	-	1	1
24	18EGH28	TECHNICAL ENGLISH-II	-	2	-	-	1	-	1

		II SEMESTER(CHEMISTRY GROUP)						

25	18MAT21	CALCULUS AND LINEAR ALEGBRA	3	2	-	3	4	-	4
26	18CHE22	ENGINEERING CHEMISTRY	3	2	-	3	4	-	4
27	18CPS23	C PROGRAMMING FOR PROBLEM SOLVING	2	2	-	2	3	-	3
28	18ELN24	BASIC ELECTRONICS	2	2	-	2	3	-	3
29	18ME25	ELEMENTS OF MECHANICAL ENGINEERING	2	2	-	2	3	-	3
30	18CHEL26	ENGINEERING CHEMISTRY LABORATORY	-	-	2	-	-	1	1
31	18CPL27	C PROGRAMMING LABORATORY	-	-	2	-	-	1	1
32	18EGH28	TECHNICAL ENGLISH-II	-	2	-	-	1	-	1
III SEMESTER									
33	18MAT13	TRANSFORM CALCULUS, FOURIER SERIES & NUMERICAL TECHNIQUES	2	2	-	2	3	-	3
34	18EC32	NETWORK THEORY	3	2	-	3	4	-	4
35	18EC33	ELECTRONICS DEVICES	3	-	-	3	3	-	3
36	18EC34	DIGITAL SYSTEM DESIGN	3	-	-	3	3	-	3
37	18EC35	COMPUTER ORGANIZATION AND ARCHITECTURE	3	-	-	3	3	-	3
38	18EC36	POWER ELECTRONICS AND INSTRUMENTATION	3	-	-	3	3	-	3
39	18EC37	ELECTROINCS AND INSTRUMENTATION LABORATORY	-	2	2	-	-	2	2
40	18EC38	DIGITAL SYSTEM DESIGN LABORATORY	-	2	2	-	-	2	2
41	18CPC39/49	CONSTITUTION OF INDIA, PROFESSIONAL ETHICS AND CYBER LAW	1	-	-	1	1	-	1
42	18MATDIP31	ADDITIONAL MATHEMATICS-I	2	1	-	2	0	-	0
43	18MAT41	COMPLEX ANALYSIS, PROBABILITY AND STATISTICAL METHODS	2	2	-	2	3	-	3
44	18EC42	ANALOG CIRUITS	3	2	-	3	4	-	4
45	18EC43	CONTROL SYSTEM	3	-	-	3	3	-	3
IV SEMESTER									
46	18EC44	ENGINEERING STATISTICS AND LINEAR ALGEBRA	3	-	-	3	3	-	3
47	18EC45	SIGNALS AND SYSTEMS	3	-	-	3	3	-	3
48	18EC46	MICROCONTROLLER	3	-	-	3	3	-	3
49	18EC47	MICROCONTROLLER LABORATORY	-	2	2	-	-	2	2

50	18ECL48	ANALOG CIRCUITS LABORATORY	-	2	2	-	-	2	2
51	18MATDIP41	ADDITIONAL MATHEMATICS-II	2	1	-	2	0	-	0
		V SEMESTER							
52	18ES51	TECHNOLOGICAL INNOVATION MANAGEMENT AND ENTERPRENEURSHIP	3	-	-	3	3	-	3
53	18EC52	DIGITAL SIGNAL PROCESSING	3	2	-	3	4	-	4
54	18EC53	PRINCIPLES OF COMMUNICATION SYSTEMS	3	2	-	3	4	-	4
55	18EC54	INFORMATION THEORY AND CODING	3	-	-	3	3	-	3
56	18EC55	ELECTROMAGNETIC WAVES	3	-	-	3	3	-	3
57	18EC56	VERILOG HDL	3	-	-	3	3	-	3
58	18ECL57	DIGITAL SIGNAL PROCESSING LABORATORY	-	2	2	-	-	2	2
59	18ECL58	HDL LABORATORY	-	2	2	-	-	2	2
60	18CIV59	ENVIRONMENTAL STUDIES	1	-	-	1	1	-	1
		VI SEMESTER							
61	18EC61	DIGITAL COMMUNICATION	3	2	-	3	4	-	4
62	18EC62	EMBEDDED SYSTES	3	2	-	3	4	-	4
63	18EC63	MICROWAVES & ANTENNAS	3	2	-	3	4	-	4
64	18EC642	ARTIFICAL NEUTRAL NETWORKS	3	-	-	3	3	-	3
65	18CV653	OCCUPATIONAL HEALTH AND SAFETY	3	-	-	3	3	-	3
68	18ECL66	EMBEDDED SYSTEM LAB		- 3	-	3	3	-	3
69	18ECL67	COMMUNICATION LAB	3		-	3	3	-	3
70	18ECMP68	MINI-PROJECT	3		-	3	3	-	3
72	18ECI85	INTERNSHIP	-	2	2	-	-	2	2
		VII SEMESTER							
73	18EC71	COMPUTER NETWORKS	3	-	-	3	3	-	3
74	18EC72	VLSI DESIGN	3	-	-	3	3	-	3
75	18EC733	DIGITAL IMAGE PROCESSING	3	-	-	3	3	-	3
83	18EC745	MACHINE LEARNING	3	-	-	3	3	-	3
84	18CV753	ENVIRONMENTAL SCIENCE AND PROTECTION	3	-	-	3	3	-	3

85	18EC76	COMPUTER NETWORKS LAB	3	-	-	3	3	-	3
86	18ECL77	VLSI LAB	3	-	-	3	3	-	3
87	18ECMP68	PROJECT PHASE-1	-	2	2	-	0	0	0
88	18ECI85	INTERNSHIP	-	2	2	-	-	2	2
		VIII SEMESTER							
89	18EC81	WIRELESS CELLULAR COMMUNICATION	3	-	-	3	3	-	3
90	18EC824	OPTICAL COMMUNICATION NETWORK	3	-	-	3	3	-	3
91	18ECP83	PROJECT PHASE-II	3	-	-	3	3	-	3
92	18ECI85	INTERNSHIP	3	-	-	3	3	-	3
93	18ECS824	TECHNICAL SEMINAR	3	-	-	3	3	-	3

Table 2.1.3

Statistics of VTU syllabus with mapping of PO and PSO

SL No.	Types of Courses	VTU	Mapped Program outcome	Mapped Program Specific outcome
1	Humanities &Basic Sciences 07	Technical English-I/ II Engineering Physics-4 Engineering Chemistry-4 Calculus and Linear Algebra-4 Advanced Calculus and Numerical Methods-4 Transform Calculus, Fourier Series and Numerical Techniques- 3, Engineering Statistics and Linear algebra-4	PO1,PO2,PO3, PO7,PO10,	PSO1
2	Engineering Sciences 06	Basic Electrical Engineering3C Programming for Problem Solving-3 Elements of Civil Engineering & Mechanics-3 Basic Electronics-3 Engineering Graphics-3 Elements of Mechanical Engineering-3	PO1,PO2,PO7	PSO1, PSO2
3	Core Subjects 21	Network Theory-4, Electronic Devices-3 Digital System Design-3 Computer Organization & Architecture-3, Power Electronics and Instrumentation-3 Analog Circuits-4 Control Systems-3 Signals & Systems-3, Microcontroller-3 Digital Signal Processing-4 Principles of Communication Systems-4 Information Theory & Coding-4 Electromagnetic Waves-4 Verilog HDL-4 Digital Communication -4 Embedded Systems-4 Microwaves & Antennas-4 Computer networks-4 VLSI Design-4 Wireless and Cellular Communication-4	PO1,PO2,PO3, PO4, PO5,PO11,PO 12	PSO1, PSO2
4	Electives Subjects 05	Professional Elective1 – Artificial Neural networks- 3 Professional Elective 2 – Digital Image Processing-3 Professional Elective 3- Machine Learning - 3 Professional Elective 4- Optical Communication Networks- 3	PO1,PO2,PO3, PO4, PO5,PO11	PSO1, PSO2
5	Open Elective 02	Open elective A-3 Open elective B-3	PO1,PO2,PO3, PO4,PO5,PO11	
6	Project Work 01	Project Work Phase 1-1 Project work Phase 2-8	PO1,PO2,PO3,PO4,PO5,PO6, PO7, PO8, PO9, PO10, PO11,PO12	PSO1, PSO2

| 7 | Mandatory Courses 03 | Constitution of India Professional Ethics and Cyber Law 1 Vyavaharika Kannada (Kannada for Communication) / Aadalitha Kannada (Kannada for Administration) 1

Environmental Studies 1 | PO6, PO7,P10 PO12 | - |

Table 2.1.1.1.4 Extend of Compliance of the University curriculum for attaining the PO and PSO

Course	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO1	PSO2
18MAT11	✓	✓	✓	✓										
18 CHE 12	✓	✓	✓	✓	✓	✓	✓							
18 CPS 13	✓	✓	✓											
18 ELN 14	✓	✓	✓	✓	✓									
18 ME15	✓	✓	✓	✓	✓									
18 CHEL 16	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓		
18 CPL 17	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓		
18EGH18								✓	✓		✓			
18MAT21	✓	✓	✓	✓										
18 PHY22	✓	✓	✓	✓								✓		
18 ELE23	✓	✓	✓	✓	✓							✓		
18 CIV24	✓	✓	✓	✓										
18 EGDL25	✓	✓	✓	✓										
18 PHYL26	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
18 ELEL27	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
18EGH28								✓	✓		✓			
18MAT31	✓	✓	✓	✓										
18EC32	✓	✓	✓	✓	✓								✓	✓
18EC33	✓	✓	✓	✓	✓								✓	✓
18EC34	✓	✓	✓	✓	✓								✓	✓
18EC35	✓	✓	✓	✓	✓								✓	✓
18EC36	✓	✓	✓	✓	✓								✓	✓
18ECL37	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
18ECL38	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓
18KAK39								✓	✓	✓		✓		
18MAT41	✓	✓	✓											
18EC42	✓	✓	✓	✓	✓							✓	✓	✓
18EC43	✓	✓	✓	✓	✓								✓	✓
18EC44	✓	✓	✓										✓	✓
18EC45	✓	✓	✓										✓	✓
18EC46	✓	✓	✓										✓	✓
18ECL47	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓
18ECL48	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓
18 CPC49								✓	✓	✓		✓	✓	✓
18ES51	✓	✓				✓		✓	✓					✓
18EC52	✓	✓	✓	✓									✓	✓
18EC53	✓	✓	✓		✓							✓	✓	✓
18EC54	✓	✓	✓										✓	✓
18EC55	✓	✓	✓										✓	✓
18EC56	✓	✓	✓										✓	✓
18ECL57	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓
18ECL58	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓
18CIV59	✓	✓	✓				✓							✓

Course														
18EC61	✓	✓	✓										✓	✓
18EC62	✓	✓	✓	✓									✓	✓
18EC63	✓	✓	✓										✓	✓
18EC642	✓	✓	✓										✓	✓
18CV653	✓	✓	✓			✓	✓		✓				✓	✓
18ECL66	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓
18ECL67	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓
18ECMP68	✓	✓	✓	✓									✓	✓
18EC71	✓	✓	✓	✓									✓	✓
18EC72	✓	✓	✓	✓									✓	✓
18EC733	✓	✓	✓	✓									✓	✓
18EC743	✓	✓	✓										✓	✓
18ME753	✓	✓	✓			✓	✓						✓	✓
18ECL76	✓	✓	✓	✓	✓	✓			✓	✓	✓		✓	✓
18ECP77	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
18EC81	✓	✓	✓										✓	✓
18EC824	✓	✓	✓										✓	✓
18ECP83	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
18ECS84	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
18ECI85	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

HUMANITIES and MANAGEMENT:The Stream includes courses in Universal Human Values, Social Connect and Responsibilities, Indian Constitution, Professional ethics, Environmental Sciences, Technological innovation and Management, Entrepreneurial skills.

BASIC SCIENCES: The Stream provides fundamental concepts for all Engineering streams, including Physics, chemistry, and Mathematics.

Basic Engineering Courses: The Stream provides basic knowledge of all Engineering streams. The Courses include Basic Electrical sciences, Elementary of Civil and Mechanical Engineering, Engineering drawing, Programming in C and Basic Electronics.

Professional Core Courses: The core courses include program specific courses of study which includes, Electronic Devices, Digital System Design ,Signals and Systems, Network analysis, Control Systems, Linear Integrated Circuits ,Wireless and Cellular Communication, Analog and Digital Communications and Fundamental courses on HDL and VLSI.

Elective Courses: The Courses will provide an choice for the student to opt the courses. Open Electives choice are also given to students as a interdisciplinary course. Some examples of the courses include Environmental protection, Occupational Health and Safety, Industrial automation, Renewable Energy resource etc.

2.1.2 State the delivery details of the content beyond the syllabus for the attainment of POs and PSOs (10)

Institute Marks : 10.00

2.1.2 State the delivery details of the content beyond the syllabus for attainment of POs and PSOs

The process used to identify the extend of compliances of university curriculum is through getting the feedback on Gaps from different Stakeholders. It includes.

1. Seeking the Input from the Faculties who is handling the course.
2. Seeking the input from internal stake holder.
3. Seeking the Input from external Stakeholder

Step1: As per the VTU curriculum respective subject (course) faculties map the CO, PO and PSO for the subjects.

Step2: To identify the GAP, Department advisory Committee collects the data from the internal and external stake holders.

Step3: If Gap is identified, inform the gap to the university and at institute level from respective department conduct the seminars , webinars, Workshops to fulfill the gap.

Step4: If Gap is not identified proceed with the existing curriculum.
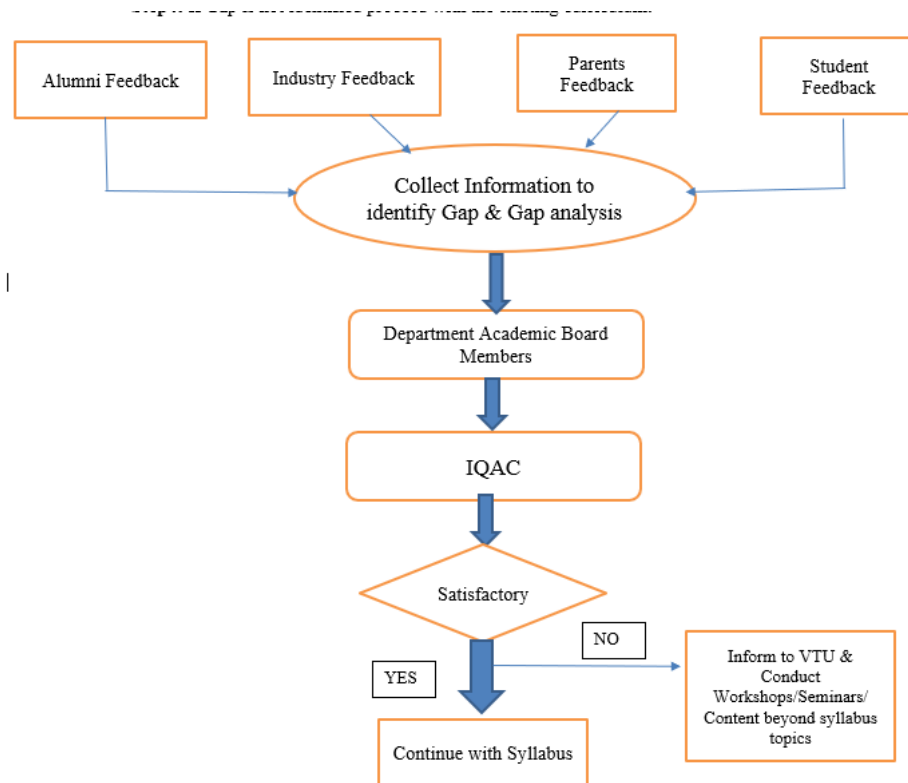
Figure 2.1.2.a : Processes used to identify the curricular gaps to the attainment of the COs/POs

Implementation: Identified content beyond the syllabus (Theory/Lab), if any, is included in lesson plan and covered in classroom by the faculty. If the topic/area is emerge, people from Industry are invited to deliver a lecture.

Gap Identification:

○ As per the university curriculum, for some subject's there is no practical lab associated. This is one of the GAP identified by the Department Core Committee along with Institutional core committee and inform to the university by mail.
○ Physical Education and yoga is one of the GAP identified by the Department core Committee and inform to the university. To fill this Gap at department level conducted Yoga Programs to benefits the students.
○ As per the university curriculum, the subject Digital image Processing in VII semester 18EC733 there is no practical lab. This is one of the GAP identified by the Department core committee and inform to the university. To fill the GAP at department level conducted workshops
○ PAC Committee identified there is no IPR, Python,Labview, courses and informed to VTU. And at department level conduct various seminars and webinars to fill the gap.
○
○   **List of some curricular gaps for attainment of defined Pos & PSOs**

Sl. No.	GAP DESCRIPTION
1	To enhance technical knowledge in line with the industry.
2	Exposure to Industry working environments through Industrial Visits, Internships.
3	To choose a career in an interdisciplinary domain
4	Usage of modern tools usage, technologies, Project based learning, Individual and group activities.
5	Soft skill development training, career guidance.
6	Motivation for Higher Studies.

Initiatives taken to address Curricular gaps:
○ The Department of ECE has taken the following measures to bridge the identified curricular gaps.

- **Technical Talks/Seminars/webinars**: Students are kept updated about the advances in technologies from different industrial experts through technical talks/webinars.
- **Workshops:** Students are encouraged to participate in hands -on sessions which will enhance their skills especially in practical domains.
- **Industrial Visits:** Industrial visits are arranged by colleges to students with an objective of providing students functional opportunity in different sectors like IT, Manufacturing and services, finance, and marketing. Industrial visit helps to combine theoretical knowledge with industrial knowledge.
- **Student Development programs:** Students are trained in major thrust areas of ECE for around one week to ten days.
- **Soft skill training:** The institution and department emphasizes on communication skills, personality development through soft skill training programs which plays a major role for placements .
- **Guest Lectures:** Experts from Industry and academia are invited to deliver lectures on the latest trends and thrust areas in Electronics and Communication Engineering.
- **2.1.2 State the Delivery details of content beyond syllabus for the attainment of Pos and PSOs.Steps were taken to get identified gaps included in curriculum.**

To enrich syllabus contents, the Department of Electronics and Communication Engineering invites experts /trainers from both Industry and academics to update the students with knowledge by sharing newer avenues with the development in Industry . The following tables summarize the action taken to fill the gaps identified and delivery of content beyond the syllabus in Electronics and Communication Engineering.

The gaps identified in the syllabus are discussed with the industry experts,Academic advisors and suitable contents are delivered to students .This will improve the students to expose to newer areas of the branch and they can update their knowledge inline with the industrial requirements.

As per the University ,whenever there is change in the syllabus ,the deputed faculty from the college will attend the meeting with the University members.

2021-22

S.No	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	% of students	Relevance to POs, PSOs
1	Modern tool Usage, Engineering and Society, Ethics	Webinar on Embedded System & IOT	06/12/2021	Satish Pantech Solutions Pvt.Ltd	90	PO6,PO7,PO8,PSO1,PSO2
2	Engineering and Society, Environment and sustainability	Webinar on Industry 4.0 Smart Factories	31/01/2022	Dr. S. V. Sathish, Professor & HOD Mechanical Department, PES University	85	PO6,PO7, PO8,PO9, PO10,PO 11,PO12, PSO1,PSO2
3	Engineering and Society, Ethics	Seminar on Team Building Activities	22/12/2021	Dr. Bharathi Gururaj & Team	75	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
4	Modern tool Usage, Engineering and Society, Ethics	Webinar on Hands on LabVIEW & Virtual Instrumentation	31/01/2022	Mr.Vasanth Kumar V, Assistant Manager, VI Solutions	70	PO6,PO7, PO8, PSO2,PS O3
5	Modern tool Usage, Engineering and Society, Ethics	Webinar on 5G Key Technologies for Industry 4.0 & Hands-on Using Matlab 5G toolbox OMNET++ & NS3	01/02/2022	Dr. Siddalingappa Birader, Dayananda Sagar Acadamey of Technology & Management	70	PO6,PO7, PO8, PSO2,PS O3
6	Engineering and Society,	Webinar on Introduction & Implementation of Industry 4.0	01/02/2022	Mr. Yash N N, Global Tachnical Leader	80	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
7	Modern tool Usage, Engineering and Society, Ethics	Webinar on Hands on LabVIEW Based Data Acquisition & Sensor Integration	01/02/2022	Mr. Rajkumar, Senior Application Engineer, VI Solution	90	PO6,PO7, PO8, PSO2,PS O3
8	Modern tool Usage, Engineering and Society, Ethics	Webinar on Industry 4.0,Implementation with IOT & its research challenges	02/02/2022	Dr. Muralidhar Kulkarni, Professor, Department of ECE, NIT	85	PO6,PO7, PO8, PSO2,PS O3
9	Individual and Team work	Webinar on Understanding Computer Vision Case study for depth estimation for Industry 4.0	02/02/2022	Dr. S. Murali, President, Maharaja Institute of Technology	75	PO6,PO7, PO8,PO9, PSO1,PS O2,PSO3
10	Individual and Team work	Webinar on An Overview of Embedded Systems with Industry 4.0	02/02/2022	Mr. Vijay Mahantesh	80	PO6,PO7, PO8,PO9, PSO1,PS O2,PSO3
11	Engineering and Society,	Webinar on Innovative Teaching Learning Method using Augumented reality Technology	03/02/2022	Dr. Rajesh Buktar, Professor, Mechnical Engineering, Sardar Patel College of Engineering	80	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
12	Engineering and Society	Webinar on Digital Transformation Technologies Cloud Overview with Industry 4.0	03/02/2022	Mr. Santhosh A Chachadi, Manager, Cloud Operations, SAP LABS India	80	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
13	Modern tool Usage, Engineering and Society, Ethics	Webinar on Hands-on LabVIEW Based Control System Design & UI Development	03/02/2022	Mr. Rajkumar, Senior Application Engineer, VI Solution	80	PO6,PO7, PO8, PSO2,PS O3
14	Engineering and Society	Webinar on Implementation of Industry 4.0, Adoption in Various Sectors and Case Studies	04/02/2022	Mr. Vasanth Kumar & Mr. SatyaNarayan, Assitant Manager, VI Solutions	70	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
15	Engineering and Society	Webinar on Stress Management, Emotion & Physical Health	04/02/2022	Dr. Shivashankar P Shenoy	85	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
16	Engineering and Society	Seminar on Carrer Guidance Program	09/04/2022	Mr. Ramesh P	75	PO6,PO8,P O10,PO12,P O7,PO9,PS O1,PSO2,P SO3
17	Engineering and Society	Industrial Visit on Di-facto Robotics & Automation Pvt Ltd	28/04/2022	Mr. Arun Kumar Singh	80	PO6,PO8,P O10,PO12,P O7,PO9,PS O3
18	Modern tool Usage, Engineering and Society Ethics	Workshop on Microwave Technology	06/05/2022	Mr. RaviKumar, Technilab Instruments	85	PO6,PO7, PO8, PSO2,PS O3
19	Modern tool Usage, Engineering and Society, Ethics	Workshop on IOT & its Implementation	09/05/2022	Mr. Kushal, Edgate Technologies	75	PO6,PO7, PO8, PSO2,PS O3
20	Engineering and Society, Ethics	Seminar on Career Guidance	10/05/2022	Mr. Chowdary, BE Pratical Solution	90	PO6,PO8,P O10,PO12,P O7,PO9,PS O1,PSO2,P SO3
21	PROJECT MANAGEMENT & FINANCE,INDIVIDUAL AND TEAM WORK	Project Exhibition	29/07/2022	Dr. A M Prasanna Kumar	85	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3

2020-21

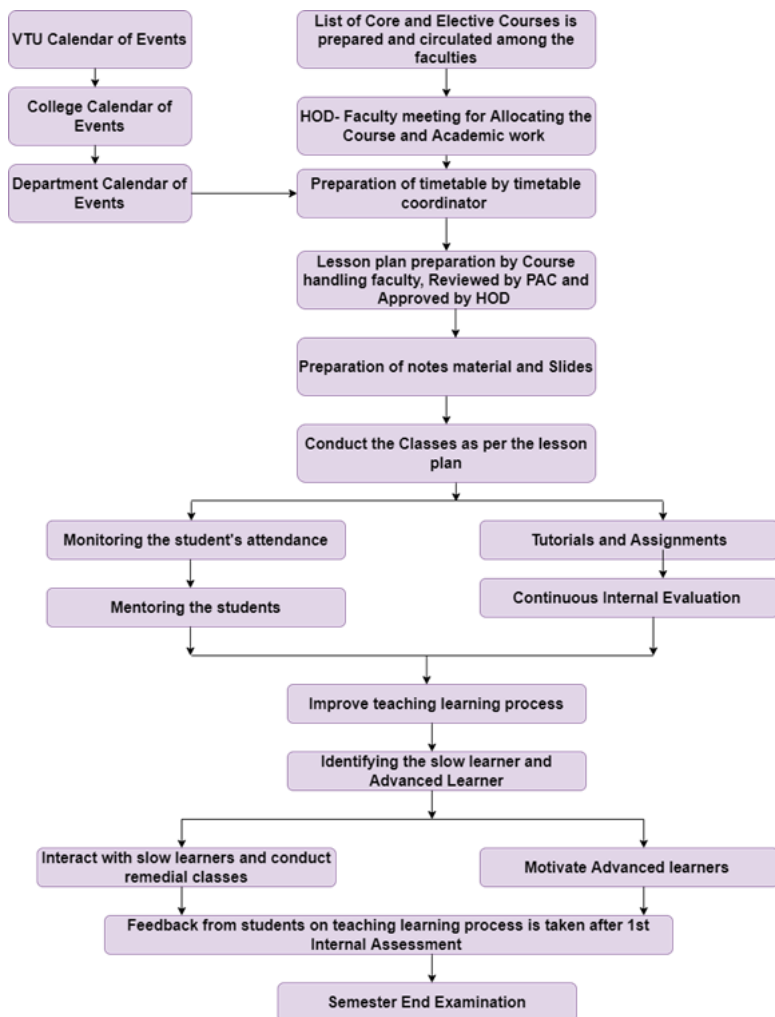| S.No	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	% of students	Relevance to POs, PSOs
1	Engineering and Society	Webinar on "National Education Policy"	21/09/2020	Shiksha Parv, Ministry of education, New Delhi	85	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
2	Engineering and Society	Webinar on "National Education Policy"	22/09/2020	Dr. Manjunath B C, Principal, New Horizon College Of Engineering,Bangalore	75	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
3	Engineering and Society	Webinar on Introduction to Industry 4.0 & its Human Application	09/11/2020	Mr.Jagadeesh Maiya, VP & Head engineering APAC, Endurance Group	80	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
4	Engineering and Society	Webinar on Opportunities for ECE Students in Pharma & Health Care	11/11/2020	Dr. M A Kumar, Principal Advanced Engineering Group, Infosys	70	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
5	Modern tool usage	Webinar on Introduction to Data Validation & Analytics	12/11/2020	Mr. Kalyan B Ram, CEO, Electrono Solution	80	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
6	Engineering and Society	Webinar on Recent trends in AR & BR in Manufacturing Industries	14/11/2020	Mr. Sreekanta Aaeadya, Chief experts 4.0, Robert Bostch Engineering	85	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
7	Engineering and Society	Webinar on Digital Transformation & its Impact in Industries	23/11/2020	Mr. Yash, Global Technical Marketing Leader, Aruba & HP Enterprise Company	80	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
8	Engineering and Society	Webinar on Applications of Industry 4.0 in Education Sector	24/11/2020	Mr. Anish Pandari, Director, Electrono Solutions	80	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
9	Engineering and Society, Ethics	Webinar on Introduction to IOT in Manufacturing Industries	26/11/2020	Mr. Lux Rao, Director, NTT Data	80	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
10	Engineering and Society	Workshop on 7 Days Soft Skill Programs	26/3/2021	ICT Academy	85	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
11	LIFE LONG LEARNING ,Engineering and Society, Ethics	Webinar on Magic of Switch Words & Healing	18/5/2021	Mrs. Deepa Rani Shekar, Founder Director, Transform Life Program	80	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
12	Engineering and Society, Ethics	Webinar on Mobility	3/6/2021	Mr. Arpit Chauhan, CEO Erkey Motors 2) Mr. Ashhar Ahmed, Skill Director, Skill Shark	85	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
13	Engineering and Society, Ethics	Webinar on 3D Printing Technology	5/6/2021	Dr. Raghaveendra K, Associate Professor, CIIRC, Jyothy Institute of Technology	85	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
14	Engineering and Society, Environment and sustainability	Webinar on Campus to Corporate	5/6/2021	Ms. Rajshree Rao, Head of all Innovation Hub & Partnerships,R2 Data labs, Rolls Royce India Pvt. Ltd..	75	PO6,PO8,P O10,PO11,P O12,PSO1, PSO2,PSO3
15	Engineering and Society	Webinar on Career Planning for Future Engineers	11/5/2021	Mr. Supreeth Y S, Facebook India Ambassador, HackerEarth Ambassador Co Founder & CEO, Tequered Labs	90	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
16	Modern tool usage ,Engineering and Society	SDP on Python & Aurdino	03/05/2021	Dr. Senthilkumarn T, Offered by the Spoken Tutorial Project,IIT Bombay	85	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3

2019-20

S.No	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	% of students	Relevance to POs, PSOs
1	Engineering and Society, Ethics, Life- Long learning	Traning program On IIC Monthly Traning Program	20/08/2019	Dr.Vinoth,, innovation consultant, pongu ventures	85	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
2	Individual and Team work	Seminar On Soft Skill Development	21/08/2019	Prof. Radhika Ramesh Associate dean for acdemics IBS,ICFAI group,Bangalore	75	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
3	Engineering and Society	Technical Talk on VLSI Technology	24/08/2019	Mr K G Managond , senior physical design engineer ALTRAN technologies bangalore	80	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
4	Engineering and Society, Ethics, Life- Long learning	Training Program on IIC	11/09/2019	Dr. Sheetal, innovation management consultant	70	PO6,PO7, PO8, PSO2,PS O3
5	Engineering and Society, Ethics	Event on Graduation Day	14/09/2019	Sri S. Theertha malai, former Director of DRDO,chennai	70	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
6	Engineering and Society Ethics	IBS on Campus to Corporate	13/09/2019	Sandip Ghorai, Chief manager-karnataka, IBS school	80	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
7	Engineering and Society, Ethics, Life- Long learning	CTDS on Mobile Applications	1/10/2019	Mr. BertrandRussel,Founder & director, X-value technologies pvt. Ltd	90	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
8	Engineering and Society	Technical Seminar on AI & Application in Modern Industries	3/10/2019	Mr.Mohan, Technical Head, Digishark technologies,	85	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
9	Engineering and Society	Industrial Visit on DiFACTO Robotics and Automation	14/10/2019	Mr. Arun Kumar Singh	75	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
10	Engineering and Society, Ethics, Life- Long learning	Training Program on IIC	15/10/2019	Dr.Vinoth,, innovation consultant, pongu ventures	80	PO6,PO7, PO8, PSO2,PS O3
11	Engineering and Society	Internal Hackathon for Smart India Hackathon 2020	10/1/2020	Dr .vinoth S, CEO, Pongu ventures	80	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
12	Engineering and Society, Ethics	Seminar FDP on Being the Best Teacher	24/1/2020	Mr .Shrinivas V, counselor & mentor	80	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
13	Engineering and Society	Technical talk on Microsoft dynamics & Allied technologies on CTDS	12/2/2020	Mr. Rajashekar data roy,VP& Global head,sonata software	80	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
14	Modern Tool USage	Events planned, Internship & Innovation Lab	10/2/2020	Dr. H B Bhuvaneswari	70	PO6,PO7, PO8, PSO2,PS O3
15	Engineering and Society, Ethics	Technical Talk on Application of Electronics in Automobiles Industry	20/2/2020	Mr. Vidyashankar MN & Mr Karthik athreya	85	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
16	Engineering and Society, Ethics	Project Exhibitions on Jnana Vigna Tantragnana Mela	19/2/2020	Dr. Nirmalanandanatha Mahaswamiji	85	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
17	Engineering and Society, Ethics	Technical Seminar on Innovation & Startup Culture in HEL's	26/2/2020	Dr. Dipan sahu,MHRD "innovation cell, AICTE,New Delhi.	85	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
18	Engineering and Society, Ethics	FDP for RRGI &Staff members on Innovation & Entrepreneurship	26/2/2020	Mr. Elangovan	75	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
19	Engineering and Society, Ethics	Event on Yoga Ladies	29/2/2020	Dr. H. B. Bhuvaneswari	85	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
20	Engineering and Society, Ethics	Technical Seminar on IOT & Embedded systems	5/3/2020	Mr. Rakesh patil	75	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
21	Engineering and Society, Ethics	Event on International Women's day	10/3/2020	Dr . B. Susheelamma	80	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
22	Engineering and Society, Ethics	Webinar 1	18/5/2020	Dr.Subhash Kulkarni	80	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
23	Engineering and Society, Ethics	Webinar 2	19/5/2020	Mr.Basawaraj patil	80	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3
24	Engineering and Society	5 Days Spoken Tutorial on Ardiuno	20/5/2020	Dr.Mathivanan	75	PO6,PO7,P O8,PO9, PO10,PO12 ,PSO3

2.2 Teaching - Learning Processes (100)   Total Marks 100.00

2.2.1 Describe processes followed to improve quality of Teaching & Learning (25)

Institute Marks : 25.00

2.2.1 Describe processes followed to improve quality of Teaching & Learning (25)

Institute Marks : 25.00

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┌──────────────────────┐        ┌──────────────────────────────┐
│  VTU Calendar of      │        │  List of Core and Elective   │
│  Events               │        │  Courses is prepared and     │
└──────────┬───────────┘        │  circulated among the        │
           │                    │  faculties                   │
           ▼                    └──────────────┬───────────────┘
┌──────────────────────┐                       │
│  College Calendar of  │                      ▼
│  Events               │        ┌──────────────────────────────┐
└──────────┬───────────┘        │  HOD- Faculty meeting for     │
           │                    │  Allocating the Course and    │
           ▼                    │  Academic work                │
┌──────────────────────┐        └──────────────┬───────────────┘
│  Department Calendar  │───────▶               │
│  of Events            │        ┌──────────────▼───────────────┐
└──────────────────────┘        │  Preparation of timetable by  │
                                 │  timetable coordinator        │
                                 └──────────────┬───────────────┘
                                                │
                                 ┌──────────────▼───────────────┐
                                 │  Lesson plan preparation by   │
                                 │  Course handling faculty,     │
                                 │  Reviewed by PAC and          │
                                 │  Approved by HOD              │
                                 └──────────────┬───────────────┘
                                                │
                                 ┌──────────────▼───────────────┐
                                 │  Preparation of notes         │
                                 │  material and Slides          │
                                 └──────────────┬───────────────┘
                                                │
                                 ┌──────────────▼───────────────┐
                                 │  Conduct the Classes as per   │
                                 │  the lesson plan              │
                                 └──────────────┬───────────────┘
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Fig 2.2.1 Process followed for Teaching and Learning Process

To strengthen the teaching-learning process, following initiatives have been taken:

A. Adherence to Academic Calendar
     a. Preparation of academic action plans

B. Pedagogical Initiatives - Content Delivery (method of instruction)
  a. Lectures
  b. Presentation
  c. Course Handouts
  d. Project Based Learning

C. Methodologies to support weak students and encourage bright Students
     a. Mentoring System
     b. Identification of Weak Students / Fast Learners
     c. Action Taken

D. Quality of Class Room Teaching

E. Conduct of Experiments

F. Continuous Assessment in the laboratory

G. Student Feedback and action taken

A. Adherence to Academic calendar

    The Institution prepares Calendar of Events based on VTU calender of events guidelines that includes the General holidays ,Internal assessment dates as it has to be common to all for entire college,will be displayed on all notice boards .According to Institution calender of Events ,department academic calendar is prepared by the coordinator which defines the schedule for various activities such as:

- Commencement and Closure of Classes
- List of Holidays (as announced by Karnataka State)
- Internal Assessment (IA) Test Schedule
- Project Presentation
- Cultural / Sports events, etc.
- Final Internal Lab Assessment /Test
- Theory Examination
- Practical Examination

    Based on the information listed above, Time table Coordinator prepares the Timetable for each semester before the Commencement of semester, according to the Course credits each Faculty members estimate the number of classes available during the semester and appropriately prepare the lesson plan.

    In case of Laboratories ,the conduction of experiments must be planned by the faculty member.

Revised Academic Calendar of VTU, Belagavi for ODD Semester of 2020-21 (Tentative)

	I Sem B. E. / B. Tech. / B. Arch./B.Plan	I Sem M.Tech./MBA /MCA/M.Arch.	III, V & VII Sem B. E. /B. Tech./B.Plan/ B.Arch & IX Sem B. Arch.	III & V Sem MCA	III Sem MBA	III Sem M. Tech.	III Sem M. Arch.
Commencement of ODD Semester	Will be announced later	Will be announced later	01.09.2020	01.09.2020	01.09.2020	01.09.2020	01.09.2020
Last Working day of ODD Semester			16.01.2021	16.01.2021	16.01.2021	16.01.2021	16.01.2021
Practical Examinations			21.01.2021 To 02.02.2021	21.01.2021 To 27.01.2021	--	21.01.2021 To 27.01.2021	--
Theory Examinations			08.02.2021 To 25.03.2021	28.01.2021 To 10.02.2021	21.01.2021 To 17.02.2021	28.01.2021 To 10.02.2021	21.01.2021 To 06.02.2021
Internship Viva-Voce			--	--		11.02.2021 To 18.02.2021	--
Professional training / Organization study			--	--	--	--	--
Commencement of EVEN Semester			26.03.2021	11.02.2021	18.02.2021	19.02.2021	08.02.2021

NOTE
- VII Semester B. E / B. Tech students shall have to undergo internship as per circular of University VTU/Aca/2019-20/85, dated 12.05.2020.
- The classroom sessions for all the higher semesters would be in ONLINE/OFFLINE/BLENDED as per the order issued by UGC/Govt. of Karnataka until further orders.
- The institute needs to function for six days a week with additional hours (Saturday is a full working day)
- The faculty/staff shall be available to undertake any work assigned by the university.
- If any of the above dates are declared to be a holiday then the corresponding event will come into effect on the next working day.
- Notification regarding Calendar of Events relating to the conduct of University Examinations will be issued by the Registrar (Evaluation) from time to time.
- Academic Calendar may be modified based on guidelines/directions issued in the future by MHRD/UGC/AICTE/State Government.
- Revised Academic Calendar is also applicable for Autonomous Colleges.

REGISTRAR

Revised-Academic Calendar of EVEN semesters of UG Programmes for 2020-2021

Semesters / EVENTS	IV semester B.E./B.Tech.	IV semester B.Arch./ B.Plan.	VI semester B.E./B.Tech.	VI semester B.Plan/B.Arch	VIII semester B.E./B.Tech.	VIII semester B.Plan.	VIII semester B.Arch
Commencement of EVEN Semester	19.04.2021	19.04.2021	19.04.2021	19.04.2021	19.04.2021	19.04.2021	19.04.2021
Last Working day of EVEN Semester	07.08.2021	07.08.2021	07.08.2021	07.08.2021	#20.07.2021	#20.07.2021	07.08.2021
Practical Examinations	09.08.2021 To 19.08.2021	09.08.2021 To 19.08.2021	09.08.2021 To 19.08.2021	---	---	---	---
Theory Examinations	23.08.2021 To 09.09.2021	23.08.2021 To 09.09.2021	23.08.2021 To 09.09.2021	10.08.2021 To 31.08.2021	22.07.2021 To 30.07.2021	22.07.2021 To 30.07.2021	10.08.2021 To 17.08.2021
Internship	---	---	---	---	---	---	---
Internship Viva-Voce/ Project Viva-Voce	---	---	---	---	02.08.2021 To 06.08.2021	---	---
Professional training / Organization study	---	---	---	---	---	---	---
Commencement of ODD Semester	13.09.2021	13.09.2021	13.09.2021	13.09.2021	---	---	23.08.2021

- The classroom sessions for even the semester should commence from the dates mentioned above.
- The Institute needs to function for six days a week with additional hours (Saturday is a full working day). #if required the college can plan to have extra classes even on Sundays also.
- If any of the above dates are declared to be a holiday then the corresponding event will come into effect on the next working day.
- Notification regarding the Calendar of Events relating to the conduct of University Examinations will be issued by the Registrar (Evaluation) from time to time.
- The faculty/staff shall be available to undertake any work assigned by the university.
- Academic Calendar may be modified based on guidelines/directions issued in the future by MHRD/UGC/AICTE/State Government.
- Revised Academic Calendar is also applicable for Autonomous Colleges. In case if any changes are to be affected by Autonomous Colleges in the academic terms and examination schedule, they could do so with the approval of the University.

VTU CALENDER OF EVENTS

ACS COLLEGE OF ENGINEERING

Calender of Events for EVEN semesters(2020-2021)
From 19/04/2021 To 7/08/2021

Week No	Month	Mon	Tue	Wed	Thur	Fri	Sat	No Working Days	Activities
1	APR	19	20	21	22	23	24	6	
2	APR-MAY	26	27	28	29	30	1	5	1-MAY DAY
3	MAY	3	4	5	6	7	8	6	
4	MAY	10	11	12	13	15	4		13- Ramzan ; 14 Basava Jayanthi
5	MAY	17	18	19	20	21	22	6	
6	MAY	24	25	26	27	28	29	6	24,25,26 : Internal Test
7	MAY-JUN	31	1	2	3	4	5	6	
8	JUN	7	8	9	10	11	12	6	
9	JUN	14	15	16	17	18	19	6	
10	JUN	21	22	23	24	25	26	6	
11	JUN-JUL	28	29	30	1	2	3	6	
12	JUL	5	6	7	8	9	10	6	5,6,7 : II Internal Test
13	JUL	12	13	14	15	16	17	6	
14	JUL	19	20	21	22	23	24	5	20 - Bakrid
15	JUL	26	27	28	29	30	31	6	
16	AUG	2	3	4	5	6	7	6	
17	AUG	9	10	11	12	13	14	6	9,10,11 : III Internal Test
18	AUG	16	17	18	19	20	21	6	
19									
20									
	Total Number of working Days							104	

Last working day of Even semester : 7/8/2021
UG-Practical Examinations : 9/8/2021 to 19/08/2021
UG-Theory Examinations : 23/08/2021 to 9/9/2021
Commencement of odd SEM :13/09/2021
ALL CLASSES ARE HELD ONLINE UNTIL FURTHER NOTICE

ACS COLLEGE OF ENGINEERING

Calender of Events for Odd semesters(2020-2021)
From 01/09/2020 To 16 /01/2021

Week No	Month	Mon	Tue	Wed	Thur	Fri	Sat	No Working Days	Activities
1	SEP		1	2	3	4	5	5	
2	SEP	7	8	9	10	11	12	6	
3	SEP	14	15	16	17	18	19	5	17th Mahalaya Amavase
4	SEP	21	22	23	24	25	26	5	26th-Saturday holiday
5	SEP/OCT	28	29	30	1	2	3	5	02-Gandhi Jayanthi
6	OCT	5	6	7	8	9	10	6	
7	OCT	12	13	- 14	15	16	17	6	15th,16th&17th First IA
8	OCT	19	20	21	22	23	24	5	19th,20th,21st-First IA 23rd-dasara holiday
9	OCT	26	27	28	29	30	31	5	26th-Dasara Holiday
10	NOV	2	3	4	5	6	7	6	
11	NOV	9	10	11	12	13	14	6	
12	NOV	16	17	18	19	20	21	5	16th-Diwali holiday
13	NOV	23	24	25	26	27	28	6	
14	NOV/DEC	30	1	2	3	4	5	5	kanakadasa jayanthi-30thnov,1st-5th dec - Second IA
15	DEC	7	8	9	10	11	12	5	12th -Saturday holiday
16	DEC	14	15	16	17	18	19	6	
17	DEC	21	22	23	24	25	26	5	25th christmas,
18	DEC/JAN	28	29	30	31	1	2	6	
19	JAN	4	5	6	7	8	9	6	7th,8th & 9th third intervals,
20	JAN	11	12	13	14	15	16	5	14th-sankranthi
	Total Number of working Days							109	

Last working day of Odd semester : 16/01/2021
UG-Practical Examinations : 21/01/2021 onwards
UG-Theory Examinations : 8/02/2021-25/03/2021
Commencement of Even SEM :26/03/2021

INSTITUTION CALENDER OF EVENTS

ACS COLLEGE OF ENGINEERING
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
Calender of Events for EVEN semester(2020-2021)
From 19/04/2021 To 7/08/2021

Week No	Month	Mon	Tue	Wed	Thur	Fri	Sat	No Working Days	Activities
1	APR	19	20	21	22	23	24	6	
2	APR-MAY	26	27	28	29	30	1	5	1-MAY DAY
3	MAY	3	4	5	6	7	8	6	
4	MAY	10	11	12	13	14	15	4	13-Ramzan ;14 Basava Jayanthi
5	MAY	17	18	19	20	21	22	6	
6	MAY	24	25	26	27	28	29	6	24,25,26 : I Internal Test
7	MAY-JUN	31	1	2	3	4	5	6	
8	JUN	7	8	9	10	11	12	6	
9	JUN	14	15	16	17	18	19	6	
10	JUN	21	22	23	24	25	26	6	
11	JUN-JUL	28	29	30	1	2	3	6	
12	JUL	5	6	7	8	9	10	6	5,6,7 : II Internal Test
13	JUL	12	13	14	15	16	17	6	
14	JUL	19	20	21	22	23	24	5	20- Bakrid
15	JUL	26	27	28	29	30	31	6	
16	AUG	2	3	4	5	6	7	6	
17	AUG	9	10	11	12	13	14	6	9,10,11 : III Internal Test
18	AUG	16	17	18	19	20	21	6	
19									
20									
			Total Number of working Days					104	

Last working day of Even semester : 7/8/2021
UG-Practical Examination: 9/8/2021 to 19/08/2021
UG-Theory Examination: 23/08/2021 to 9/9/2021
Commencement of odd SEM :13/09/2021
ALL CLASSES ARE HELD ONLINE UNTIL FURTHER NOTICE

ACS COLLEGE OF ENGINEERING
Calender of Events for Odd semester(2020-2021)
From 01/09/2020 To 16/01/2021

Week No	Month	Mon	Tue	Wed	Thur	Fri	Sat	No Working Days	Activities
1	SEP		1	2	3	4	5	5	
2	SEP	7	8	9	10	11	12	6	
3	SEP	14	15	16	17	18	19	5	17th Idah sharu Ayana
4	SEP	21	22	23	24	25	26	5	26th-Samvatsar holiday
5	SEP-OCT	28	29	30	1	2	3	5	02-Gandhi Jayanthi
6	OCT	5	6	7	8	9	10	6	
7	OCT	12	13	14	15	16	17	6	15th,16th All 7th First IA
8	OCT	19	20	21	22	23	24	5	19th,20th,21st First IA, 23rd dsra holiday
9	OCT	26	27	28	29	30	31	5	26th-Dsara Holiday
10	NOV	2	3	4	5	6	7	6	
11	NOV	9	10	11	12	13	14	6	
12	NOV	16	17	18	19	20	21	5	16th-Diwali holiday
13	NOV	23	24	25	26	27	28	6	
14	NOV/DEC	30	1	2	3	4	5	5	kanakadasa jayanthi-30th nov,1st-5th dec -Second IA
15	DEC	7	8	9	10	11	12	5	12th -Saturday holiday
16	DEC	14	15	16	17	18	19	6	
17	DEC	21	22	23	24	25	26	5	25th christmas,
18	DEC/JAN	28	29	30	31	1	2	6	
19	JAN	4	5	6	7	8	9	5	7th,8th & 9th third internal,
20	JAN	11	12	13	14	15	16	5	14th-sankranthi
			Total Number of working Days					109	

Last working day of Odd semester : 16/01/2021
UG-Practical Examination: 21/01/2021 onwards
UG-Theory Examination: 8/02/2021 -26/03/2021
Commencement of Even SEM :26/03/2021

DEPARTMENT CALENDER OF EVENTS

Lesson Plan

The lesson plan must be kept ready one week before the commencement of the semester.The format to be maintained for the lesson plan is given to faculty by the department.The faculty is required to organize the lecture and prepare the lesson plan with accordance to time table and calender of Events.

Figure: 2.2.2 Sample Lesson Plan with details on Text and Reference Books

ACS College of Engineering
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
LESSON PLAN
Semester: IV Semester   Year: 2020-21

Subject Title: ANALOG CIRCUITS	Subject Code: 18EC42
Total Lecture Hours: 40	Duration of Exam: 03 Hrs.
Total SEEMarks: 60	Total CIEMarks: 40
Lesson plan author: Mr. Nagesh H B	Date:19-04-2021

Sl. No.	DAY	TOPICS	Method of teaching
1	1	Module-1: BJT Biasing: Biasing in BJT amplifier circuits: The Classical Discrete circuit bias (Voltage- divider bias).	Board presentation
2	2	Biasing using a collector to base feedback resistor	Board presentation
3	3	Small signal operation and Models: Collector current and transconductance.	Board presentation
4	4	Base current and input resistance, Emitter current and input resistance, voltage gain	Board presentation
5	5	Separating the signal and the DC quantities, The hybrid Π model.	Board presentation
6	6	MOSFETs: Biasing in MOS amplifier circuits: Fixing VGS, Fixing VG, Drain to Gate feedback resistor.	Board presentation
7	7	Small signal operation and modeling: The DC bias point, signal current in drain	Board presentation
8	8	Voltage gain, small signal equivalent circuit models, transconductance.	Board presentation
9	9	Module -2:MOSFET Amplifier configuration: Basic configurations, characterizing amplifiers	Board presentation
10	10	CS amplifier with and without source resistance RS, Source follower.	Board presentation
11	11	MOSFET internal capacitances and High frequency model: The gate capacitive effect	PPT
12	12	Junction capacitances, High frequency model.	PPT
13	13	Frequency response of the CS amplifier: The three frequency bands	Board presentation
14	14	High frequency response, Low frequency response.	Board presentation
15	15	Oscillators: FET based Phase shift oscillator	PPT
16	16	LC and Crystal Oscillators	PPT
17	17	Module -3: Feedback Amplifier: General feedback structure	Board presentation
18	18	Properties of negative feedback, The Four Basic Feedback Topologies	Board presentation
19	19	The series-shunt, series-series, shunt-shunt and shunt-series amplifiers	Board presentation
20	20	Output Stages and Power Amplifiers: Introduction	PPT
21	21	Classification of output stages., Class A output stage.	Board presentation
22	22	Class B output stage: Transfer Characteristics.	Board presentation
23	23	Power Dissipation,	Board presentation
24	24	Power Conversion efficiency	Board presentation
25	25	Class AB output stage, Class C tuned Amplifier	Board presentation
26	26	Module -4:Op-Amp with Negative Feedback and general applications: Inverting and Non inverting Amplifiers	Board presentation
27	27	Closed Loop voltage gain, Input impedance, Output impedance, Bandwidth with feedback.	Board presentation
28	28	DC and AC Amplifiers	PPT
29	29	Summing, Scaling	PPT
30	30	Averaging Amplifiers	PPT
31	31	Instrumentation amplifier ,Comparators,	PPT
32	32	Zero Crossing Detector, Schmitt trigger	PPT
33	33	Module -5:Op-Amp Circuits: DAC - Weighted resistor and R-2R ladder, ADC- Successive approximation type	Board presentation
34	34	Small Signal half wave rectifier.	Board presentation
35	35	Active Filters	Board presentation
36	36	First and second order low-pass and high-pass Butterworth filters	Board presentation
37	37	Band-pass filters,	Board presentation
38	38	Band reject filters.	Board presentation
39	39	555 Timer and its applications :Monostable Multivibrators	Board presentation
40	40	A stable Multivibrators	Board presentation

Course Outcomes: At the end of the course students should be able to:

1. Understand the characteristics of BJTs and FETs.
2. Design and analyze BJT and FET amplifier circuits.
3. Design sinusoidal and non-sinusoidal oscillators.
4. Understand the functioning of linear ICs.
5. Design of Linear IC based circuits

Text Books:
1. Robert L. Boylestad and Louis Nashelsky, "Electronics devices and Circuit theory",Pearson, 10th Edition, 2012, ISBN: 978-81-317-6459-6.

Reference Books:
1. Adel S. Sedra and Kenneth C. Smith, "Micro Electronic Circuits Theory AndApplicatication," 5th Edition ISBN:0198062257
2. Fundamentals of Microelectronics, BehzadRazavi, John Weily ISBN 2013 978-81-265-2307-8
3. J.Millman&C.C.Halkias—Integrated Electronics, 2nd edition, 2010, TMH. ISBN 0-07-462245-5
4. K. A. Navas, "Electronics Lab Manual", Volume I, PHI, 5th Edition, 2015,ISBN:9788120351424.

Evaluation:
1. Student Assessment: Through Internal assessment

Faculty In-charge

Mr. Nagesh H B

HOD, ECE

HOD
Dept. of ECE
ACS College of Engineering
Bangalore - 560 074

MAINTENANCE OF COURSE FILE

For each course, a course file is prepared by the concerned faculty.Course file consist of Department Vision and Mission,VTU,Institution and Department calender of Events,Student List,Time table of class and Individual time table, syllabus,class conducted report,Assignment questions,VTU question papers,Notes,Program outcomes,co-po mapping ,and attainment of the course.

B. Pedagogical Initiatives

B.1 Lectures

- Teaching Learning process through green board teaching.
- Interactive sessions with students to ensure effective teaching.
- Green board teaching is exclusively used to solve the numerical,derive mathematical expressions,workout complex problems and to clear concepts/doubts.

B.2 Presentation

- Imparting bettter visual effects and better solution to solve complex engineering concepts.
- Animations help the students for faster grasping of convoluted concepts.
- Audio and Videos effectively communicate the working of actual engineering solutions and their impact.

Students are also encouraged to register through NPTEL courses, IIT Bombay, Infosys certification courses.

B.3 Mini-Projects and Projects

- Students are encouraged to carry out multidisciplinary projects to apply their engineering
- knowledge from third semester onwards.
- 2-4 students in a group are allowed to choose their guide and in consultation with guide identify the project.
- The faculty mentor and the students collectively identify the Projects based on societal need and issues.
- At the end of the semester, projects are evaluated by the examiners.
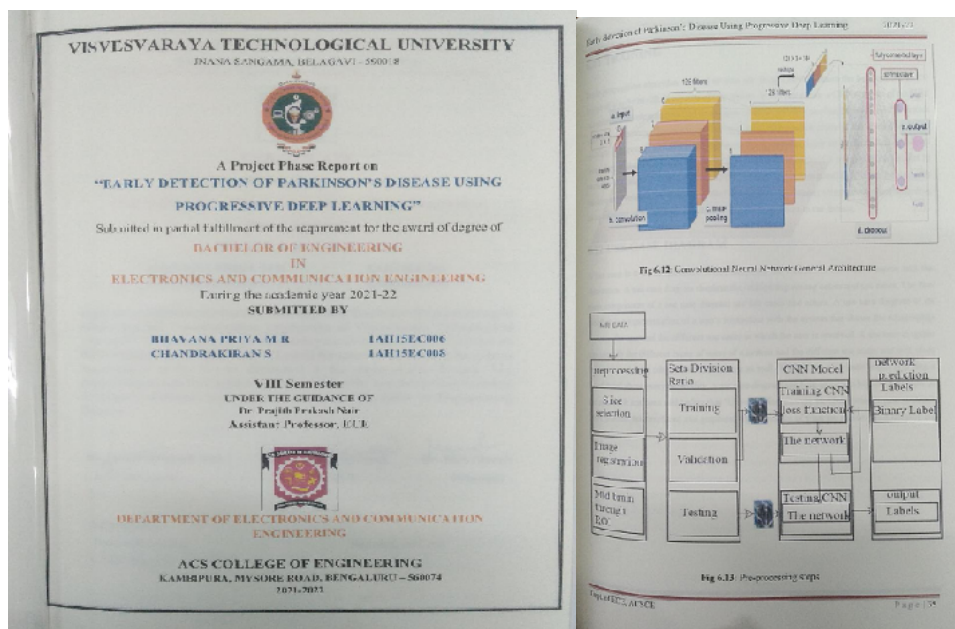
B.4 Methodologies to support slow learners and encourge Advanced learners

Proctor incharge and Head of the Department after discussion with class incharges given guidelines to individual mentors to identify slow learners by considering their academic performance in the Internal assesssment tests and previous semester end examination.

The Students are considered as Slow learners if they score marks below 50% of the total CIE marks, Assignment marks, and Semester End Examinations. The Students who have obtained marks more than 75% are considered as Advanced Learners.Mentors observations play a vital role which gives the supplement of the individual observations of the student's.

Parents will be intimated about their ward academic progress and attendance shortage.Remedial Classes are conducted with an aim to improve the academic performance of the slow learners.

Advanced Learners: are encouraged to participate and present papers in various Seminars/ Conferences/ Workshops/ Inter Collegiate Competitions. They are encouraged to participate in various inter collegiate cocurricular activities such as debates, Problem Solving, design competitions etc.Meritorious students from every semester in the respective departments are provided along with a certificate of merit. They are also encouraged to participate in a wide range of activities through student clubs/forums.

B.5 Quality of Class room Teaching

Classroom Teaching

Quality of content delivery in live lectures is evaluated randomly by visiting ongoing lecture classes. Each classroom is spacious and equipped with white/black board and audio visual aids to create a better ambience for effective teaching learning environment. Each lecture is scheduled for one hour. During the lecture, faculties take efforts to keep students engaged by reviewing and asking questions on previous lecture and interactively deliver the lecture planned for the day.At the end of the lecture, students are encouraged to summarize, ask doubts from the content taught.

B.6.Conduct of experiment

Laboratory:

To ensure the quality of conduction of experiments in the laboratory, Lab incharge and Instructor monitors the readiness of laboratory and laboratory experiments. The Lab incharge takes runtime corrective measures to ensure quality of experiments. Cycle of experiments will be given to students before the commencement of semester.Continuous Evaluation in every lab session is done . Observation, individual report, laboratory examination and viva, are conducted and evaluated.

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CET Code : E186 COMED-K : E003 PGCET : T918

MICROCONTROLLERS LAB-18ECL47

Microcontroller Laboratory-18ECL47

ELECTRONICS DEVICES AND INSTRUMENTATION LABORATORY-18ECL37

Fig. Sample of filled Continuous Lab evaluation

B.7 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 the Institution.

Some of the parameters are:

- Motivating the Students
- Presentation of the Subject

- Subject Knowledge
- Interaction with students
- Ability to Explain
- Punctuality/Class Time Utilization

2.2.2 Quality of internal semester Question papers, Assignments and Evaluation (20)

Institute Marks : 20.00

A.1 Process for Internal Assessment Test Question paper Setting

The Circular will be issued to all the faculty members from IA Coordinator before one -week of the commencement of the Internal Assessment.

The question paper along with scheme of solution will be prepared by the subject handling faculty according blooms taxomony levels which duly verified by HOD .

The subject handling faculty prepares the question paper according to blooms taxonomy levels and are mapped to course outcomes ,program outcomes to assess the students at various BT levels.

The internal blue books with question paper will be handed to the concered faculty member for Evaluation .

```
┌──────────────────────────────────────────────────────┐
│ Preparing Circular to send guidelines to be followed   │
│ by faculty for setting up question paper , scheme of   │
│ evaluation  and also its submission date.              │
└──────────────────────────────────────────────────────┘
                            │
                            ▼
┌──────────────────────────────────────────────────────┐
│ Question paper and scheme of evaluation written by     │
│ faculty.                                               │
└──────────────────────────────────────────────────────┘
                            │
                            ▼
┌──────────────────────────────────────────────────────┐
│ Verification of Question paper by HOD                  │
└──────────────────────────────────────────────────────┘
                            │
                            ▼
                   ◇ Accept the Question Paper ◇
                     │                    │
                   [ No ]              [ Yes ]
                     │                    │
                     └────(back to top)   ▼
┌──────────────────────────────────────────────────────┐
│ Question paper and scheme of evaluation handed to IA   │
│ Coordinator after Printing the copies                  │
└──────────────────────────────────────────────────────┘
                            │
                            ▼
┌──────────────────────────────────────────────────────┐
│ Evaluation of Blue Books and computation of CO         │
│ attainment                                             │
└──────────────────────────────────────────────────────┘
```

A.2 Procedure for Conduction and Evaluation of Internal Assessment Test.

Department provides blue books for writing the Internal Assessment tests and shall be maintained by the department for any verification purpose.

The students will be seated in their allocated seats as per the University seat numbers in the test hall,under the invigilation of a faculty member.

The Scheme of valution will be prepared for the question paper by the concerned faculty member ensuring appropriate distribution of marks for a transparent valution .

ACS College of Engineering, Bangalore
Department of Electronics and Communication Engineering
FIRST INTERNAL ASSESSMENT TEST-ODD SEMESTER 2021

Max. Marks: 50   SEM: III
Duration   : 1hr.30min   Sub. Code: 18EC53
Date   : 25/11/2021   Subject: Principles of Communication Systems

Note: 1) Answer all Full Questions, selecting at least one questions from each PART

Q.NO	Questions	MARKS	CO'S	RBTL
	PART-A			
1	Define AM. Obtain the Expression for AM wave with suitable diagrams	10	1	L1
	OR			
2	Explain in detail the working of switching modulator with block diagram and necessary derivations.	10	1	L2
	PART-B			
3	Explain the operation of Envelope detector with neat diagrams and waveforms. Bring out the significance of the RC time constant of the circuit in detection of the message signal without distortion.	10	1	L1
	OR			
4	Explain with a neat block diagram generation of VSB Modulated wave	10	1	L2
	PART-C			
5	Explain the single tone modulation of DSB-SC wave with frequency spectrum.	10	1	L1
	OR			
6	Explain the operation of quadrature carrier multiplexing scheme with transmitter and receiver diagrams.	10	1	L3
	PART-D			
7	With relevant block diagram, explain working of FDM system.	10	1	L1
	OR			
8	Explain how Costas receiver can be used for demodulating the DSB-SC signal	10	1	L3
	PART-E			
9 a)	A modulating signal $m(t)=0.2\sin3(2\pi\times500t+0.1\sin5(2\pi\times500t)$ is amplitude modulated with a carrier signal $c(t)=4\sin(2\pi\times500\times10^3t)$. Find the Net modulation index, upper and lower sidebands, and the total power in the sidebands required for transmitting AM wave	10	1	L1
	OR			
10	A modulating signal $m(t)=10\sin(2\pi\times500t)$ is amplitude modulated with a carrier signal $c(t)=50\sin(2\pi\times10^3t)$. Find the sideband frequencies, the Amplitude of each sidebands, Bandwidth required and the Efficiency of AM wave	10	1	L1

Name & Signature of the Staff:
23/11/2021

BG
HOD ECE
23/11/2
Page 1 of 2

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NAAC 'A' Accredited

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
SCHEME AND SOLUTION

Sem: 05 Subject: Principle of Communication System Subject Code: 18EC53
IA: 01ST Faculty Name: Mr. NAGESH. H.B

Question Number	Solutions	Marks Allocated
01.	Amplitude Modulation is a process of altering the amplitude of carrier signal in accordance with the instantaneous value of message signal by keeping frequency and phase of carrier signal constant.	(02M)
	Expression of AM Wave :- $m(t) = A_m \cos 2\pi f_m t$	
	$c(t) = A_c \cos 2\pi f_c t$; $s(t) = A_c[1+k_a m(t)]\cos 2\pi f_c t$	
	$s(t) = A_c \cos 2\pi f_c t + \frac{\alpha A_c}{2}\cos 2\pi (f_c-f_m)t + \frac{\alpha A_c}{2}\cos 2\pi (f_c+f_m)t$	(05M)
	$s(f) = \frac{A_c}{2}[\delta(f-f_c)+\delta(f+f_c)] + \frac{\alpha A_c}{4}[\delta(f-(f_c-f_m))+\delta(f+(f_c-f_m))] + \frac{\alpha A_c}{4}[\delta(f-(f_c+f_m))+\delta(f+(f_c+f_m))]$	
		(03M)
	Time domain Analysis Frequency Analysis	(10M)

1/8

Question Number	Solutions	Marks Allocated
10.	Given	

$$x(t) = \frac{1}{2\pi} \cos(4000\pi t) \cos(100\pi t)$$

$$x(t) = \frac{1}{4\pi}\left[\cos(4000 - 100\pi)t + \cos(4000 + 100\pi t)\right]$$

$$x(t) = \frac{1}{4\pi}\left[\cos\omega_1 t + \cos\omega_2 t\right]$$

$$\omega_1(t) = 3900\pi \qquad \omega_2 = 4100\pi$$
$$\omega_1 = 3900\pi$$
$$2\pi f_1 = 3900\pi \qquad 2\pi f_2 = 4100\pi$$

$$f_1 = \frac{3900}{2} \qquad f_2 = \frac{4100}{2}$$

$$f_1 = 1950 Hz \qquad f_2 = 2050 Hz$$

$$\therefore f_m = \max(f_1, f_2)$$

$$= \max(1950 Hz, 2050 Hz) = 2050 Hz$$

$$\therefore Nyquist \ Rate \quad f_s = 2 \times f_m$$
$$= 2 \times 2050 Hz$$ (10M)
$$= 4100 Hz$$

Also Nyquist interval $T_c = \frac{1}{f_s} = \frac{1}{4100 Hz} = 0.24 ms$

Engel. HSS
FACULTY INCHARGE

BA
HOD, ECE

I Internal Test

Q.No.	1	2	3	4	5	6	7	8	9	10
a	10	10	10			10	10			10
b										
c										
d										
Total										

Grand Total: 50/50   30/30

II Internal Test

Q.No.	1	2	3	4	5	6	7	8	9	10
a	8	10	10	10	10		8		10	
b										
c										
d										
Total										

Grand Total: 48/50   29/30

III Internal Test

Q.No.	1	2	3	4	5	6	7	8	9	10
a	10			10		8			10	
b										
c										
d										
Total										

Grand Total: 38   23/30

IV Internal Test

Q.No.	1	2	3	4	5	6	7	8	9	10
a										
b										
c										
d										
Total										

Grand Total:

Nititha
Signature of the Candidate

Name of the Faculty
Zomula KallcasA
Signature of the Faculty

Part - D.

7) i)

RISC	CISC
• reduced instruction set computing.	complex instruction set computing.
• less number of instruction	• more number of instruction
• instruction pipelining, high performance.	• no instruction Pipelining
• It is orthogonal in nature.	• It is non orthogonal in nature.
• operations are performed on register.	• operation are performed on register, & memory dependent instruction
• large Numbers of registers is used.	• less numbers of registers is used
• Programmes need to write more Program since it is simple one.	• programmes need not write more program, since it is complex
• It is a single fixed instruction	• It is variable instruction
• less silica usage	• more silica usage
• It is Harvard architecture.	• It is von-Neuman architecture.

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Internal assessment - II

Part - A.

1)

ASR Rd, Rn, #immed   Rd = Rn >> #immed ; Arithmetic Shift right

ASR Rd, Rn   Rd = Rd >> Rn

ASR.W Rd, Rn, Rm   Rd = Rn >> Rm

LSL Rd, Rn, #immed   Rd = Rn << #immed.   logical shift left.

LSL Rd, Rn   Rd = Rd << Rn

LSL.W Rd, Rn, Rm   Rd = Rn << Rm.

LSR Rd, Rn, #immed   Rd = Rn >> #immed   logical shift right.

LSR Rd, Rn   Rd = Rd >> Rn

LSR.W Rd, Rn, Rm   Rd = Rn >> Rm.

ROR Rd, Rn, #immed   Rd =
ROR Rd, Rn   rotate instruction
ROR.W Rd, Rn, Rm

RRX
RRX.W Rd, Rn   {cod, Rd} = Rn, cog.   rotate right extend.

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C.Assignments

Handwritten notes:

III internal assessment.

Part-A.
i) Operational quality attributes of E-s
a) Response   b) Throughput c) scalability
d) safety   e) security   f) maintainence

a) Response :- It tells that the how fast the
   embedded system. we get to know the
   quickness of the system.
• All real time system should have
  high response.
• ex:- flight control system, where the
  system has to meet the deadlines
• If not the flight will be in danger,
  risk the life of passenger.
• All embedded system need not be real
  time system
  ex:- electronic toy.

b) Throughput :- It gives the efficiency of
   the embedded system,
• The rate of production at an stipulated
  period of time.
• This rate is measured in terms of unit of
  products, batches.
• It can be used as a benchmark, used to

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The faculty incharge informs about the type of assignment that will be given ,its submssion date,Marks allocation to students .

Assignments are compiled in such a way to mplement self learning habits to students from various sources.

The assignments wll be given generally before the commencement of the Internal assessment inorder to help the students for getting good marks in the IA.

Submission date will be announced ,evaluated and its feedback will be given to students to improve learning and also to appreciate them.

Both CIE marks and assignment marks will be entered after each IA,and Finalized IA will be sent to university before SEE exams.

2.2.3 Quality of student projects (25)   Institute Marks : 25.00

Project work carried out by the final year students in two phases. Phase -I and Phase II aim at applying theoretical and practical knowledge gained to provide technical solutions to real world problems. we also ensure that the projects address and attain PO's and PSO's. The students are encouraged and motivated to do quality projects that address environment friendliness, societal needs, safety etc. The faculty members encourage students to publish their project work in reputed journals/conferences. Also, students are encouraged to avail the external funding schemes for their project work like KSCST, VTU project funding schemes.

Project Identification and Allocation:

- Conduct meeting with students in the presence of HoD, Professors, Associate Professors and project coordinators addressing the VTU guidelines and timelines ,Simultaneously, the project coordinators collect & display the list of projects suggested by the faculty members.
- Students can choose from the suggested projects or find a problem statement for the execution of the project based on their area of interest.
  Students must identify their team members and submit the synopsis to the project coordinator.
- Based on the student's chosen area and faculty specialization suitable guide will be allotted. The students will be intimated the finalized projects with guide and also the dates of the reviews.
- Conduction of First review which involves project synopsis presentation, in the presence of review panel members comprising of guide, project coordinator and HOD.
- Based on the inputs given by the Panel members students might need to identify another project title and resubmit the synopsis or improve the existing one.

Project Execution

All the students must report to their internal guides and update them on the progress of their project work.

The project team should give a presentation cum demonstration depicting the progress and partial output of their project work during second Review to the review panel members.

A final presentation and demonstration of the project is carried out by the project team during the third/ final review.

On successful completion of third review the project team submits the project report.

A project exhibition- **ANAVESHANA** is conducted at college level where the students are encouraged to demonstrate their project work.

Project work:

Project work shall preferably be Batch wise, the strength of each Batch shall not exceed a maximum of four students as per VTU Regulations.

Project Work Phase-1

The CIE Marks awarded for Project Work Phase-1 shall be based on the evaluation of Project Work Phase-1 Report, Project skill and Question and Answer session in the ratio 50:25:25. The marks awarded for Project report shall be same for all the Batch mates as per VTU Regulations.

Project Work Phase-2

The CIE Marks awarded for Project Work Phase-2 shall be based on the evaluation of Project Work Phase-2 Report, Project skill and Question and Answer session in the ratio 50:25:25. The marks awarded for Project report shall be same for all the Batch mates as per VTU Regulations.

Funded/Sponsored Projects:

List of funded/sponsored major projects.

Sl. No.	Academic year	Name of Students	Title	Funding agency	Year	Amount	Guide
1	2021-2022	Swathi S Ramya C Nidhishree Varshini M U	Women's Safety Device Using Panic Button	KSCST	2021-22	7000	Dr. Bharathi Gururaj
2	2020-2021	Chandan Gowda Samarth K Vidya M Deepika S	Industry boiler Monitoring Using IoT	VTU	2020-21	5000	Dr.H.B. Bhuvaneswari
3	2020-2021	Manoj Kumar Yashpal Gowda Prajwal C N	Social Distancing detection and Monitoring using Yolo v3	VTU	2020-21	5000	Mr. Harish L
4	2019-2020	Akshay S Devika S Shreya A Himanshu	Drowsiness detection using EEG signal Analysis	FAER	2019-2020	5000	Dr. Mathivanan M

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CET Code : E188 COMED-K : E003 PGCET : T818

DEPARTMENT OF ECE

PROJECT PHASE - 2 (2021-22 EVEN)

2/06/2022

All final year students are hereby informed that the second review of project phase 2 will be held on 10/6/2022 (Friday). All the groups are informed to prepare the following hard copies while attending the review.

1. Power Point (PPT) with guide correction.
2. Base Paper and Related Research Papers.
3. Working model of the project.

The PPT presentation slides should include but not limited to the following slides:

1) FRONT SLIDE
2) AGENDA
3) INTRODUCTION
4) LITERATURE SURVEY
5) EXSISTING SYSTEM
6) PROPOSED SYSTEM
7) FUTURE ENCHANCEMENT
8) REFERENCES

The time of the presentation will be as follows. A minimum of 25 to 30 slides should be prepared giving a detailed overview of the work done.

SL. NO	NAME OF THE PROJECT	USN	NAME OF THE STUDENT	NAME OF THE GUIDE	TIME
1	Automatic Ration Material Distribution	1AH18EC003	Ajay M.N	Dr.A.M.Prasanna Kumar	10:00 am
2		1AH18EC015	Kiran Vanjre G		
3		1AH18EC023	Rahul M		
4		1AH18EC026	Ranjeet K		
5	Design and Simulation of MEMS using Thermal Actuators For RF Application	1AH18EC029	Sadhana K V	Dr.Bharathi Gururaj	10:30 am
6		1AH18EC033	Sowmya M		
7		1AH18EC039	Vasavi B L		

8	Knowledge Based Real Time Monitoring System For aquaculture Using IOT	1AH17EC021	M.B.Sri Sandhya	Mr.Nagesh .H.B	11:00 am	
9		1AH18EC004	Anusha A S			
10		1AH18EC005	Ashwini Uppaladinni			
11		1AH18EC016	Laxmi Uppaladinni			
12	IOT Based Underground Cable Fault Detector	1AH18EC001	Aarti Swamy	Mrs.Vijaya Dalawai	11:30 am	
13		1AH18EC006	Ashwini V			
14		1AH18EC010	Gowri N			
15		1AH18EC014	Kavya M.S			
16	Automatic Fracture Detection in Bone Using Matlab and Image Processing	1AH18EC021	Pooja G	Dr.Prajith Prakash Nair	12:00 pm	
17		1AH18EC027	Rashmitha P			
18		1AH18EC030	S.R.Indhu			
19		1AH18EC043	Yogitha Vaishnav K			
20	Smart Crop Protection System	1AH18EC020	Niteesh Gowda S	Dr.Bharathi Gururaj	12:30 pm	
21		1AH18EC007	Charan V			
22		1AH18EC013	Kappu Hemanth Kumar Reddy			
23		1AH18EC040	Vijay K			
24	Women Safety Device Using Panic BUtton	1AH18EC019	Nidhishree V	Dr.Prajith Prakash Nair	1:30 pm	
25		1AH18EC025	Ramya C			
26		1AH18EC036	Swathi S			
27		1AH18EC038	Varshini M U			
28	IOT Based Hi-Tech Robot For Teaching	1AH18EC008	Chethan D	Mrs.Vijaya Dalawai	2:00 pm	
29		1AH18EC009	Gagan B R			
30		1AH18EC011	Harish Kumar M V			
31		1AH18EC041	Vijay Kumar S			
32	Smart Rail Tech	1AH15EC001	Abhay Nagesh HA	Mr.Nagesh .H.B	2:30 pm	
33		1AH16EC031	Nikhil N			
34		1AH18EC400	Nishanth S			
35	Early Detection of Parkinson's Disease using Progressive Deep Learning	1AH15EC006	Bhavana Priya M R	Dr.Prajith Prakash Nair	3:00 pm	
36		1AH15EC008	Chandra Kiran S			

Project Coordinator

HOD/ECE
HOD 2/6/2022
Dept. of ECE
ACS College of Engineering
Bangalore - 560

Fig.No. 2.2.3.1-Sample Project circular

Mini Projects:

Mini Project work carried out by the students aims at applying theoretical and practical knowledge gained during the respective semesters thereby inculcating the learning by doing amongst the students.

Project Identification, Allocation, Continuous Monitoring and Evaluation:
The process of mini project identification, allocation and monitoring and evaluation is summarized in table

Processes of Mini-project identification, allotment, monitoring and evaluation as per VTU guidelines

Steps	Tasks	Process Description
1	Project Identification	• Projects are identified by the students in their respective area of interest. Students must submit a brief synopsis based on their identified project. Project coordinator approve the synopsis or ask for its resubmission if required.
2	Allotment	• Projects Guides are allocated to them based on faculty expertise and synopsis submitted.

3	Continuous Monitoring	The progress of a project is monitored by the guide on weekly basis. The continuous monitoring is done through two periodic reviews by panel (first review and final review).
4	Evaluation	Internal Assessment of the project team members is done based on project objectives and quality of the project by the internal guide along with the review panel member (Problem statement, Effectiveness of the solution, presentation, report with individual contribution, etc). · The continuous progress is assessed through periodic review by panel (first review and final review) Final IA marks are calculated by taking the average of two reviews. Semester End Examination is conducted wherein the project team members are assessed by an Internal and an External examiner. This includes presentation by the project team and demonstration of the project followed by Viva-Voce.

Outcome of the Project

Students enhance their innovative project work to convert it into relevant technology application or product. While carrying out the project work students learn how to work in team and individually. Students are also involved in deciding the budget of their project and accordingly selecting the components without compromising the functionality. These helps the students to gain finance and managerial skills. Further it encourages students to enter into entrepreneurship.
Students are also motivated to present their project work in National/international
Conferences, and project exhibitions and also to publish a paper based on their project work in journals.

2.2.4 Initiative related to industry interaction (15)   Institute Marks : 15.00

To strengthen interaction with industries and to keep our students updated with the latest trends in Electronics & Communication Engineering, the Department has entered into an agreement with the following companies.The planning of the workshops, seminars, internships, and academic projects will be coordinated by these companies along with the Department.

MOUs were signed with industries to emphasize on

Internship
Industrial Visits

Industry supported Laboratory and activities

A.MOU signed with the Department

Sl.No.	Industries/ Company Name	Date of agreement	Duration	MoU Link
1	Cadmaxx Edtech Pvt Ltd	21.09.2022	3 years	https://www.acsce.edu.in/acsce/wp-content/uploads/2013/06/MOU_cadmaxx-edtech.pdf (https://www.acsce.edu.in/acsce/wp-content/uploads/2013/06/MOU_cadmaxx-edtech.pdf)
2	GMAT and Be Practical	08-06-2022	2 years	https://www.acsce.edu.in/acsce/wp-content/uploads/2013/06/MOU_gmat-.pdf (https://www.acsce.edu.in/acsce/wp-content/uploads/2013/06/MOU_gmat-.pdf)
3	EdGate Techniologies Pvt. Ltd, Bangalore	20-09-2021	3 years	https://www.acsce.edu.in/acsce/wp-content/uploads/2013/06/MOU_Edgate-Technologies.pdf (https://www.acsce.edu.in/acsce/wp-content/uploads/2013/06/MOU_Edgate-Technologies.pdf)
4	Pongu Ventures Pvt. Ltd, Chennai	23-01-2019	4 year	https://www.acsce.edu.in/acsce/wp-content/uploads/2013/06/Pongu-Ventures-IIC.pdf (https://www.acsce.edu.in/acsce/wp-content/uploads/2013/06/Pongu-Ventures-IIC.pdf)
5	Uniqval Software Solutions	06-02-2018	2 years	https://www.acsce.edu.in/acsce/wp-content/uploads/2021/08/UNIQAL-keep-IT-simple.pdf
6	Infotech Solutions, Chennai	10-01-2018	3 years	https://www.acsce.edu.in/acsce/wp-content/uploads/2021/08/Infotech-Solutions.pdf
7	BOSCH Rexroth	02-07-2018	3 years	https://www.acsce.edu.in/acsce/wp-content/uploads/2021/09/mech-MoUs-singed.pdf
8	Intel- FICE	01-06-2018	5 years	https://www.acsce.edu.in/acsce/wp-content/uploads/2013/06/INTEL-MOU.p
9	SWAYAM-NPTEL-Local-Chapter	2016	6YEAR	https://www.acsce.edu.in/acsce/wp-content/uploads/2013/05/SWAYAM-NPTEL-Local-Chapter.pdf (https://www.acsce.edu.in/acsce/wp-content/uploads/2013/05/SWAYAM-NPTEL-Local-Chapter.pdf)

2.2.4.2. Implementation

a. **Webinars conducted:**

Title: "3D Printing Technology"

Number of Students: 70

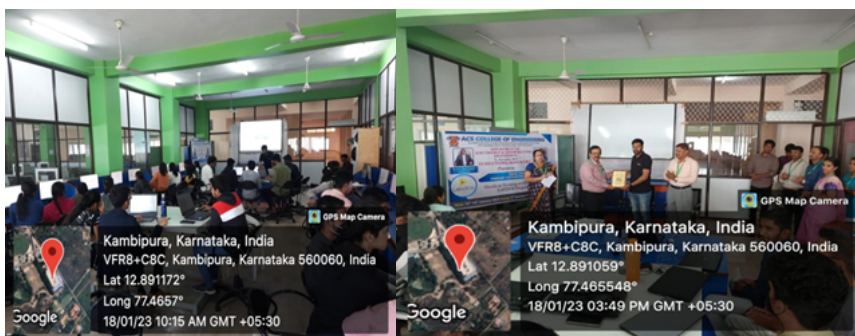Title: "Campus to Corporate

Number of Students: 110

Workshops Conducted:

Title: "Student Development Program"

Number of Students: 52

2.2.4 Initiatives related to industry internship training (15)

(Mention the initiatives, implementation details and impact analysis)

a. Industrial Visit details

Industrial visits are a crucial part of the academic curriculum because they give students practical experience in real-world situations and a pragmatic viewpoint on a theoretical concept relevant to their line of work. Furthermore, by giving students first-hand experience identifying the inputs and outputs for a variety of business operations and procedures, industrial visits bridge the widening gap between academic learning and practical experience.

Students are scheduled for industrial tours where the essential instruction is provided, allowing them to provide their best effort during the placements. Students can increase the necessary abilities through a training programme, where they can individually develop their technical talents.

Name of the event:

1)INDUSTRIAL VISIT TO SOLAR POWER PLANT

Date: 26.03.2019

Venue: Solar Power Plant in Shivanasamudra, Mandya District

No of participants: III Year ECE Students-30

The students of VI semester were taken to Solar Power Plant in Shivanasamudra, Mandya District for Industrial visit on 26.03.2019 that is on Tuesday as a part of Industry interaction to students along with two faculty members. The students assembled in the college at 8:30 am in their class. As the bus arrived at 9:00 am the students boarded the bus and started from college and reached Solar Power Plant in Mandya District at 12:30pm.

Name of the event: INDUSTRIAL VISIT TO HAL Museum

Date: 27.03.2019

No of participants: II Year ECE Students- 30

The students of IV SEM were taken to HAL Museum for Industrial visit on 27.03.2019 that is on Wednesday as a part of Industry interaction to students along with two faculty members. The students assembled in the college at 8:30 am in their class. As the bus arrived at 8:45 am the students boarded the bus and started from college and reached HAL Museum at 10:30am. Tickets collected for all students by paying amount of Rs 50 per head. Next all the students entered the Museum and started to visit all places inside the Museum. There are two major halls, one displaying the photographs that chart the growth of aviation in each decade from 1940 till date and a Hall of Fame that takes the visitors on an exciting journey through the Heritage of Aerospace & Aviation Industry in India. The second Hall highlights the various functions of an Aero Engine by displaying motorized cross sections of various models of Aero Engines. Real Engines such as Garret (for Dornier Aircraft), Adour (for Jaguar Aircraft) and Orpheus (for Kiran Aircraft) can be seen here along with Ejection Seat with Parachute; and Pushpak & BasantAircraft.
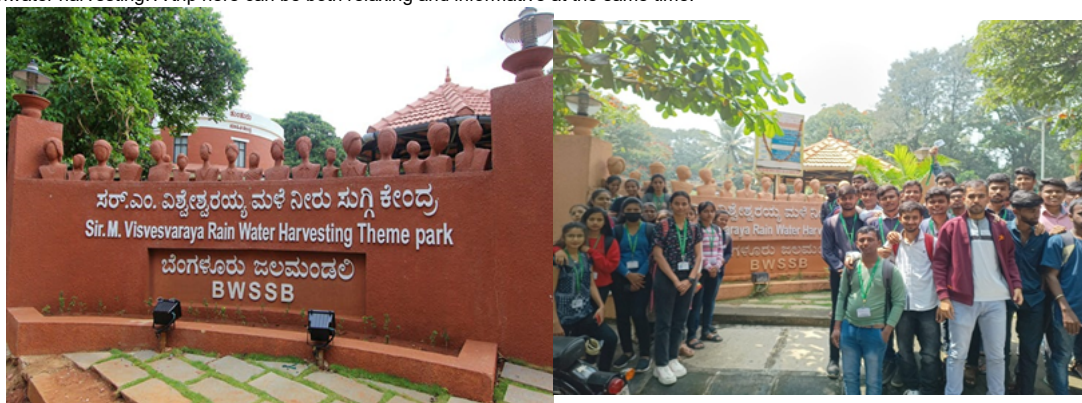

Name of the event: INDUSTRIAL VISIT TO Visvesvaraya Rain Water Harvesting Theme Park

Date: 14.10.2022

No of participants: II Year ECE Students- 55

The students of III semester were taken to Solar Power Plant in Visvesvaraya Rain Water Harvesting Theme Park for Industrial visit on 14.10.2022 that is on Friday as a part of Industry interaction to students along with two faculty members. The students assembled in the college at 8:30 am in their class. As the bus arrived at 9:00 am the students boarded the bus and started from college and reached Visvesvaraya Rain Water Harvesting Theme Park at Jayanagar 10:00 am. Located in Jayanagar, this garden was designed and developed by a scientist named AR Shivakumar and made possible by the Bangalore Water Supply and Sewerage Board.As the name suggests, it features different ways to harvest rainwater – there are 26 models of the different types of rainwater harvesting. A trip here can be both relaxing and informative at the same time.

4) Name of the event : INDUSTRIAL VISIT TO Be Practical Tech Solutions

Date :9.12. 2022

Participants: II and III Year ECE Students- 60

A batch of 3rd semester and 5th semester of department ELECTRONICS AND COMMUNICATION ENGINEERING along with faculty Dr. A. M. Prasanna kumar sir and Mrs. Aishwarya L.K madam visited BE PRACTICAL TECH SOLUTIONS at Basaveshwara Nagar in Bangalore -560079.

This visit was mainly focused on understanding the important courses for professional future and about career guidance. Initially we visited the office at the time of 11:15 a.m and we had three sessions there.

The first session had started at the time of 11:45 a.m, and the session was held by Mr. Koushal, Business development manager. Firstly he told us to

introduce our friends and later he introduced us all about the institution. This Institute was started in the year of 2012. He asked about our future goals. This session ended at 12:15 p.m.

The second session started at 12:20 p.m , and the session was held by Mr.

Ganesh, Full Stack developer.

2.2.4.3. Impact Analysis

The effectiveness of this practice can be gauged by the great response of the participants of the workshops.

Students picked up what they learnt at the workshops to implement their own mini project and also final year projects.

Students gained from this exposure to incorporate an entrepreneurial spirit and project based .thinking

2.2.5 Initiative related to industry internship/summer training (15)   Institute Marks : 15.00

Initiatives related to Industry Internship / Summer Training Internship/Professional Practice:

The Internship shall be completed during the period specified in the Scheme of Teaching and Examination.

The internship shall preferably be at an Industry/R and D organization/ IT company/Government organization of significant repute for a specified period as mentioned in scheme of Teaching and Examination.

The Department/college shall nominate staff members to facilitate, Guide and supervise students under internship.

The students shall report progress of the internship to the Guide in regular intervals and seek his/her advise. The Guide shall maintain the progress record of the candidates undergoing internship.

After the completion of internship students shall submit a report with completion certificate and attendance certificate to the Head of the Department with the approval of both Internal and External Guides.

There shall be 40 marks for CIE and 60 marks for SEE. The minimum requirement of CIE MARKS SHALL BE 50% of the maximum marks.

The Internship coordinator shall be the internal examiner for the SEE.

The external Guide/Senior Professor will be the external examiner for SEE. Examination for internship shall be conducted at the college and the date shall be given by VTU .Batches will be created according to dates specified . The Examiners shall jointly award the SEE marks.

In case the external Guide expresses his inability to conduct the examination, the Principal/ Chief Superintendent of the Institute shall appoint a senior Faculty of the Department to conduct the Examination along with the Internal Guide.

Non-availability of Internal guide due to inevitable situations for the conduct of SEE, the Principal/ Chief Superintendent of respective institute shall appoint a senior faculty of the Department to conduct the Examination.

The students are permitted to carry out the internship anywhere in India or abroad. The University will not provide any Kind of financial assistance to any student for carrying out the Internship.

The CIE Marks awarded for Internship shall be based on the evaluation of Internship Report, Internship Presentation skill and Question and Answer session in the ratio 50:25:25 as per VTU Regulations.

2019-2020

Fig 2.2.5.1 Internship Certificate

Fig. 2.2.5.2 Student list

2020-2021

Fig 2.2.5.6 Circular and Schedule

2021-2022

Figure 2.2.5.3 Internship company list

CERTIFICATE OF COMPLETION

This certifies that

Laxmi Uppaladinni

has completed one month Internship on Internet of Things
from 16th August 2021 to 15th September 2021 at Tequed Labs
and has worked on a Project Titled

"SMART CAR PARKING"

USN: 1AH18EC016

Institution Name: ACS COLLEGE OF ENGINEERING

Internship ID: TLS21A1315

Supreeth Y S, CEO

Aditya S K, CTO

ACS College of Engineering

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
VII SEM STUDENT LIST-2021 -2022
Internship Final Marks

SL.NO	USN	STUDENT NAME	Presentation(20/25)	Report(15/20)	Q & A(5)	Total (40/50)
1	1AH18EC001	Arati S Swamy	20	15	5	40
2	1AH18EC003	Ajay M N	20	15	4	39
3	1AH18EC004	Anusha A S	20	15	4	39
4	1AH18EC005	Ashwini Uppaladinni	20	15	4	39
5	1AH18EC006	Ashwini V	20	15	4	39
6	1AH18EC007	Charan V	20	15	4	39
7	1AH18EC008	Chetan	20	15	4	39
8	1AH18EC009	Gagan B R	20	15	4	39
9	1AH18EC010	Gowri N	20	15	5	40
10	1AH18EC011	Harish Kumar M V	20	15	4	39
11	1AH18EC012	Hemanth K	20	15	4	38
12	1AH18EC013	Kapu Hemanth Kumar Reddy	20	15	5	40
13	1AH18EC014	Kavya M S	20	15	5	40
14	1AH18EC015	Kiran Vanjre G	20	15	4	39
15	1AH18EC016	Laxmi Uppaladinni	20	15	4	39
16	1AH18EC019	Nidhishree V	20	15	5	40
17	1AH18EC020	Nitesh Gowda S	20	15	5	40
18	1AH18EC021	Pooja G	20	15	4	39
19	1AH18EC022	Rachana	20	15	4	39
20	1AH18EC023	Rahul M	20	15	4	39
21	1AH18EC024	Rakshith Yadav B	20	15	4	39
22	1AH18EC025	Ramya C	20	15	5	40
23	1AH18EC026	Ranjeet K	20	15	4	39
24	1AH18EC027	Rashmitha P	20	15	4	39
25	1AH18EC029	Sadhana K V	20	15	4	39
26	1AH18EC030	Sallapalli Raksha Indhu	20	15	4	39
27	1AH18EC032	Shreedhara D Borannavar	20	15	4	38
28	1AH18EC033	Sowmya M	20	15	5	40
29	1AH18EC035	Suresh Kumar H V	20	15	4	39
30	1AH18EC036	Swathi S	20	15	5	40
31	1AH18EC037	Tejas K B	20	15	4	38
32	1AH18EC038	Varshini M U	20	15	4	39
33	1AH18EC039	Vaanavi B L	20	15	4	39
34	1AH18EC040	Vijay K	20	15	4	39
35	1AH18EC041	Vijay Kumar S	20	15	4	39
36	1AH18EC042	Vijetha Rao A V	20	15	4	39
37	1AH18EC043	Yogitha Vaishnavi	20	15	4	39
38	1AH17EC021	Srisandhya M B	20	15	4	39
39	1AH18EC045	Somesh D Yogi	20	15	4	39
40	1AH15EC001	Abay Nagesh H A	25	20	3	48
41	1AH15EC006	Bhavan Priya M R	25	20	5	50
42	1AH15EC008	Chandra Kiran S	25	20	5	50
43	1AH17EC029	Shashank	25	20	3	48
44	1AH16EC031	Nikhil N	25	20	5	50
45	1AH17EC003	Ajay Kumar Param	25	20	3	48
46	1AH16EC011	Bharat S	25	20	3	48
47	1AH18EC400	Nishanth	20	15	4	48

Fig 2.2.5.4 Internship Marks Split up

Technical Seminar:

The CIE Marks awarded for Technical Seminar shall be based on the evaluation of Seminar Report, Seminar Presentation skill and Question and Answer session in the ratio 50:25:25.

ACS College of Engineering
Approved by AICTE New Delhi, Affiliated to VTU, Belagavi
(A Unit of RajaRajeswari Group of Institutions)

Department of Electronics & Communication Engineering

TECHNICAL SEMINAR (2021-2022)

Date: 10.04.2022

All the Final Year students are hereby informed to present ppt for the technical seminar. The seminar will be conducted from may 20th & 21st 2022. The presentation of the topic is given through PPTs.

Fig 2.2.5.17 Circular

Corrected copy of the report and PPT should be submitted to the Coordinator before the Seminar.

Renuka Kelkar A 10/4/22
Technical Seminar Coordinator

BG
HOD, ECE
10/4/2022

ACS College of Engineering

TECHNICAL SEMINAR CIRCULAR (2021-2022)

There will be 100 Marks for CIE (Seminar Presentation: 50, Technical Seminar Report:50).

The Technical Seminar report should be Spiral binded.

Cover page: Purple colour.

Number of pages of the report: 30

The guidelines for the report to be followed from VTU website similar to Project report guidelines.

The Report and PPT to be first checked with guide and then to be submitted to the Technical Seminar Coordinator. The duration for the presentation is 30 Mins for each student and timings to be followed strictly. Be in time for the Presentation.

The Seminar will commence from 9:00 am.

Sl. No.	USN	Name	Date
1	1AH18EC001	Arathi S Swamy	
2	1AH18EC003	Ajay M N	
3	1AH18EC004	Anusha A S	
4	1AH18EC005	Ashwini Uppaladinni	
5	1AH18EC006	Ashwini V	
6	1AH18EC007	Charan V	20.05.2022 9:00am to 12:30pm
7	1AH18EC008	Chetan	
8	1AH18EC009	Gagan B R	
9	1AH18EC010	Gowri N	
10	1AH18EC011	Harish Kumar M V	
11	1AH18EC012	Hemanth K	
12	1AH18EC013	Kagu Hemanth Kumar Reddy	
13	1AH18EC014	Kavya M S	20.05.2022 1:30am to 3:30 pm
14	1AH18EC015	Kiran Vanjre G	
15	1AH18EC016	Laxmi Uppaladinni	

	USN	Name	Date
16	1AH18EC019	Nidhishree V	
17	1AH18EC020	Nitesh Gowda S	
18	1AH18EC021	Pooja G	
19	1AH18EC022	Rachana	
20	1AH18EC023	Rahul M	
21	1AH18EC024	Rakshith Yadav B	
22	1AH18EC025	Ramya C	
23	1AH18EC026	Ranjeet K	
24	1AH18EC027	Rashmitha P	
25	1AH18EC029	Sadhana K V	
26	1AH18EC030	Sallapalli Raksha Indhu	
27	1AH18EC032	Shreedhara D Borannavar	
28	1AH18EC033	Sowmya M	21.05.2022 9:00am-12:30pm
29	1AH18EC035	Suresh Kumar H V	
30	1AH18EC036	Swathi S	
31	1AH18EC037	Tejas K B	
32	1AH18EC038	Varshini M U	
33	1AH18EC039	Vasavi B L	
34	1AH18EC040	Vijay K	
35	1AH18EC041	Vijay Kumar S	
36	1AH18EC042	Vijetha Rao A V	
37	1AH18EC043	Yogitha Vaishnavi	
38	1AH17EC021	Srisandhya.M.B	
39	1AH18EC045	Somesh D Yogi	
40	1AH15EC001	AbayNagesh H A	21.05.2022 1.30pm-3.30pm
41	1AH15EC006	BhavanPriya M R	
42	1AH15EC008	Chandra Kiran S	
43	1AH16EC031	Nikhil N	
44	1AH17EC003	Ajay Kumar Param	
45	1AH16EC011	Bharat S	
46	1AH18EC400	Nishanth	
47	1AH17EC029	Shashank	

Fig 2.2.5.18 Schedule and Guidelines

ACS College of Engineering

BE (Electronics and Communication Engineering Department) Technical Seminar
Topics as entered in google forms

SL NO	NAME	USN	MAIL ID	MOBILE NO	TOPIC	Is the topic related to project
1	SOWMYA M	1AH18EC033	mariswamysowmya191@gmail.com	9164460191	Design and Simulation of MEMS using thermal actuators for RF application.	YES
2	Sadhana K V	1AH18EC029	sadhanagowda1815@gmail.com	9535850753	5G wireless technology	NO
3	M B SRI SANDHYA	1ah17ec021	srisandhyamb@gmail.com	8688906868	Internet of things	YES
4	Sallapalli Rakshaindhu	1AH18EC030	indhu.salla25@gmail.com	07996365057	Blockchain technology	NO
5	Vasavi BL	1AH18EC039	vasavi.bl123@gmail.com	9380728277	Virtual reality technology	NO
6	Chandrakiran	1AH15EC008	chandrakiran7ronaldo@gmail.com	9036451816	Cybersecurity essentials	NO
7	Tejas k b	1ah18ec037	tejakb25@gmail.com	7259148929	GIFI TECNOLOGY	NO
8	Sallapalli Rakshaindhu	1AH18EC030	indhu.salla25@gmail.com	07996365057	Haptic technology	NO
9	Gowri.N	1AH18EC010	gourynaidu14@gmail.com	9148767911	Appliances security control using power line	NO
10	AJAY M N	1AH18EC003	ajaymn5543@gmail.com	9591458893	6th sense technology	NO
11	Varshini M U	1AH18EC038	muvarshini4@gmail.com	9611206467	mqtt	NO
12	AartiSwamy	1AH18EC001	aartiswamy06081999@gmail.com	9448106220	Wi-Vi technology	NO
13	SWATHI S	1AH18EC036	swathisrinivas2341@gmail.com	9019534335	SECURITY ISSUES IN CLOUD COMPUTING	NO
14	Ramya C	1AH18EC025	ramyashika2000@gmail.com	8123467831	WiFace	NO
15	RAHUL M	1AH18EC023	rahul9738131992@gmail.com	09066668768	Deep learning based vehicle	NO

Fig 2.2.5.19 Topics

	NAME	USN	MAIL ID	MOBILE NO	TOPIC	
16	SHREEDHARA D BORANNAVAR	1AH18EC032	SHREEDHARDB1222K@gmail.com	9008144565	occupancy detection in an open parking lot	NO
17	NITEESH GOWDA S	1AH18EC020	nitmo1314@gmail.com	9620148219	POLYMER MEMORY	NO
18	Chethan D	1AH18EC008	chethanaaradhya72325@gmail.com	9740415951	Solar tree	NO
19	Gagan B R	1AH18EC009	gaganpuli05@gmail.com	9113840733	MicroLED	NO
20	Harish Kumar M V	1AH18EC011	harishkumarmv3859@gmail.com	9964078013	Gi-Fi	NO
21	M B SRI SANDHYA	1ah17ec021	srisandhyamb@gmail.com	8688906868	Li fi communication	NO
22	Kavya M S	1AH18EC014	kavyakavana55555@gmail.com	8310481981	Smart aquaculture an iot approach towards efficient farming	YES
23	NIDHISHREE V	1AH18EC019	vnidhishree520@gmail.com	7019444518	Goggle glass	NO
24	Nikhil N	1AH16EC031	nikhilnatraj98@gmail.com	9482839261	Lithium ion battery	NO
25	YogithaVaishnav K	1AH18EC043	yogithavaishnav26@gmail.com	7204833004	Embedded system using Arduino UNO	NO
					E-textiles	NO

Technical Seminar Co-ordinator

ECE HOD

3 COURSE OUTCOMES AND PROGRAM OUTCOMES (120)   Total Marks 120.00

Define the Program specific outcomes

3.1 Establish the correlation between the courses and the Program Outcomes (POs) and Program Specific Outcomes (PSOs) (20)   Total Marks 20.00

:

PSO1	To Analyze, design and develop solutions by applying foundational concepts of Electronics and Communication Engineering.
PSO2	Design and implement the products using cutting edge technologies in hardware and software, to demonstrate leadership qualities among students, to promote research and development activities for betterment of organization and society.

3.1.1 Course Outcomes(COs)(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) (5)   Institute Marks : 5.00

Note : Number of Outcomes for a Course is expected to be around 6.

Course Name :		C2 33	Course Year :	2019-2020

Course Name	Statements
C2 33.1	Understand the principles of semiconductor Physics
C2 33.2	Understand the principles and characteristics of different types of semiconductor devices.
C2 33.3	Understand the fabrication process of semiconductor devices.
C2 33.4	Utilize the mathematical models of semiconductor junctions and MOS transistors for circuits and systems.

Course Name :		C2 42	Course Year :	2019-2020

Course Name	Statements
C2 42.1	Understand the characteristics of BJTs and FETs.
C2 42.2	Design and analyze BJT and FET amplifier circuits.
C2 42.3	Design sinusoidal and non-sinusoidal oscillators.
C2 42.4	Understand the functioning of linear ICs
C2 42.5	Design of Linear IC based circuits.

Course Name :		C3 53	Course Year :	2020-2021

Course Name	Statements
C3 53.1	Understand and analyze concepts of Analog Modulation schemes viz; AM, FM., Low pass sampling and Quantization as a random process
C3 53.2	Understand and analyze concepts digitization of signals viz; sampling, quantizing and encoding.
C3 53.3	Evolve the concept of SNR in the presence of channel induced noise and study Demodulation of analog modulated signals.
C3 53.4	Evolve the concept of quantization noise for sampled and encoded signals and study the concepts of reconstruction from these samples at a receiver.

Course Name :		C3 61	Course Year :	2020-2021

Course Name	Statements
C3 61.1	Understand the mathematical representation of signal, symbol, and noise.
C3 61.2	Understand the concept of signal processing of digital data and signal conversion to symbols at the transmitter and receiver.
C3 61.3	Compute performance metrics and parameters for symbol processing and recovery in ideal and corrupted channel conditions
C3 61.4	Compute performance parameters and mitigate channel induced impediments in corrupted channel conditions

Course Name :		C4 71	Course Year :	2021-2022

Course Name	Statements
C4 71.1	Understand the layering architecture of OSI reference model and TCP/IP protocol suite
C4 71.2	Understand the protocols associated with each layer
C4 71.3	Learn the different networking architectures and their representations
C4 71.4	Learn the functions and services associated with each layer.

Course Name :		C4 81	Course Year :	2021-2022

Course Name	Statements
C4 81.1	Understand the concepts of propagation over wireless channels from a physics standpoint
C4 81.2	Application of Communication theory both Physical and networking to understand GSM systems that handle mobile telephony
C4 81.3	Application of Communication theory both Physical and networking to understand CDMA systems that handle mobile telephony.
C4 81.4	Application of Communication theory both Physical and networking to understand LTE-4G systems

3.1.2 CO-POmatrices of courses selected in 3.1.1(Six matrices to be mentioned; one per semester from 3rd to 8th semester) (5)

Institute Marks : 5.00

3.1.2 CO-POmatrices of courses selected in 3.1.1(Six matrices to be mentioned; one per semester from 3rd to 8th semester) (5)

Institute Marks : 5.00

1 . course name : C233

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C233.1	3	2	2	2	1	-	-	-	1	-	1	1
C233.2	2	3	2	2	1	-	-	-	1	-	1	1
C233.3	2	2	3	2	1	-	-	-	1	-	1	1
C233.4	2	2	2	2	1	-	-	-	1	-	1	1
Average	2.25	2.25	2.25	2.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00

2 . course name : C242

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C242.1	2	1	2	2	1	-	1	-	2	-	-	2
C242.2	2	1	2	2	2	-	1	-	3	-	-	2
C242.3	2	1	2	2	2	-	1	-	3	-	-	2
C242.4	2	1	2	2	3	-	2	-	3	-	-	2
C242.5	2	1	2	2	3	-	2	-	3	-	-	2
Average	2.00	1.00	2.00	2.00	2.20	0.00	1.40	0.00	2.80	0.00	0.00	2.00

3 . course name : C353

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C353.1	3	2	2	1	-	-	-	-	-	1	-	1
C353.2	3	2	3	1	-	-	-	-	-	1	-	1
C353.3	3	2	3	1	-	-	-	-	-	1	-	1
C353.4	3	2	2	1	-	-	-	-	-	1	-	1
Average	3.00	2.00	2.50	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00

4 . course name : C361

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C361.1	3	2	1	1	1	-	-	-	-	-	-	2
C361.2	3	2	2	1	1	-	-	-	-	-	-	2
C361.3	3	2	2	1	1	-	-	-	-	-	-	2
C361.4	3	2	1	1	1	-	-	-	-	-	-	2
Average	3.00	2.00	1.50	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00

5 . course name : C471

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C471.1	3	2	2	2	1	-	-	-	-	1	-	2
C471.2	3	2	2	2	1	-	-	-	-	1	-	2
C471.3	3	2	2	2	1	-	-	-	-	1	-	2
C471.4	3	2	2	2	1	-	-	-	-	1	-	2
Average	3.00	2.00	2.00	2.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	2.00

6 . course name : C481

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C481.1	3	2	2	1	1	-	-	-	-	1	-	2
C481.2	3	2	2	1	1	-	-	-	-	1	-	2

C481.3	3 ⌄	2 ⌄	2 ⌄	1 ⌄	1 ⌄	- ⌄	- ⌄	- ⌄	- ⌄	1 ⌄	- ⌄	2 ⌄
C481.4	3 ⌄	2 ⌄	2 ⌄	1 ⌄	1 ⌄	- ⌄	- ⌄	- ⌄	- ⌄	1 ⌄	- ⌄	2 ⌄
Average	3.00	2.00	2.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	2.00

1 . Course Name : C233

Course	PSO1		PSO2	
C233.1	3	⌄	2	⌄
C233.2	3	⌄	2	⌄
C233.3	3	⌄	2	⌄
C233.4	3	⌄	2	⌄
Average	3.00		2.00	

2 . Course Name : C242

Course	PSO1		PSO2	
C242.1	3	⌄	2	⌄
C242.2	3	⌄	2	⌄
C242.3	3	⌄	2	⌄
C242.4	3	⌄	2	⌄
C242.5	3	⌄	2	⌄
Average	3.00		2.00	

3 . Course Name : C353

Course	PSO1		PSO2	
C353.1	3	⌄	2	⌄
C353.2	3	⌄	2	⌄
C353.3	3	⌄	2	⌄
C353.4	3	⌄	2	⌄
Average	3.00		2.00	

4 . Course Name : C361

Course	PSO1		PSO2	
C361.1	2	⌄	1	⌄
C361.2	2	⌄	1	⌄
C361.3	2	⌄	1	⌄
C361.4	2	⌄	1	⌄
Average	2.00		1.00	

5 . Course Name : C471

Course	PSO1		PSO2	
C471.1	2	⌄	2	⌄
C471.2	2	⌄	2	⌄
C471.3	2	⌄	2	⌄
C471.4	2	⌄	2	⌄
Average	2.00		2.00	

6 . Course Name : C481

Course	PSO1		PSO2	
C481.1	2	⌄	3	⌄
C481.2	2	⌄	3	⌄
C481.3	2	⌄	3	⌄
C481.4	2	⌄	3	⌄

Average	2.00	3.00

3.1.3 - A Program level Course-PO matrix of all courses INCLUDING first year courses (10)

Institute Marks : 10.00

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C111	3	2	2	1	1	0	0	0	0	1	0	1
C112	3	0	3	2	3	0	3	0	3	3	3	3
C113	3	2	3	1	0	0	0	0	0	1	0	1
C114	3	3	1	2	3	1	1	1	0	1	0	1
C115	3	3	2	1	0	0	1	0	0	0	0	1
C116	3	3	2	0	0	2	0	0	0	0	0	2
C117	3	2	3	2	0	0	0	0	0	1	0	1
C118	0	0	0	0	0	0	0	0	0	0	3	0
C121	2	2	2	0	0	0	0	0	0	0	2	2
C123	2	2	0	0	0	0	0	0	0	0	0	0
C124	3	0	2	0	0	0	0	0	0	1	0	2
C125	2	2	2	0	2	2	2	0	2	2	1	0
C128	0	0	0	0	0	0	0	0	0	0	3	0
C1L27	3	3	0	0	0	3	3	3	0	0	2	0
C222	2	0	0	0	0	0	0	0	0	0	2	0
C226	3	3	0	0	0	0	0	3	3	3	0	3
C231	2	2	2	0	0	0	0	0	0	0	2	2
C232	2	2	0	0	0	0	0	0	0	1	0	1
C233	3	3	3	2	0	0	1	0	0	0	0	0
C234	3	3	3	3	2	0	0	0	0	1	0	1
C235	3	3	3	1	2	0	2	0	0	2	0	0
C236	3	3	2	2	0	0	1	0	0	0	0	0
C237	3	3	3	3	3	2	0	0	0	1	0	1
C238	3	3	3	2	0	0	0	0	0	1	0	1
C241	3	3	3	0	0	0	0	0	0	0	2	2
C242	3	3	3	2	0	0	1	0	0	1	0	1
C243	3	3	3	2	0	0	1	0	0	1	0	1
C244	3	3	3	2	0	0	1	0	0	1	0	1
C245	3	3	3	2	0	0	1	0	0	1	0	1
C246	3	3	2	2	0	0	0	0	0	1	0	1
C247	3	3	3	2	0	0	0	00	0	1	0	1
C248	3	3	2	2	0	0	0	0	0	1	0	1
C249	0	0	0	0	0	0	0	0	0	0	0	1
C257	3	3	3	2	2	0	0	0	0	1	0	1
C339	0	0	0	0	0	0	0	0	0	0	0	0
C351	0	0	0	0	0	0	1	2	3	3	3	1
C352	3	3	2	1	2	1	0	0	0	1	0	1
C353	3	3	2	2	2	0	0	0	0	1	0	1
C354	3	3	3	2	3	0	1	0	0	0	0	3
C355	3	3	2	2	0	0	0	0	0	1	0	1
C356	3	2	3	2	2	2	2	1	2	2	2	1
C358	3	3	3	2	0	0	0	0	0	1	0	1
C359	3	0	2	0	0	0	0	0	0	1	0	2

C361	3	3	3	2	3	2	2	0	0	1	0	1
C362	3	3	2	1	0	0	1	0	0	0	0	1
C363	3	3	2	3	2	2	1	0	1	2	0	0
C3642	2	2	2	2	0	0	0	0	0	1	0	1
C3653	3	2	3	2	3	0	0	0	0	0	0	1
C366	3	3	2	2	2	0	0	0	0	1	0	1
C367	3	3	3	2	2	0	0	0	0	1	0	1
C368	3	3	3	2	2	0	0	0	0	1	0	1
C471	3	3	3	2	2	0	0	0	0	1	0	1
C472	3	3	2	2	0	0	0	0	0	1	0	1
C4733	3	2	3	2	0	0	0	0	0	1	0	1
C4743	3	3	2	0	0	0	0	0	0	1	0	1
C4753	3	3	2	0	0	0	0	0	0	1	0	1
C476	3	3	3	3	2	2	0	0	0	1	0	1
C477	3	3	2	2	2	0	0	0	0	1	0	1
C478	2	2	2	2	2	2	2	2	2	2	2	2
C481	3	2	2	1	0	0	0	0	0	0	0	1
C4824	3	2	3	2	2	2	1	0	2	2	0	2
C483	3	3	3	3	3	2	3	2	3	2	3	2
C484	3	3	2	2	2	2	2	2	2	2	2	2
C485	3	3	2	2	2	2	2	2	2	2	2	2

3.1.3 - B Program level Course-PSO matrix of all courses INCLUDING first year courses

Course	PSO1	PSO2
C111	2	2
C112	1	1
C113	2	2
C114	2	2
C115	2	2
C116	1	1
C117	2	2
C118	2	2
C121	2	2
C122	2	2
C123	1	2
C124	1	0
C125	2	2
C126	2	2
C127	2	2
C128	2	2
C231	2	2
C233	3	2
C234	2	2
C235	3	2
C236	2	2
C237	2	2
C239	2	2
C241	2	2

C242	2	2
C243	3	1
C244	3	2
C245	3	2
C246	3	2
C247	2	2
C248	2	2
C249	1	1
C351	2	2
C352	3	2
C353	2	2
C354	3	3
C355	3	2
C356	3	3
C357	2	2
C358	2	2
C359	0	1
C36	2	2
C361	2	2
C362	2	2
C363	3	2
C3642	2	2
C3653	2	2
C367	2	2
C368	2	2
C376	2	2
C382	2	2
C471	2	2
C472	3	2
C4733	2	2
C4743	2	2
C4753	1	1
C477	2	2
C478	2	2
C481	3	2
C4824	2	2
C483	2	2
C484	2	2
C485	3	3

3.2 Attainment of Course Outcomes (50)   Total Marks 50.00

3.2.1 Describe the assessment processes used to gather the data upon which the evaluation of Course Outcome is based (10)   Institute Marks : 10.00

The key aspects in Outcome-Based Education (OBE) are the assessment of course outcomes. This describes the mode of assessment adopted to measure the students' performance using direct assessment and indirect assessment methods

Program Outcomes (PO), Course Outcomes (CO) and Program Specific Outcomes (PSO) are the three levels of the outcomes from OBE. Course Outcomes, Program Outcomes and Program Specific Outcomes relate to the knowledge (cognitive), skills (psychomotor), and behavior (affective) that the student acquires through the programme.

At the initial stage of OBE implementation, the Course Outcomes (CO) for each course are defined based on the Programme Outcome (PO) and other requirements. At the end of each course, the CO needs to be assessed and evaluated, to check whether it has been attained or not. Assessment is one or more processes, 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 Internal Evaluation or examination result.

Attainment of the COs can be measured directly and indirectly.
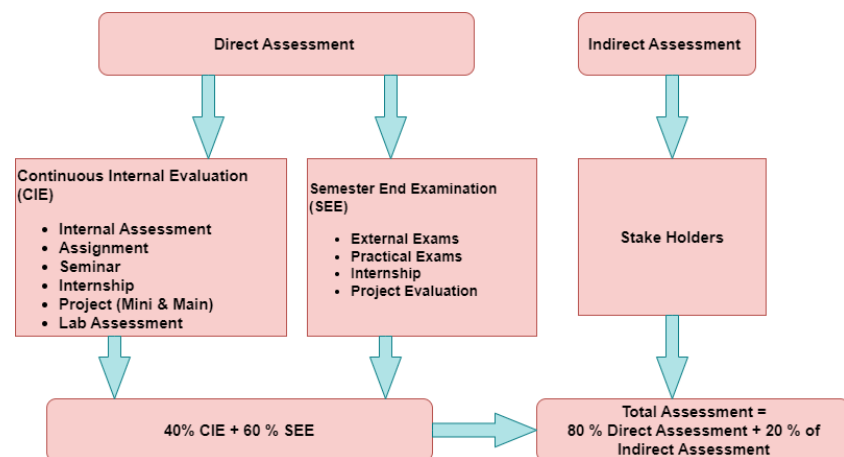
Direct attainment

Direct attainment basically 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 Continuous Internal Evaluation(CIE), assignments, quiz, seminars, laboratory assessments and Semester End Exam(SEE).

These methods provide a sampling of what students know and/or can do and provide strong evidence of student learning.

Initially course outcomes are defined for every course. The attainment target is set at the beginning of the semester.Three Internal assessments (IA) are conducted which covers all CO. Each Question in the IA test is mapped with respective CO. All IA are assessed for finding CO attainment using Rubrics. Similarly Average Attainment is calculated for SEE. The Technical Seminars, Project and Internship are also mapped with PO/PSO and rubrics are framed to measure the attainments.

The various tools which are used in Direct attainment are listed below.

Table.3.2.1.1: Tools for Direct Assessment of CO

Sl. NO	Direct Assessment for CO	Description
1	Continuous Internal Evaluation (CIE)	According to VTU regulations CIE Marks in each theory Course shall be the sum of marks prescribed for test and assignment. Marks prescribed for test shall be 30 and that for assignment is 10. The CIE marks for test in a theory Course shall be based on three tests generally conducted at the end of fifth, tenth and fourteenth week of each semester. Each test shall be conducted for a maximum of 30 marks and the final marks shall be the average of three tests. The remaining 10 marks shall be awarded based on the evaluation of Assignments/Unit tests/written Quizzes that support to cover some of the Course/program outcomes. Final CIE marks awarded shall be the sum of these two out of maximum of 40 marks.
2	Lab Assessment	According to VTU regulations In the case of a Practical, the CIE marks shall be based on the laboratory journals/ records (30 Marks on continuous evaluation based on conduct of experiment, viva and report writing) and one practical test (10 Marks) to be conducted at the end of the semester.
3	Seminars	According to VTU regulations for Technical seminar, the CIE marks shall be 100. The CIE marks in the case of seminars in the final year shall be based on the evaluation at the end of VIII semester by a committee consisting of the Head of the concerned Department and two senior faculty members of the Department, one of whom shall be the seminar guide. Seminar topic shall be selected from the emerging technical areas only.

4	Project	According to VTU regulations The CIE marks in the case of projects in the final year shall be based on the evaluation at the end of VIII semester by a committee consisting of the Head of the concerned Department and two senior faculty members of the Department, one of whom shall be the project guide. Project work shall preferably be batch wise, the strength of each batch shall not exceed a minimum of four students Project Work consists of 2 Phases , Phase-1, Phase-II, The CIE marks awarded for project work phase -1 and Phase-II shall be based on the evaluation of project work in phase -1 and Phase-II, Report, Project Presentation skill and Question and Answer session Viva-voce examination in project work shall be conducted batch-wise.
5	Semester End Examination (SEE Marks)	According to VTU regulations SEE examinations is conducted by the University covering the entire Course Syllabus. For this purpose, Syllabi to be modularized and SEE questions to be set from each module, with a choice confined to the concerned module only. SEE is also termed as University examination For a pass in a theory Course, the student shall secure minimum of 35% of the maximum marks prescribed in the University examination and in total 40% of the maximum marks (i.e., prescribed for SEE and CIE) including the CIE marks secured by the student
6	Practical examination	There shall be 40 marks for CIE and 60 marks for SEE. The minimum requirement of CIE marks shall be 50% of the maximummarks
8	Internship	According to VTU regulations the Internship shall be completed during the period specified in the Scheme of Teaching andExaminations. 1) The internship shall preferably be at a industryand R and D organization/IT company/ Government organization of significant repute for a specified period as mentioned in Scheme of Teaching andExaminations. 2. The Department/college shall nominate staff member/s to facilitate, Guide and supervise students underinternship. 3. The students shall report progress of the internship to the Guide in regular intervals and seek his/her advice. The Guide shall maintain the progress record of the candidates undergoinginternship. 4. After the completion of Internship, students shall submit a report with completion certificate and attendance certificate to the Head of the Department with the approval of both internal and externalGuides. 5. There shall be 40 marks for CIE and 60 marks for SEE. The minimum requirement of CIE marks shall be 50% of the maximummarks.

Indirect attainment

Indirect attainment methods such as course surveys are conducted which reflect on the students learning. They assess opinions or thoughts about the student's knowledge or skills.

The various tools which are used in Indirect CO attainment are listed below.

Table.3.2.1.2: Tools for Indirect Assessment of CO

S.NO	Indirect Assessment Method	Description

1	Student Exit Survey	The Exit survey is the feedback collected from graduating students who are at the end of the final semester of graduation. The Survey consists of questionnaires which are further mapped to PO.
2	Alumni Survey	The Alumni Survey is designed to give the information is used to improve the college experience for future students by identifying strengths in our programs as well as areas that need further development.
3	Parents' survey	The feedback is taken from the parents and their suggestions are considered
4	Employers' Survey	With the Corporate insight, the graduates' skills, capabilities, performance with other employees of the organization is collected through employer feedback.

For every course, the target is set based on the course complexity and previous year results. Targets are set for the CIE and SEE. CIE is evaluated based on the students' performance in Internals, assignments and other activities. Indirect CO attainment is calculated based on the Course exit survey. In order to calculate the final CO attainment for a course, 80% of Direct attainment and 20% of Indirect attainmentvalues are considered.

Direct CO Attainment: Continuous Internal Assessment/ Semester End Exam/ Assignment

Following procedure is followed for calculation of course outcomes attainment using MS Excel Tool:-

Program shall have set Course Outcome attainment levels for all courses.

Measuring Course Outcomes 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.

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 CO attainment through Internal Assessments:

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 (tests, assignments, etc. as mapped with the COs)

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 CO's 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.

Course Outcome Attainment:

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)

Attainment of Course Outcomes:

Weightage given to SEE: 60% Weightage given to CIE:40%

CO Attainment for Continuous Internal Evaluation (CIE):

CIE Attainment = 75% IA(30 Marks) + 25% Assignments (Activities)(10 Marks)

CO Attainment for Direct Evaluation:

CO Attainment for Direct Evaluation = 40% CIE + 60% SE

Indirect CO Attainment:

Survey At the end of the course, a survey is conducted for measuring the Course Outcome attainment. Six questions are framed for every CO and students responses are recorded on a scale of 1 to 5. Weighted average for every question is computed as follows:

Weighted average= ((No. of students given rating as 5) + (No. of students given rating as 4) + (No. of students given rating as 3) + (No. of students given rating as 2) + (No. of students given rating as 1)) / Total No. of Participants

For any CO, the Average of Weighted average of all Six questions is taken. % of Attainment = (Weighted Average for CO **/6**) * 100

Attainment % is then normalized on a scale of 3.

Faculty: Mr. NAGESH H B

Subject: ANALOG CIRCUITS

Subject Code: 18EC42 (2020-21-EVEN)

ASSIGNMENT DETAILS

USN	Student Name	Test	Assignment1					Assignment2					Assignment3			
		Q. No.	1	2	3	4	5	1	2	3	4	5	1	2	3	4
		CO's	C242.1,C242.2	C242.1,C242.2	C242.1,C242.2	C242.1,C242.2	C242.1,C242.2	C242.2,C242.3	C242.2,C242.3	C242.2,C242.3	C242.2,C242.3	C242.2,C242.3	C242.4,C242.5	C242.4,C242.5	C242.4,C242.5	C242.4,C242.5
1AH19EC001	AMITH DEEPAK PAWAR		2	2	2	2	2	2	2	2	2	2	2	2	2	2
1AH19EC003	CHANDAN G B		2	2	2	2	2	2	2	2	2	2	2	2	2	2
1AH19EC004	CHETHANA M NIJAGULI		2	2	2	2	2	2	2	2	2	2	2	2	2	2
1AH18EC031	SANJAY KUMAR B K		2	2	2	2	2	2	2	2	2	2	2	2	2	2
1AH18EC034	SUNIL KUMAR B K		2	2	2	2	2	2	2	2	2	2	2	2	2	2
1AH18EC044	RITVOSH GHOSH		2	2	2	2	2	2	2	2	2	2	2	2	2	2
MARKS SCORED			80	80	80	80	80	80	80	80	80	80	80	80	80	80
Participation			40	40	40	40	40	40	40	40	40	40	40	40	40	40
Maximum Aactual marks			2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
80% of the actual marks (Target)			1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Students Attaining 80% (Target)			40	40	40	40	40	40	40	40	40	40	40	40	40	40
ATTAINMENT of 80% from participation			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Figure 3.3: Assignment is used for attainment calculation
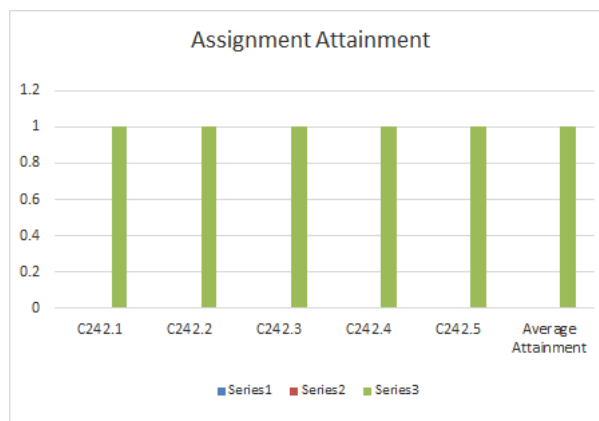
Figure 3.4: CO –Attainment for Assignment

Faculty: Mr. NAGESH H B
Subject: ANALOG CIRCUITS
Subject Code: 18EC42 (2020-21-EVEN)

CAY 2019-2020   Internal Assessment Details

USN	Student Name	Test	TEST 1										TEST 2										TEST 3									
		Q. No.	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
1AH19EC001	AMITH DEEPAK PAWAR		10		9		7				6		10		110		9			10			10		10			10	5	
1AH19EC003	CHANDAN G B		5		9		7			5		5	10		7	10	2		10			10		10			10	5
1AH18EC004	CHETHANA M NIJAGULI		10		10		9		10		10		10	10		6		10		10			10		10			10	10
1AH18EC031	SANJAY KUMAR B K		9					5					10			10	5				10	10				10			10	4
1AH18EC034	SUNIL KUMAR B K			10	9		6			5			10			10	5				10	10				10			10	6
1AH18EC044	RITVOSH GHOSH		7	0	9		6	0	5				8		10	7		5	1	10			10	1	1	10	1	10	1	10	7
MARKS SCORED			269	114	249	0	282	5	88	229	60	139	37	341	85	368	302	28	268	1	296	65	400	1	1	400	1	400	1	400	271	0
Participation			31	13	27	0	36	2	10	27	6	23	4	35	10	28	36	4	38	1	31	9	40	1	1	40	1	40	1	40	39	0
Maximum Aactual marks			10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
80% of the actual marks (Target)			8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Students Attaining 90% (Target)			26	10	24	0	17	0	7	19	6	2	3	32	6	23	25	2	15	0	29	4	40	0	0	40	0	40	0	40	13	0
ATTAINMENT of 90% from participation			0.84	0.77	0.89	0.00	0.47	0.00	0.70	0.70	1.00	0.09	0.75	0.91	0.60	0.82	0.69	0.50	0.39	0.00	0.94	0.44	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	0.33	0.00

Figure 3.5: CIE is used for calculation of attainment
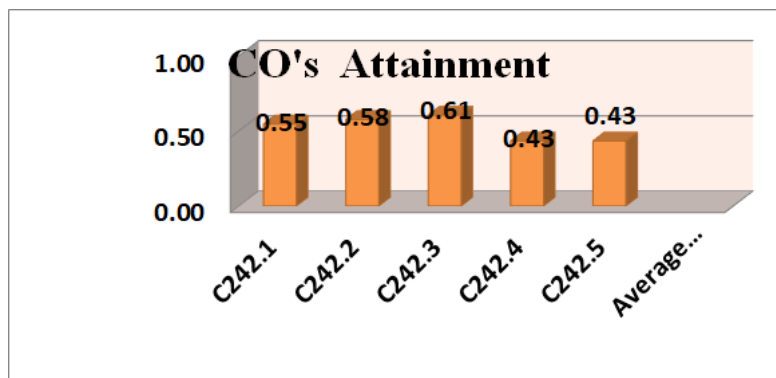
Figure 3.6: CO Attainment based on CIE and assignment

3.2.2 Record the attainment of Course Outcome of all courses with respect to set attainment levels (40)

Institute Marks : 40.00

Record the attainment of Course Outcome of all courses with respect to set attainment levels

Course	CO Attainment Level	CO %
C111	1.81	60.33
C112	1.89	63
C113	1.85	61.7
C114	1.89	63
C115	2.1	70
C116	2.49	83
C117	2.44	81.3
C118	2.11	70.3
C121	1.83	61
C122	1.9	63.3
C123	1.64	54.7
C124	1.84	61.3
C125	1.81	60.3
C126	2.31	77
C127	2.43	81
C128	2.23	74.3
C231	1.85	61.67
C232	2.10	70
C233	1.80	60
C234	2.13	71
C235	2.10	70
C236	2.10	70
C237	2.16	72
C238	2.4	80
C239	2.34	78

C241	1.92	64
C242	2.28	76
C243	2.25	75
C244	2.10	70
C245	2.31	77
C246	1.95	65
C247	2.43	81
C248	2.40	80
C351	2.79	93
C352	2.40	80
C353	2.91	97
C354	2.55	85
C355	2.43	81
C356	2.28	76
C357	2.31	77
C358	2.28	76
C359	1.56	52
C361	2.25	75
C362	2.10	70
C363	2.79	93
C3643	2.88	96
C3653	2.10	70

C366	2.10	70
C367	2.19	73
C368	2.25	75
C471	2.52	84
C472	2.55	85
C4734	2.67	89
C4744	2.70	90
C4753	1.95	65
C476	1.89	63
C477	2.49	83
C481	2.73	91
C4823	2.49	83
C483	2.40	80
C484	2.58	86
C485	2.49	83

Figure 3.7 : CO attainment

3.3 Attainment of Program Outcomes and Program Specific Outcomes (50)   Total Marks 50

3.3.1 Describe the assessment tools and processes used for measuring the attainment of each of the Program Outcomes and Program Specific Outcomes (10)

Institute Marks : 10

POs describe what students should know and be able to do at the end of the programme. Students are required to attain all the Program Outcomes by the end of the program through Direct and Indirect assessment tools. Attainment of Program Outcomes gives the performance of a student.

There are two factors that contribute towards attainment of program Outcomes; they are Direct method and

Indirect method.

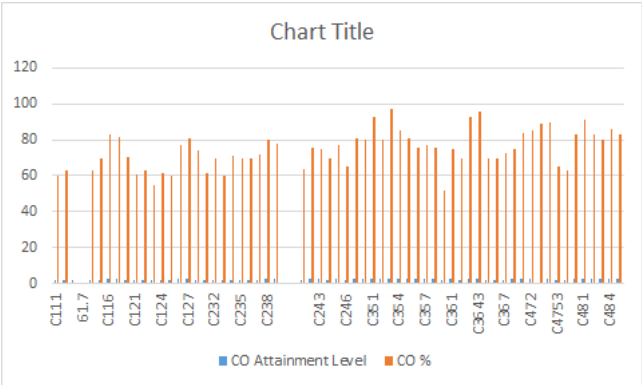The Process used for measuring the Attainment of each of the POs and PSOs and the tools used is shown in Figure .3.8
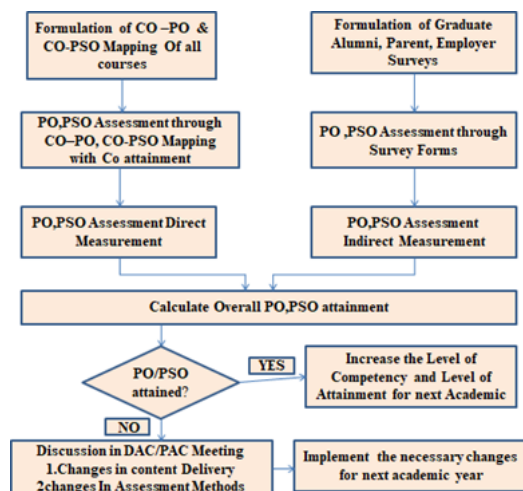
Figure3.8: The Process of Direct Assessment tools used for measuring the attainment of PO/PSO

To know the effectiveness of the delivery, Continuous Internal Evaluation (CIE) is conducted on a regular basis for theory and laboratory subjects. The University will conduc examinations (SEE) every semester for theory and laboratory. VTU 2018-2019 scheme of evaluation follows 60 marks for SEE and 40 marks for CIE

Direct Method:

Faculty: Mr. NAGESH H B

Subject: ANALOG CIRCUITS   3 = Above Average

Subject Code: 18EC42(2020-21-EVEN)   2 = Average

CO Attainment   1 = Below Average

COs	Direct Internal Assesment (40%)					Direct External Assessment (60%)				G=C+F
	A IA Marks (100%)	B 40% of A				D External Marks (100%)	E = 60% of D			
C0_1	0.77	0.31				1.00	0.60			0.77
C0_2	0.79	0.32				1.00	0.60			0.79
C0_3	0.80	0.32				1.00	0.60			0.80
C0_4	0.72	0.29				1.00	0.60			0.72
C0_5	0.72	0.29				1.00	0.60			0.72
Average										0.76

CO-PO Mapping

	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PO-12	PSO1	PSO2
CO-1	2	3	1	2	1						2	1	2	1
CO-2	2	3	2	1	1						2	1	2	1
CO-3	3	3	1	1	2						2	1	2	1
CO-4	2	3	1	2	1						2	1	2	1
CO-5	2	3	2	1	1						2	1	2	1

Figure 3.9:Calculation of Attainment using both CIE and SEE marks
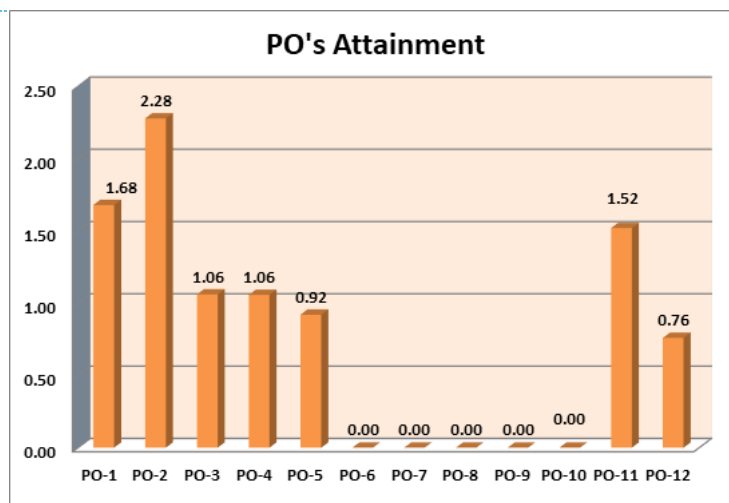
Figure 3.10: Attainment of PO's
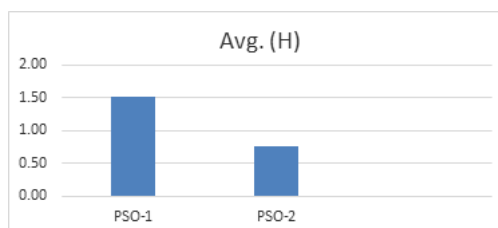
Figure 3.11: Attainment of PSO's

Indirect assessment methods such as surveys by the stakeholders to reflect on the students learning. They assess opinions or thoughts about the graduate's knowledge o skills and they are valued by different stakeholders.

Indirect assessment tools are listed below.

- Student Exit Survey
- Alumni Feedback Survey
- Parents Feedback Survey
- Employers Feedback Survey

Figure 3.12: Indirect Assessment Tools used for measuring the attainment of PO /PSO

The Indirect Assessment Tools, their description and the frequency of conduction is listed as below:

S.NO	Indirect Assessment Method	Description	Frequency
1	Student Exit Survey	The Exit survey is the feedback collected from graduating students who are at the end of the final semester of graduation. The Survey consists of questionnaires which are further mapped to PO. This type of survey can also point to areas in which the institution should invest more or less resources to enhance	End of VIII semester

		a students learning and development experience.	
2	Alumni Survey	The Alumni Survey is designed to give the information is used to improve the college experience for future students by identifying strengths in our programs as well as areas that need further development. The survey includes issues relating to satisfaction regarding academic programs, intellectual and personal growth, student services, and preparation for a career.	Once in Year
3	Parents' survey	The feedback is taken from the parents and them suggestions are considered to improve the infrastructure facilities, quality of education, placement activities.	Once in Year

4	Employers' Survey	With the Corporate insight, the graduates' skills, capabilities, performance with other employees of the organization is collected through employer feedback.	Once in Year

3.3.2 Provide results of evaluation of PO&PSO (40)   Institute Marks : 40.00

PO Attainment

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C111	2.13	2.14	2.34	2.15	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C112	2.1	2.3	1.9	1.5	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C113	1.68	1.68	1.68	0.84	0.42	PO6	PO7	PO8	PO9	PO10	PO11	0.42
C114	2.14	2.13	2.34	2.14	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C115	1.34	2.13	2.14	2.13	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C116	2.3	2.1	2.2	2.3	2.1	2.5	2.6	2.7	2.1	2.7	2.4	2.1
C117	1.67	2.01	2.1	2.4	1.7	2.2	2.3	2.5	2.3	2.5	2.6	2.4
C118	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	2.1	2.3	PO11	2.1
C121	2.56	1.89	1.34	2.13	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C122	2.3	2.1	2.2	2.3	2.1	2.32	2.6	PO8	PO9	PO10	PO11	PO12
C123	1.34	1.45	1.67	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C124	2.1	1.9	1.2	2.3	2.2	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C125	2.13	2.14	2.15	2.16	2.09	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C126	2.13	2.14	2.14	2.3	2.4	PO6	PO7	2.1	2.19	2.2	2.15	1.9
C127	1.56	1.35	2.13	1.89	2.13	PO6	PO7	2.1	2.7	2.2	2.8	2.1
C128	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	2.1	2.3	PO11	2.1
C231	2.13	2.14	2.14	2.14	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C232	1.84	2.88	2.68	2.19	2.72	PO6	PO7	PO8	PO9	PO10	PO11	2.39
C233	2.75	1.2	1.25	0.86	1.04	PO6	PO7	PO8	1.06	PO10	0.7	1.03
C234	1.61	2.2	0.73	1.03	0.88	PO6	PO7	PO8	PO9	PO10	1.47	0.73
C235	1.53	2.3	1.53	0.77	1.53	PO6	PO7	PO8	PO9	PO10	PO11	1.53
C236	1.25	1.87	1.25	1.66	1.45	0.83	PO7	PO8	PO9	PO10	0.83	1.54
C237	2.14	2.15	1.67	2.3	2.1	2.5	2.1	2.6	2.2	2.1	2.6	2.6
C238	2.13	2.14	2.15	2.1	2.3	PO6	PO7	2.1	1.9	1.7	2.3	2.1
C239	PO1	PO2	PO3	PO4	PO5	PO6	PO7	2.5	1.7	2.4	PO11	1.9
C241	1.34	2.14	2.34	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C242	1.68	2.28	1.06	0.92	PO5	PO6	PO7	PO8	PO9	PO10	1.52	0.76
C243	1.64	2.07	2.15	1.44	1.02	PO6	PO7	PO8	PO9	PO10	PO11	0.82
C244	1.4	2.1	2.15	1.3	PO5	PO6	PO7	PO8	PO9	PO10	PO11	0.7
C245	1.68	2.16	0.96	0.96	0.96	PO6	PO7	PO8	PO9	PO10	1.44	0.72
C246	1.76	2.13	1.78	1.07	1.18	PO6	PO7	PO8	PO9	PO10	PO11	1.42
C247	2.14	1.23	1.45	2.1	2.3	2.1	2.4	2.1	2.3	2.1	PO11	PO12
C248	2.14	2.15	2.13	2.3	2.5	PO6	PO7	2.3	2.1	2.7	2.1	1.8
C351	0.96	0.96	1.67	0.96	1.92	PO6	PO7	PO8	PO9	PO10	PO11	0.67
C352	1.66	2.21	1.29	1.11	0.92	PO6	PO7	PO8	PO9	PO10	1.48	0.74
C353	2.02	2.69	1.12	1.35	1.12	PO6	PO7	PO8	PO9	PO10	1.79	0.9
C354	2.02	2.69	1.12	1.35	1.12	PO6	PO7	PO8	PO9	PO10	1.79	0.9
C355	1.39	1.84	0.92	0.92	0.78	PO6	PO7	PO8	PO9	PO10	1.23	0.61

C356	1.46	2.19	1.46	1.33	1.46	PO6	PO7	PO8	PO9	PO10	PO11	1.45
C357	2.34	2.14	2.14	2.4	2.4	PO6	PO7	2.1	2.7	2.5	1.3	1.7
C358	2.14	2.14	2.12	1.7	2.3	PO6	PO7	1.7	2.1	2.4	2.1	2.1
C359	1.8	1.3	1.2	PO4	PO5	PO6	2.5	PO8	PO9	PO10	PO11	PO12
C361	2.03	2.7	0.68	1.35	1.13	PO6	PO7	PO8	PO9	PO10	1.8	0.9
C362	1.79	1.34	1.12	1.57	PO5	PO6	PO7	PO8	PO9	PO10	PO11	1.57
C363	1.64	2.24	0.9	1.19	0.9	PO6	PO7	PO8	PO9	PO10	PO11	0.79
C3642	2.24	1.86	1.24	0.62	1.26	PO6	PO7	PO8	PO9	PO10	PO11	1.24
C3653	1.2	1.7	1.5	PO4	PO5	0.51	0.43	PO8	0.5	PO10	PO11	PO12
C366	2.13	1.14	1.23	2.1	2.3	PO6	PO7	1.8	1.8	1.6	1.9	1.4
C367	1.23	1.34	1.78	2.13	2.2	PO6	PO7	2.8	2.6	2.1	2.4	2.1
C368	2.3	1.5	2.45	1.45	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C371	1.99	2.71	1.08	1.45	1.09	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C372	1.56	2.14	2.34	1.56	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C3733	1.34	1.24	2.13	2.1	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C3743	1.99	2.71	1.08	1.45	1.09	PO6	PO7	PO8	PO9	PO10	1.81	0.9
C376	1.7	2.1	1.9	1.45	1.3	1.38	PO7	PO8	PO9	0.9	0.73	0.56
C377	1.7	2.1	1.9	1.45	1.3	1.38	PO7	PO8	PO9	0.9	0.73	0.56
C4753	2.14	1.8	1.8	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C478	2.5	2.34	2.2	1.65	1.35	1.73	1.02	1.54	2.1	2.47	2.01	1.63
C481	1.76	2.36	0.6	1.18	0.98	PO6	PO7	PO8	PO9	PO10	1.57	0.8
C4824	1.89	2.51	1.23	1.25	1.06	PO6	PO7	PO8	PO9	PO10	1.67	0.84
C483	2.3	2.1	2.4	2.1	2.6	2.1	2.6	2.1	2.3	1.8	2.1	2.1
C484	2.4	2.1	2.6	2.1	2	2.3	2.7	1.9	2.1	2.1	2.4	1.9
C4I85	2.1	2.1	2.3	1.9	2.1	2.3	2.1	2.1	2.5	2.1	2.3	2.2

PO Attainment Level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO Attainment	1.78	1.93	1.63	1.62	1.64	1.71	2.00	2.02	1.88	2.02	1.66	1.46
Direct Attainment	1.87	2.01	1.71	1.65	1.62	1.86	2.12	2.18	2.07	2.10	1.80	1.40
InDirect Attainment	1.4	1.6	1.3	1.5	1.7	1.1	1.5	1.4	1.1	1.7	1.1	1.7

PSO Attainment

Course	PSO1	PSO2
C111	2.1	2.3
C112	1.6	1.6
C113	2.1	2.3
C114	2.3	2.1
C115	2.2	2.1
C116	2.1	2.2
C117	2.3	2.1
C118	0.0	0.51
C121	2.3	2.1
C122	2.1	1.9
C123	2.0	2.1
C124	1.9	2.1
C125	2.1	2.1
C126	2.3	1.8
C127	1.9	1.8
C228	0.0	0.51

C231	1.9	1.9
C232	2.1	2.3
C233	1.4	0.7
C234	1.47	2.20
C235	0.77	1.53
C236	1.66	1.66
C237	2.3	2.4
C238	2.1	2.3
C239	0.0	0.51
C241	1.6	1.8
C242	1.52	0.76
C243	1.64	1.64
C244	1.65	1.38
C245	1.44	0.72
C246	1.42	1.42
C247	2.5	2.4
C248	2.3	2.1
C351	1.92	1.92
C352	1.48	0.74
C353	1.79	1.79
C354	2.1	2.1
C355	1.23	0.61
C356	0.72	1.45
C357	2.1	2.3
C358	2.2	2.1
C359	0.0	0.5
C361	1.80	0.90
C362	1.79	1.79
C363	1.49	0.75
C3643	1.97	0.98
C3653	0.0	1.8
C366	0.0	1.8
C367	2.1	2.2
C368	2.0	2.1
C471	1.52	0.76
C472	0.0	2.0
C4734	0.0	2.0
C4743	1.81	1.00
C4753	1.8	2.0
C476	1.0	1.9
C477	1.1	2.0
C478	1.2	2.7
C481	1.6	1.57
C4824	1.67	0.84
C483	2.1	2.4
C484	2.1	2.1
C485	2.1	2.3

PSO Attainment Level

Course	PSO1	PSO2

CO Attainment	1.64	1.81
Direct Attainment	1.58	1.69
InDirect Attainment	1.9	2.3

4 STUDENTS' PERFORMANCE (150)   Total Marks 113.96

:

Table 4.1

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	2022-23 (CAY)	2021-22 (CAYm1)	2020-21(CAYm2)	2019-20(CAYm3)	2018-19(CAYm4)	2017-18 (CAYm5)	2016-17 (CAYm6)
Sanctioned intake of the program(N)	60	60	60	120	120	60	60
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)	60	57	23	44	43	33	45
Number of students admitted in 2nd year in the same batch via lateral entry (N2)	0	5	0	0	0	0	1
Separate division students, If applicable (N3)	3	0	0	0	0	0	0
Total number of students admitted in the programme(N1 + N2 + N3)	63	62	23	44	43	33	46

Table 4.2

Year of entry	Total No of students admitted in the program (N1 + N2 + N3)	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
2022-23 (CAY)	63	0	0	0	0
2021-22 (CAYm1)	62	28	0	0	0
2020-21 (CAYm2)	23	13	4	0	0
2019-20 (CAYm3)	44	23	6	6	0
2018-19 (LYG)	43	23	18	15	15
2017-18 (LYGm1)	33	15	12	10	9
2016-17 (LYGm2)	46	19	13	13	12

Table 4.3

Year of entry	Total No of students admitted in the program (N1 + N2 + N3)	Number of students who have successfully graduated in stipulated period of study) [Total of with Backlog + without Backlog]			
		I year	II year	III year	IV year
2022-23 (CAY)	63	0	0	0	0
2021-22 (CAYm1)	62	57	0	0	0
2020-21 (CAYm2)	23	23	23	0	0
2019-20 (CAYm3)	44	44	44	44	0
2018-19 (LYG)	43	43	38	38	38
2017-18 (LYGm1)	33	33	28	26	26
2016-17 (LYGm2)	46	45	35	29	28

4.1 Enrolment Ratio (20)   Total Marks 16.00

Institute Marks : 16.00

	N (From Table 4.1)	N1 (From Table 4.1)	Enrollment Ratio [(N1/N)*100]
2022-23 (CAY)	60	60	100.00
2021-22 (CAYm1)	60	57	95.00
2020-21 (CAYm2)	60	23	38.33

Average [(ER1 + ER2 + ER3) / 3] : 77.78

Assessment : 16.00

4.2 Success Rate in the stipulated period of the program (40)   Total Marks 18.65

4.2.1 Success rate without backlogs in any semester / year of study (25)   Institute Marks : 7.25

Item	Latest Year of Graduation, LYG (2018-19)	Latest Year of Graduation minus 1, LYGm1 (2017-18)	Latest Year of Graduation minus 2 LYGm2 (2016-17)
X Number of students admitted in the corresponding First year + admitted in 2nd year via lateral entry and seperated division, if applicable	43.00	33.00	46.00
Y Number of students who have graduated without backlogs in the stipulated period	15.00	9.00	12.00
Success Index [SI = Y / X]	0.35	0.27	0.26

Average SI [(SI1 + SI2 + SI3) / 3] : 0.29

Assessment [25 * Average SI] : 7.25

4.2.2 Sucess rate in stipulated period (15)   Institute Marks : 11.40

Item	Latest Year of Graduation, LYG (2018-19)	Latest Year of Graduation minus 1, LYGm1 (2017-18)	Latest Year of Graduation minus 2 LYGm2 (2016-17)
X Number of students admitted in the corresponding First year + admitted in 2nd year via lateral entry and seperated division, if applicable	43.00	33.00	46.00
Y Number of students who have graduated in the stipulated period	38.00	26.00	28.00
Success Index [SI = Y / X]	0.88	0.79	0.61

Average SI[(SI1 + SI2 + SI3) / 3]: 0.76

Assessment [15 * Average SI] : 11.40

Note : If 100% students clear without any backlog then also total marks scored will be 40 as both 4.2.1 & 4.2.2 will be applicable simultaneously.

4.3 Academic Performance in Third Year (15)   Total Marks 10.20

Institute Marks : 10.20

Academic Performance	CAYm3 (2019-20)	LYG (2018-19)	LYGm1 (2017-18)
Mean of CGPA or mean percentage of all successful students(X)	6.65	7.21	7.05
Total number of successful students(Y)	44.00	38.00	26.00
Totalnumber of students appeared in the examination(Z)	44.00	38.00	28.00
API [X*(Y/Z)]:	6.65	7.21	6.55

Average API [(AP1 + AP2 + AP3)/3] : 6.80

Assessment [1.5 * AverageAPI] : 10.20

4.4 Academic Performance in Second Year (15)   Total Marks 10.18

Institute Marks : 10.18

Academic Performance	CAYm2 (2020-21)	CAYm3 (2019-20)	LYG (2018-19)
Mean of CGPA or mean percentage of all successful students(X)	6.75	7.26	7.19
Total number of successful students (Y)	23.00	44.00	38.00
Total number of students appeared in the examination (Z)	23.00	44.00	43.00
API [X * (Y/Z)]	6.75	7.26	6.35

Average API [(AP1 + AP2 + AP3)/3] : 6.79

Assessment [1.5 * AverageAPI] : 10.18

4.5 Placement, Higher Studies and Entrepreneurship (40)   Total Marks 38.93

Institute Marks : 38.93

Academic Performance	CAYm2 (2020-21)	CAYm3 (2019-20)	LYG (2018-19)
Mean of CGPA or mean percentage of all successful students(X)	6.75	7.26	7.19
Total number of successful students (Y)	23.00	44.00	38.00
Total number of students appeared in the examination (Z)	23.00	44.00	43.00
API [X * (Y/Z)]	6.75	7.26	6.35

Item	LYG (2018-19)	LYGm1 (2017-18)	LYGm2 (2016-17)
Total No of Final Year Students(N)	38.00	26.00	29.00
No of students placed in the companies or government sector(X)	33.00	22.00	25.00
No of students admitted to higher studies with valid qualifying scores(GATE or equivalent State or National Level tests, GRE, GMAT etc.) (Y)	2.00	1.00	2.00
No of students turned entrepreneur in engineering/technology (Z)	0.00	3.00	2.00
x + y + z =	35.00	26.00	29.00
Placement Index [(X+Y+Z)/N] :	0.92	1.00	1.00

Average Placement [(P1 + P2 + P3)/3] :   0.97

Assessment [40 * Average Placement] : 38.93

Program Name :
Assessment Year Name : CAYm1

S.No	Student Name	Enrollment No	Employee Name	Appointment No
1	ASHWINI UPPALADINNI	1AH18EC005	VIRTUSA SYSTEM PRIVATE LTD	ACSCE/T&P/2021-22/VIRTUSA/1
2	ASHWINI V	1AH18EC006	HEXAWARE	ACSCE/T&P/2021-22/HEXAWARE/1
3	CHARAN V	1AH18EC007	INFOSYS	ACSCE/T&P/2021-22/INFOSYS/1
4	CHETAN D	1AH18EC008	INFOSYS	ACSCE/T&P/2021-22/INFOSYS/2
5	HARISH KUMAR M V	1AH18EC011	CONTINENTAL	ACSCE/T&P/2021-22/CONTINENTAL/1
6	KAVYA M S	1AH18EC014	COMPUTACENTER	ACSCE/T&P/2021-22/COMPUTACENTER/1
7	POOJA G	1AH18EC021	NTT DATA FA INSURENCE	ACSCE/T&P/2021-22/NTT/1
8	RAHUL M	1AH18EC023	ROBERT BOSCH	ACSCE/T&P/2021-22/BOSCH/1
9	RANJEET K	1AH18EC026	FACE	ACSCE/T&P/2021-22/FACE/1
10	RASHMITHA P	1AH18EC027	TEACHNOOK	ACSCE/T&P/2021-22/TEACHNOOK/1
11	SADHANA K V	1AH18EC029	ACCORD	ACSCE/T&P/2021-22/ACCORD/1
12	SALLAPALLIRAKSHAINDHU	1AH18EC030	CAPGEMINI	ACSCE/T&P/2021-22/CAPGEMINI/1
13	SOWMYA M	1AH18EC033	6D TECHNOLOGY	ACSCE/T&P/2021-22/6DTECHNOLOGY/1
14	SWATHI S	1AH18EC036	ACCORD	ACSCE/T&P/2021-22/ACCORD/1
15	TEJAS K B	1AH18EC037	STRATEGENT	ACSCE/T&P/2021-22/STRATEGENT/1
16	VARSHINI M U	1AH18EC038	CAPGEMINI	ACSCE/T&P/2021-22/CAPGEMINI/2
17	VASAVI B L	1AH18EC039	CAPGEMINI	ACSCE/T&P/2021-22/CAPGEMINI/3
18	VIJAY K	1AH18EC040	INFOSYS	ACSCE/T&P/2021-22/INFOSYS/1
19	VIJAY KUMAR S	1AH18EC041	NEWT GLOBAL	ACSCE/T&P/2021-22/NEWT/1
20	VIJETHA RAO A V	1AH18EC042	CAPGEMINI	ACSCE/T&P/2021-22/CAPGEMINI/4
21	ABAYNAGESH H A	1AH15EC001	SEPIC TECHNOLOGIES	ACSCE/T&P/2021-22/SEPIC/1
22	CHANDRA KIRAN S	1AH15EC008	SSI PEOPLE	ACSCE/T&P/2021-22/SSI/1
23	Aarthi Swamy	1AH18EC001	Indian NAvy	ACSCE/T&P/2021-22/INDIANNAVY/1
24	Nishanth	1AH18EC400	SLOKY TECHNOLOGY	ACSCE/T&P/2021-22/SLOKY/1
25	Ajay M N	1AH18EC003	CAPGEMINI	ACSCE/T&P/2021-22/CAPGEMINI/5
26	Gagan B R	1AH18EC009	MUWT GLOBAL	ACSCE/T&P/2021-22/MUWT/1

Assessment Year Name : CAYm2

S.No	Student Name	Enrollment No	Employee Name	Appointment No
1	Abhinav Anand	1AH17EC001	GOVERNMENT SECTOR, BIHAR	ACSCE/T&P/2020-21/GOVN/1
2	Akshay Aradhya.M	1AH17EC004	Tessolve, Electrono Solutions	ACSCE/T&P/2020-21/Tessolve/1
3	Ashwini.M	1AH17EC006	Grassroots, Electrono Solutions, ak AEROTECH	ACSCE/T&P/2020-21/Grassroots/1
4	Athira.K	1AH17EC007	Cognizant	ACSCE/T&P/2020-21/Cognizant/1
5	Chandana.R	1AH17EC010	VRIZE	ACSCE/T&P/2020-21/VRIZE/1
6	Chandan Gowda.K R	1AH17EC011	AVIN SYSTEMS PVT LTD	ACSCE/T&P/2020-21/AVIN/1
7	Chethan Kumar.B	1AH17EC012	VALIANT COMMUNICATION LTD	ACSCE/T&P/2020-21/VALIANT/1
8	Chethan Kumar.L	1AH17EC013	HCL (SmartBrain)	ACSCE/T&P/2020-21/HCL/1
9	Dilip.K	1AH17EC015	GSAS MICROSYSTEM	ACSCE/T&P/2020-21/GSAS/1
10	Drupad.N	1AH17EC017	TCS	ACSCE/T&P/2020-21/TCS/1
11	Hitha Suresh	1AH17EC018	BOSCH	ACSCE/T&P/2020-21/BOSCH/1
12	Jeshwanth. Y R	1AH17EC019	WIPRO	ACSCE/T&P/2020-21/WIPRO/1
13	Kala.N.S.	1AH17EC020	FUJITSU	ACSCE/T&P/2020-21/FUJITSU/1
14	Monish.D	1AH17EC022	DXC TECH	ACSCE/T&P/2020-21/DXC/1
15	Prajwal.N	1AH17EC023	WIPRO	ACSCE/T&P/2020-21/WIPRO/2
16	Samarth Kulkarni	1AH17EC027	EDGE GATE	ACSCE/T&P/2020-21/EDGEGATE/1
17	Sarwesh	1AH17EC028	HCL (SmartBrain), HCL Technologies	ACSCE/T&P/2020-21/HCL/2
18	Shreyas. D K	1AH17EC030	MainTec, Accenture	ACSCE/T&P/2020-21/MainTec/1
19	Vidya.M	1AH17EC032	BEL, Electrono Solutions	ACSCE/T&P/2020-21/BEL/1
20	Sathyashree G	1AH15EC034	ACCORD	ACSCE/T&P/2020-21/ACCORD/1
21	Chinmaya Naik	1AH15EC009	CODOSPHERE	ACSCE/T&P/2020-21/CODOSPHERE/1
22	Lithin K Dani	1AH15EC017	FIRST HIRE	ACSCE/T&P/2020-21/FIRSTHIRE/1
23	Ravikumar K	1AH15EC029	MainTec	ACSCE/T&P/2020-21/MainTec/2
24	Monica Gladise k	1AH16EC400	AROGYA ENTREPRICE	ACSCE/T&P/2020-21/AROGYA/1
25	Prajwal C N	1AH16EC035	BRIGHT CHAMPS	ACSCE/T&P/2020-21/BRIGHTCHAMPS/1
26	Nakul H	1AH15EC023	ALORICA	ACSCE/T&P/2020-21/ALORICA

Assessment Year Name : CAYm3

S.No	Student Name	Enrollment No	Employee Name	Appointment No
1	A SHREYA	1AH16EC001	NTT DATA/FREEN KART	ACSCE/T&P/2019-20/NTT/1
2	AISHWARYA B K	1AH16EC003	QSPIDERS, Test Yantra	ACSCE/T&P/2019-20/QSP/1
3	AKSHAY S	1AH16EC004	NTT DATA	ACSCE/T&P/2019-20/NTT/2
4	AVINASH P RAO	1AH16EC007	SFO TECHNOLOGIES	ACSCE/T&P/2019-20/SFO/1
5	BHAGYASHREE M	1AH16EC009	LUMEN TECHNOLOGIES	ACSCE/T&P/2019-20/LUMEN/1
6	BHARATH S	1AH16EC010	CONCENTRIX	ACSCE/T&P/2019-20/COCENT/1
7	CHANDAN R	1AH16EC013	VISIONET SYSTEM PVT LTD	ACSCE/T&P/2019-20/VISIONENT/1
8	CHARITHA N	1AH16EC014	QUALITEST GROUP INDIA	ACSCE/T&P/2019-20/QUALITEST/1
9	DEVIKA S	1AH16EC015	SONATA SOFTWARE	ACSCE/T&P/2019-20/SONATA/1
10	IMPANA S	1AH16EC020	FREEN KART SOLUTION	ACSCE/T&P/2019-20/FREENKAR/1
11	KISHAN NANDAVARIK N	1AH16EC022	ADA	ACSCE/T&P/2019-20/ADA/1
12	MANASA C	1AH16EC028	DIGIADD, INFOSYS	ACSCE/T&P/2019-20/INFOS/1
13	MONISHA D	1AH16EC029	FREEN KART SOLUTION	ACSCE/T&P/2019-20/FREENKAR/2
14	NAMRATHA V	1AH16EC030	UFABER	ACSCE/T&P/2019-20/UFABER/1
15	PAVAN KUMAR	1AH16EC032	XACTLY	ACSCE/T&P/2019-20/XACTLY/1
16	POOJA B R	1AH16EC034	FREEN KART SOLUTION/ BEL	ACSCE/T&P/2019-20/FREENKAR/3
17	RAMYASHREE B K	1AH16EC037	HYDAX	ACSCE/T&P/2019-20/HYDAX/1
18	RINCY MARIA T	1AH16EC038	IBM	ACSCE/T&P/2019-20/IBM/1
19	SWATHI H	1AH16EC040	HUDL PVT LTD, AMAZON	ACSCE/T&P/2019-20/HUDL/1
20	TEJASWINI B	1AH16EC042	FREEN KART SOLUTION	ACSCE/T&P/2019-20/FREENKAR/4
21	VEENA K	1AH16EC043	Wistron infocom manufacturing india pvt LTD,	ACSCE/T&P/2019-20/Wistron/1
22	SOUNDARYA R	1AH16EC047	CONTEXT SOFTWARE DEVELOPMENT-Assistant system engineer	ACSCE/T&P/2019-20/CONTEXT/1
23	VARSHA M	1AH14EC031	SMILE ELECTRONICS PVT LTD	ACSCE/T&P/2019-20/SMILEPL/1
24	ARPITHA M L	1AH15EC003	HIYAMEE PVT LTD	ACSCE/T&P/2019-20/HIYAMEE/1
25	ASHMITHA B S	1AH15EC005	BYJU'S	ACSCE/T&P/2019-20/BYJU'S/1
26	KRUTHIKA S	1AH15EC014	HIYAMEE PVT LTD	ACSCE/T&P/2019-20/HIYAMEE/2
27	PRAJWAL GOWDA	1AH15EC025	COMPETING ZP ELECTION	ACSCE/T&P/2019-20/COMPETING/1
28	R RAKESH NAIK	1AH15EC027	FREEN KART SOLUTION	ACSCE/T&P/2019-20/FREENKAR/5
29	UTHPALA V L	1AH15EC043	HIYAMEE PVT LTD	ACSCE/T&P/2019-20/HIYAMEE/3
30	SANGEETHA R	1AH15EC048	MYND INTELLIGENCE	ACSCE/T&P/2019-20/MYND/1

4.6 Professional Activities (20)   Total Marks 20.00

4.6.1 Professional socities/ chapters and organizing engineering events (5)

Institute Marks : 5.00

Professional Activities (20)

4.6.1 Professional socities/ chapters and organizing engineering events (5)

These student chapters are active in a variety of student-centric professional activities that expose students talents. One of the most important functions of these societies is dissemination of technical expertise, which aids in ensuring that aspiring engineers are aware of recent trends in technological advancements in this complex and ever-changing world.

Proposes to establish the IETE Students Forum in Engineering College through a massive membership drive in these institutions. IETE Students Forums play a useful and improving standard of education, counselling students on emerging new opportunities, encouraging outside-the-classroom studies / practical work / seminars, and so on.

Professional society activities provide valuable resources for students, networking opportunities, as well as perfect platform for sharing ideas with each other

<p align="center">List of Professional society/chapters</p>

Sl.No.	Professional society/chapters	Outcome
1	IETE	Running since 2016

Organizing Engineering Events

| EVEN Semester 2022				
Sl. No	Month & Year	Title of the Events	Number of Participants	Date
1	April 2022	Career guidance program	75	09.04.2022
2	May 2022	Workshop - Microwave Technology	85	06.05.2022
3	May 2022	Workshop - IOT and its Implementation	70	09.05.2022
4	May 2022	Seminar - Career guidance	90	10.05.2022
5	July 2022	Project Exhibition	70	29.07.2022
ODD Semester 2021				
Sl. No	Month & Year	Title of the Events	Number of Participants	Date
1	October 2020	Webinar on "National Education Policy"	80	22/09/2020
2	November 2020	Webinar - Introduction to Industry 4.0 & its human application	85	9/11/2020
3	November 2020	Webinar - Digital Transformation & its Impact in industries	110	9/11/2020
4	November 2020	Webinar - Introduction to IOT in Manufacturing Industries	75	13/11/2020
5	November 2020	Webinar - Recent trends in AR & BR in Manufacturing Industries	90	14/11/2020
6	November 2020	Webinar - Introduction to Industry 4.0 & its human application	85	23/11/2020
7	November 2020	Webinar - Digital Transformation & its Impact in industries	70	23/11/2020
8	November 2020	Webinar - Applications of Industry 4.0 in Education Sector	85	24/11/2020
EVEN Semester 2021				
Sl. No	Month & Year	Title of the Events	Number of Participants	Date
1	May 2021	WEBINAR ON MAGIC OF SWITCH WORDS AND HEALING	85	18/05/2021
2	June 2021	WEBINAR ON E- MOBILITY	70	3/06/2021
3	June 2021	WEBINAR ON 3D PRINTING TECHNOLOGY	85	5/6/2021

| 4 | June 2021 | WEBINAR ON CAMPUS TO CORPORATE | 70 | 5/6/2021 |
| 5 | June 2021 | WEBINAR ON CAREER PLANNING FOR FUTURE ENGINEERS | 85 | 11/6/2021 |

ODD Semester 2020

Si. No	Month & Year	Title of the Events	Number of Participants	Date
1	October 2020	Webinar on "National Education Policy"	80	22/09/2020
2	November 2020	Webinar - Opportunities for ECE students in Pharma & Health Care	90	11/11/2020
3	November 2020	Webinar - Introduction to Data Validation & Analytics	75	12/11/2020
4	November 2020	Webinar - Introduction to IOT in Manufacturing Industries	90	26/11/2020

EVEN Semester 2020

Si. No	Month & Year	Title of the Events	Number of Participants	Date
1	January 2020	Internal Hackathon for Smart India Hackathon 2020	75	10-01-2020
2	February 2020	Application of Electronics in automobiles industry	85	20/02/2020
3	February 2020	QSoCs	75	15/02/2020
4	February 2020	Innovation and entrepreneurship	85	26/02/2020
5	February 2020	One day 2020	75	29/02/2020
6	February 2020	Yoga	85	29/2/2020
7	March 2020	Vidhyunman	70	05/03/2020
8	May 2020	5 days spoken tutorial on Ardiuno	70	20/05/2020 to 24/05/2020

ODD Semester 2019

Si. No	Month & Year	Title of the Events	Number of Participants	Date
1	August 2019	Seminar - Robotics & IoT	75	20/08/2019
2	August 2019	Seminar - Soft Skill Development	85	21/08/2019
3	August 2019	Seminar - VLSI Technology	70	24/08/2019
4	September 2019	Campus to Corporate	90	13/09/2019
5	September 2019	Mobile Applications	85	01/10/2019
6	October 2019	Seminar - AI & Application in Modern Industries	70	03/10/2019

4.6.2 Publication of technical magazines, newsletters, etc. (5)   Institute Marks : 5.00

Publication of Technical magazine,newsletters.

Newsletter	AY-2022-23	AY-2021-2022	AY-2020-2021	AY 2019-2020
Volume& Issue	VOLUME–8, ISSUE–1	VOLUME–7, ISSUE–1	VOLUME–6, ISSUE–1	VOLUME–5, ISSUE–1
Editors	Dr. Bharathi Gururaj Dr. Prajith Prakash Nair	Dr. Bharathi Gururaj Dr. Prajith Prakash Nair	Dr. Bharathi Gururaj Dr. Prajith Prakash Nair	Dr.H.B. Bhuvaneswari Dr. Mathivanan

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DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

NEWSLETTER

VOLUME : 4   ACADEMIC YEAR : 2018-19

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Principal, ACS College of Engineering

HEAD OF THE DEPARTMENT   **EDITOR**

Dr. H.B. BHUVANESWARI   **Dr. M. MATHIVANAN**
Professor & Head, Department of ECE   Associate Professor, Department of ECE

4.6.3 Participationininter-institute events by students of the program of study (10)

Institute Marks : 10.00

STUDENT EVENTS PARTICIPATION-ACADEMIC YEAR-2021-22

Sl. No.	Student Name	USN	Name of the Programme	Date	Venue
1	Tejash K B & Team	1AH18EC035	Cricket Winner	20/04/2022	ACSCE Sports Meet
2	Akshay	1AH20EC003	Practipated in 10th South India Level All Style Karate & Kung – Fu Championship	10/10/2021	Bangalore
3	Akshay	1AH20EC003	Basics of Martial Arts Awarded with Rank of Red	20/02/2022	Bangalore
4	Swathi S	1AH18EC036	Presented Paper in International Conference	23/06/2022 to 24/06/2022	RRCE, Bangalore
5	Varshini	1AH18EC038	Presented Paper in International Conference	23/06/2022 to 24/06/2022	RRCE, Bangalore
6	Nidhi	1AH18EC019	Presented Paper in International Conference	23/06/2022 to 24/06/2022	RRCE, Bangalore
7	Ramya	1AH18EC026	Presented Paper in International Conference	23/06/2022 to 24/06/2022	RRCE, Bangalore

STUDENT EVENTS PARTICIPATION-ACADEMIC YEAR-2019-20

Sl.No.	Student Name	USN	Name of the Programme	Date	Venue
1	Hita Suresh	1AH17EC018	Workshop	25/08/2019	Techfortune Technologies
2	Chandhan Gowda K R	1AH17EC011	NECSES	21/09/2019 to 22/09/2019	National Engineering College, Tamilnadu
3	Chandhan Gowda K R	1AH17EC011	Texas Instruments & DST	Aug - 2019	Texas Instruments, India
4	Chandhan Gowda K R	1AH17EC011	Project Demonstration	13/04/2019	Dr. AIT,Bangalore
5	Chandhan Gowda K R	1AH17EC011	Project Demonstration Jnana – Vijnana – Tantrajnana Mela	19/01/2019 to 20/01/2019	Jnana – Vijnana – Tantrajnana Mela, Sri Kshetra Adichunchanagiri
6	Chandhan Gowda K R	1AH17EC011	National Conference	29/03/2019 to 30/03/2019	Amruta Institute of Engineering & management Sciences, Bangalore
7	Chandhan Gowda K R	1AH17EC011	Paper Presentation	21/05/2019	ACS College of Engineering, Bangalore

8	Chandhan Gowda K R	1AH17EC011	Innovative Project Exhibition	08/05/2019	ACS College of Engineering, Bangalore
9	Ashwini M	1AH17EC006	Innovative Project Exhibition	08/05/2019	ACS College of Engineering, Bangalore
10	Chetan Kumar L	1AH17EC013	Project Demonstration	13/04/2019	Dr. AIT, Bangalore
11	A Shreya	1AH16EC001	National Conference – Image Processing	03/05/2019	RNSIT, Bangalore
12	Aishwarya B K	1AH16EC003	Volley Ball Runner	26/04/2019	ACS College of Engineering, Bangalore
13	Akshay S	1AH16EC004	Programming in C++	29/04/2019	ACS College of Engineering, Bangalore

STUDENT EVENTS PARTICIPATION-ACADEMIC YEAR-2018-19

Sl.No.	USN	Name	Certificate	Venue	Date
1	1AH15EC007	CHAITHRA R	National Conference-SPBCN-19	ACS College of Engineering	21.05.2019
2	1AH15EC010	DINESH NAIDU J	National Conference-SPBCN-19	ACS College of Engineering	21.05.2019
			Best paper award at SPBCN-2019		
3	1AH15EC012	HARSHAD JAIN A	National Conference-SPBCN-19	ACS College of Engineering	21.05.2019
4	1AH15EC013	HEMA R	National Conference-SPBCN-19	ACS College of Engineering	21.05.2019
			UTSARGA MARATHON	RVCE, B'LORE	10.02.2019
5	1AH15EC015	LIKITHA M	National Conference-SPBCN-19	ACS College of Engineering	21.05.2019
6	1AH15EC016	LISHA S	National Conference-SPBCN-19	ACS College of Engineering	21.05.2019
			Best paper award at SPBCN-2019		
7	1AH15EC018	LOHITH R	National Conference-SPBCN-19	ACS College of Engineering	21.05.2019

8	1AH15EC019	M VARSHINNI	National Conference-SPBCN-19	ACS College of Engineering	21.05.2019
9	1AH15EC020	MADHUSUDHAN S	National Conference-SPBCN-19	ACS College of Engineering	21.05.2019
10	1AH15EC021	MOHAMMED ARSHAD S	National Conference-SPBCN-19	ACS College of Engineering	21.05.2019
11	1AH15EC028	RASHMI KANABUR	National Conference-SPBCN-19	ACS College of Engineering	21.05.2019
12	1AH15EC031	REVATHI A	National Conference-SPBCN-19	ACS College of Engineering	21.05.2019
13	1AH15EC032	SANIA TABASSUM	National Conference-SPBCN-19	ACS College of Engineering	21.05.2019
14	1AH15EC036	SHWETHA SUBBARAO	National Conference-SPBCN-19	ACS College of Engineering	21.05.2019
15	1AH15EC037	SONYA A	National Conference-SPBCN-19	ACS College of Engineering	21.05.2019
16	1AH15EC038	SOUNDARYA C D	National Conference-SPBCN-19	ACS College of Engineering	21.05.2019
			Volleyball Runner		26th & 27th April 2019
			Best paper award at SPBCN-2019		21.05.2019
17	1AH15EC039	SUHAS K S	National Conference-SPBCN-19	ACS College of Engineering	21.05.2019
			Volunteer in cultural fest		11th And 13th May 2019
18	1AH15EC040	SUMANSUREKHA V	National Conference-SPBCN-19	ACS College of Engineering	21.05.2019
19	1AH15EC041	SUSHMA P	National Conference-SPBCN-19	ACS College of Engineering	21.05.2019
20	1AH15EC042	SWATHI S	National Conference-SPBCN-19	ACS College of Engineering	21.05.2019
21	1AH15EC044	VINUTHA G N	National Conference-SPBCN-19	ACS College of Engineering	21.05.2019
22	1AH15EC045	YASHASH KUMAR K E	National Conference-SPBCN-19	ACS College of Engineering	21.05.2019
			Best paper award at SPBCN-2019		
23	1AH15EC046	YASHMITHA B S	National Conference-SPBCN-19	ACS College of Engineering	21.05.2019
24	1AH14EC022	PUNEETH KUMAR R	National Conference-SPBCN-19	ACS College of Engineering	21.05.2019

25	1AH14EC029	SRIKANTH S	National Conference-SPBCN-19	ACS College of Engineering	21.05.2019
26	1AH14EC030	SUSHMA R	National Conference-SPBCN-19	ACS College of Engineering	21.05.2019
			UTSARGA MARATHON	RVCE, B'LORE	10.02.2019
27	1AH14EC018	NIRANJAN KUMAR	National Conference-SPBCN-19	ACS College of Engineering	21.05.2019
			Volunteer in cultural fest		11th And 13th May 2019
28	1AH13EC029	RETHUMON BABY	National Conference-SPBCN-19	ACS College of Engineering	21.05.2019

List of funded/sponsored major projects.

Sl. No.	Academic year	Name of Students	Title	Funding agency	Year	Amount	Guide
1	2021-2022	Swathi S Ramya C Nidhishree Varshini M U	Women's Safety Device Using Panic Button	KSCST	2021-22	7000	Dr. Bharathi Gururaj
2	2020-2021	Chandan Gowda Samarth K Vidya M Deepika S	Industry boiler Monitoring Using IoT	VTU	2020-21	5000	Dr.H.B. Bhuvaneswari
3	2020-2021	Manoj Kumar Yashpal Gowda Prajwal C N	Social Distancing detection and Monitoring using Yolo v3	VTU	2020-21	5000	Mr. Harish L
4	2019-2020	Akshay S	Drowsiness detection using EEG signal Analysis	FAER	2019-2020	5000	Dr. Mathivanan M

STUDENT ACHIEVEMENTS-VTU FIRST RANK WITH SEVEN GOLD MEDALS-Ms SWATHI

SWATHI S (1AH18EC036) ACS COLLEGE OF ENGINEERING, BANGALORE   (6+1)

1	To the student who passes B.E. degree in Electronics & Communication Engineering course of VTU in first attempt securing highest marks in aggregate in the last four semesters.	SJCE Silver Jubilee-1988 Gold Medal
2	To the student who secures first rank in B.E. Electronic & Communication Engineering.	VTU Gold Medal
3	To the student who secures first rank in B.E. Electronic & Communication Engineering.	Late Sanjay Shripati Koimattur Memorial Gold M
4	To the student who secures 1st rank in B.E. Electroni Communication Engg.	Dr. N. R. Shetty Gold Medal
5	the student who secures 1st rank in B.E. Electronics Communication Engineering	Jyothi Gold Medal
6	To the First Rank Holder in Electronics & Communication Engg.	R N Shetty Gold Medal
7	To the student who secures highest marks in Electronics & Communication Engg.	Jain University Gold Medal

STUDENT ACHIEVEMENTS IN COCURICULAR AND EXTRA CURICULAR ACTIVITIES

BASAVESHW VEERASHAIVA VIDYAVARDHA SANGHA

AMRUTA INSTITUTE OF ENGINEERING & MANAGEMENT SCIENCES AIéMS

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2nd National Conference on
"Recent Advances in Engineering & Management"

NCRAEM-19

Certificate

This is to certify that Mr. /Ms. /Mrs. __CHANDAN K.R, NANDAN.M, Dr. RAMESHA .M.__
have been awarded First / Second prize in the 2nd National Conference on "Recent Advances in Engineering
& Management" – NCRAEM-19 held on 29th and 30th of March 2019 at Amruta Institute of Engineering &
Management Sciences, Bidadi, in association with International Journal of Engineering Research &
Technology (IJERT) for his / her technical paper titled "___SAFE RYDER___

___AIEMS – NCRAEM – ECE – 119_____

___"

Dr. Suresha C N
Chief Coordinator, NCRAEM-19

Dr. Mahendra K V
Principal

Certificate of Participation

This certificate is issued to

CHANDAN K·R

for his/her active participation during the Startup Pitch Practice Bootcamp & Pre-Incubation workshop as part of **NEC Startup Entrepreneurship Summit (NECSES)** 2019, powered by Pongu Ventures Pvt. Ltd., including the learning of Idea to Product, Business Model Canvas, Pitch Deck Preparation and Validation.

Convener
Dr. K. Manisekar

Cheif Executive Consultant, NECBI
Dr. G.Vinoth

Principal
Dr.K.Kalidasa Murugavel

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Approved by AICTE, New Delhi
#207, Kambipura, Mysore Road, Bengaluru - 560 074

"IconSET 2018"

Certificate

It is certified that

Mr. Harish. M. Mathivanan, M. Balamurugan, Nandini, Manish Reddy

Has presented the 'Technical Paper' titled

IoT Based Continuous Monitoring of Cardic Patients using Raspberry D

in the "1' International Conference On Sustainable Engineering And Technology" conducted during 19ᵗʰ – 20ᵗʰ April, 2018, in ACS College of Engineering, Bangalore.

Chair   Principal   Chairman

5 FACULTY INFORMATION AND CONTRIBUTIONS (200)   **Total Marks 172.56**

Name	PAN No.	University Degree	Date of Receiving Degree	Area of Specialization	Research Paper Publications	Ph.D Guidance	Faculty receiving Ph.D during the assessment year	Current Designation	Date (Designated as Prof/Assoc. Prof.).	Initial Date of Joining	As Ty
Dr.Bharathi Gururaj	AHUPG0719R	ME/M. Tech and PhD	03/04/2021	IMAGE AND SIGNAL PROCESSING	8	0	0	Associate Professor	07/07/2021	30/07/2012	Re
Dr.A.M.Prasanna Kumar	AMDPK2253N	ME/M. Tech and PhD	20/02/2020	SIGNAL PROCESSING & SPEECH PROCESSIONG	10	0	0	Professor	03/08/2009	03/08/2009	Re
Mr. Nagesh H B	AWHPN9976B	M.E/M.Tech	26/08/2013	VLSI DESIGN	02	0	0	Assistant Professor		01/08/2013	Re
Dr.Mathivanan	ALFPM8382B	ME/M. Tech and PhD	15/11/2014	SPEECH PROCESSING	05	04	1	Associate Professor	18/02/2015	18/02/2015	Re
Dr.Prajith Prakash Nair	AQKPN5154A	ME/M. Tech and PhD	18/05/2022	IMAGE AND SIGNAL PROCESSING	5	0	0	Associate Professor	06/10/2022	19/07/2019	Re
Mrs. Vijaya Dalawai	BEQPD9331C	M.E/M.Tech	10/02/2009	VHDL & VLSI DESIGN	0	0	0	Assistant Professor		20/09/2018	Re
Mrs. Renuka Kelkar	CWJPK2009L	M.E/M.Tech	09/04/2012	VLSI DESIGN	0	0	0	Assistant Professor		21/10/2021	Re
Ms. Sumathi A	FIIPS0697J	M.E/M.Tech	15/01/2016	COMMUNICATION SYSTEMS	0	0	0	Assistant Professor		04/02/2019	Re
Ms. RAMYA K	CJTPR9742L	M.E/M.Tech	06/11/2014	VLSI DESIGN	0	0	0	Assistant Professor		20/08/2018	Re
Dr.Bhuvaneswari	AGMPB6163B	ME/M. Tech and PhD	16/01/2006	VLSI DESIGN &TECHNOLOGY	0	1	0	Professor	27/07/2016	27/07/2016	Re
Mr. Harish L	AHRPL4274D	M.E/M.Tech	09/04/2012	IMAGE AND SIGNAL PROCESSING	0	0	0	Assistant Professor		15/07/2017	Re
Mrs. Vanishree Moji	ATNPM6652J	M.E/M.Tech	07/01/2010	DIGITAL COMMUNICATION & ELECTRONICS SYSTEMS	0	0	0	Assistant Professor		21/12/2020	Re
Mr. Baswaraj Swamy	BDNPB4136K	M.E/M.Tech	05/04/2013	VLSI AND EMBEDDED SYSTEMS	0	0	0	Assistant Professor		14/12/2020	Re
Mrs. Vijayanandini	AIBPV7534M	M.E/M.Tech	08/11/2014	VLSI DESIGN	0	0	0	Assistant Professor		22/07/2015	Re
Mr. Ganeshraj	AVDPG1433H	M.E/M.Tech	20/06/2013	COMMUNICATION SYSTEMS	0	0	0	Assistant Professor		20/06/2019	Re
Mrs. Ashwini A M	BTHPA1116Q	M.E/M.Tech	30/12/2015	ELECTRONICS AND COMMUNICATION	1	0	0	Assistant Professor		19/07/2019	Re
Prof. Sundersha N	AKQPS9355Q	M.E/M.Tech	03/01/1995	ELECTRONICS AND COMMUNICATION ENGINEERING	0	0	0	Associate Professor	26/08/2020	26/08/2020	Re
Mr. Panchaxari Mamadapur	ASBPM4148A	M.E/M.Tech	13/02/2006	INFORMATION AND COMMUNICATION SYSTEMS	0	0	0	Assistant Professor		04/04/2022	Re
Mrs.Aishwarya L	AZWPA2318N	M.E/M.Tech	08/06/2015	COMMUNICATION SYSTEMS	0	0	0	Assistant Professor		25/07/2022	Re
Mr.GowriShankar I	AZGPG6914J	M.E/M.Tech	12/06/2013	COMMUNICATION SYSTEMS	0	0	0	Assistant Professor		26/08/2019	Re

5.1 Student-Faculty Ratio (20)

Total Marks 16.00

Institute Marks : 16.00

UG

No. of UG Programs in the Department 1

	B.E					
Year of Study	**CAY**		**CAYm1**		**CAYm2**	
	(2022-23)		**(2021-22)**		**(2020-21)**	
	Sanction Intake	Actual admitted through lateral entry students	Sanction Intake	Actual admitted through lateral entry students	Sanction Intake	Actual admitted through lateral entry students
2nd Year	60	1	60	0	120	0
3rd Year	60	0	120	0	120	0
4th Year	120	0	120	0	60	0
Sub-Total	**240**	**1**	**300**	**0**	**300**	**0**
Total	**241**		**300**		**300**	
Grand Total	241		300		300	

PG

No. of PG Programs in the Department 0

Grand Total			

SFR

No. of UG Programs in the Department 1

No. of PG Programs in the Department 0

Description	CAY(2022-23)		CAYm1 (2021-22)		CAYm2 (2020-21)	
Total No. of Students in the Department(S)	241	**Sum total of all (UG+PG) students**	300	**Sum total of all (UG+PG) students**	300	**Sum total of all (UG+PG) students**
No. of Faculty in the Department(F)	14	**F1**	16	**F2**	17	**F3**
Student Faculty Ratio(SFR)	17.21	**SFR1=S1/F1**	18.75	**SFR2=S2/F2**	17.65	**SFR3=S3/F3**
Average SFR	17.87	**SFR=(SFR1+SFR2+SFR3)/3**				
F=Total Number of Faculty Members in the Department (excluding first year faculty)						

Note: All the faculty whether regular or contractual (except Part-Time), will be considered. The contractual faculty (doing away with the terminology of visiting/adjunct faculty, whatsoever) who have taught for 2 consecutive semesters in the corresponding academic year on full time basis shall be considered for the purpose of calculation in the Faculty Student Ratio. However, following will be ensured in case of contractual faculty:

1. Shall have the AICTE prescribed qualifications and experience.

2. Shall be appointed on full time basis and worked for consecutive two semesters during the particular academic year under consideration.

3. Should have gone through an appropriate process of selection and the records of the same shall be made available to the visiting team during NBA visit

5.1.1. Provide the information about the regular and contractual faculty as per the format mentioned below:

	Total number of regular faculty in the department	Total number of contractual faculty in the department
CAY(2022-23)	14	0
CAYm1(2021-22)	16	0
CAYm2(2020-21)	17	0

Average SFR for three assessment years :   17.87

Assessment SFR :   16

5.2 Faculty Cadre Proportion (25)   Total Marks 25.00

Institute Marks : 25.00

Year	Professors		Associate Professors		Assistant Professors	
	Required F1	Available	Required F2	Available	Required F3	Available
CAY(2022-23)	1.00	1.00	2.00	3.00	8.00	10.00
CAYm1(2021-22)	1.00	1.00	3.00	2.00	10.00	13.00
CAYm2(2020-21)	1.00	2.00	3.00	1.00	10.00	14.00
Average Numbers	1.00	1.33	2.67	2.00	9.33	12.33

Cadre Ratio Marks [(AF1 / RF1) + [(AF2 / RF2) * 0.6] + [(AF3 / RF3) * 0.4]] * 12.5 :   25.00

5.3 Faculty Qualification (25)   Total Marks 15.56

Institute Marks : 15.56

	X	Y	F	FQ = 2.5 x [(10X + 4Y) / F)]
2022-23(CAY)	4	10	12.00	16.67
2021-22(CAYm1)	3	13	14.00	14.64
2020-21(CAYm2)	3	14	14.00	15.36

Average Assessment :   15.56

5.4 Faculty Retention (25)   Total Marks 20.00

Institute Marks : 20.00

Description	2021-22	2022-23
No of Faculty Retained	15	12
Total No of Faculty	17	17
% of Faculty Retained	88	71

Average :   79.00

Assessment Marks :   20.00

5.5 Innovations by the Faculty in Teaching and Learning (20)   Total Marks 20.00

Institute Marks : 20.00

Innovative ideas in teaching learning process have helped the educators of our department to develop a holistic approach that has helped to encompass all the learning needs of our students. The major goal of identification and implementation of such innovations were to keep not only our students up to date with the current knowledge but also make them suitable for tackling all types of technical problems that they may face. To achieve this our faculty members continously implementing the following techniques :

1) implementation and usage of ICT tools for delivering lectures

2) Conduction of student participatory activities such as Quiz programmes, GD and Seminars on recent trends and cutting edge technologies.

3) Providing Advanced Value added courses for student benifits

4) Encouragement of Institute Industry Interaction activities

5)Pursuing online courses

List of Innovative practises implemented in department include :

Sl.NO	Innovations by Faculty in Teaching -Learning Process
1	Implementation of ICT tools for delivering lectures
2	Conduction of Quiz and seminars on cutting edge technology
3	Organising and Attending various workshops , Seminars and other types of Value Addded Courses
4	Learning through Analysing Research Papers in the subjects
5	Learning through Industrial Visits
6	Learning through Alumni Interaction
7	Mini project competitions and student seminars
8	Virtual teaching techniques (MS teams)
9	Project based learning

5.6 Faculty as participants in Faculty development/training activities/STTPs (15)   Total Marks 15.00

Institute Marks : 15.00

Name of the faculty	Max 5 Per Faculty		
	2021-22 (CAYm1)	2020-21 (CAYm2)	2019-20 (CAYm3)
Dr.Bharathi Gururaj	5.00	5.00	3.00
Dr.A.M.Prasanna Kumar	3.00	5.00	3.00
Dr.Mathivanan	3.00	5.00	3.00
Dr.Prajith Prakash Nair	3.00	5.00	3.00
Mr.Nagesh H B	3.00	5.00	3.00
Mrs.Vijaya Dalawai	3.00	5.00	3.00
Mrs.Renuka Kelkar	3.00	0.00	0.00
Ms.Sumathi A	3.00	5.00	3.00
Mrs.Ramya K	3.00	5.00	3.00
Dr.H B Bhuvaneswari	0.00	5.00	3.00
Mr.Harish L	0.00	5.00	3.00
Mrs.Vanishree Moji	3.00	3.00	0.00
Mr.Basawaraj Swamy	3.00	3.00	0.00
Mrs.Vijayanandhini K	3.00	5.00	3.00
Mr.Ganeshraj	3.00	3.00	3.00
Mrs.Ashwini	5.00	5.00	3.00
Prof Sundersha n	3.00	3.00	0.00
Mr.Panchaxari Mamadapur	0.00	3.00	0.00
Mrs.Aishwarya L	0.00	3.00	3.00
Mr.Gowrishankar I	3.00	3.00	3.00
Sum	52.00	81.00	45.00
RF = Number of Faculty required to comply with 20:1 Student Faculty Ratioas per 5.1	12.05	15.00	15.00
Assessment [3*(Sum / 0.5RF)]	25.89	32.40	18.00

Average assessment over 3 years: 25.43

5.7 Research and Development (30)

5.7.1 Academic Research (10)

<table>
<tr><td colspan="5" align="center">PhD Guidance Details During Assessment Period</td></tr>
<tr>
<th>Sl. No.</th>
<th>Research Guide</th>
<th>Name of Scholar</th>
<th>University & Year of Registration</th>
<th>Status</th>
</tr>
<tr>
<td>1</td>
<td>Dr.H.B.Bhuvaneswari</td>
<td>Ms.Manasa Charitha</td>
<td>VTU, Belgaum & 2017</td>
<td>Pursuing</td>
</tr>
<tr>
<td rowspan="5">2</td>
<td rowspan="5">Dr.M.Mathivanan</td>
<td>Mrs.Vanishree Moji</td>
<td>VTU, Belgaum & 2017</td>
<td>Pursuing</td>
</tr>
<tr>
<td>Mr.Rahul R Rai</td>
<td>VTU, Belgaum & 2016</td>
<td>Pursuing</td>
</tr>
<tr>
<td>Ms. Vamsha Deepa N</td>
<td>VTU, Belgaum & 2017</td>
<td>Pursuing</td>
</tr>
<tr>
<td>Mr. Panchaxari Mamadapur</td>
<td>VTU, Belgaum & 2017</td>
<td>Pursuing</td>
</tr>
<tr>
<td>Mr.Vijaya Kumar H R</td>
<td>VTU, Belgaum & 2015</td>
<td>Pursuing</td>
</tr>
<tr>
<td rowspan="4">3</td>
<td rowspan="4">Dr.Aniths.S</td>
<td>Ms. Niveditha H R</td>
<td>VTU, Belgaum & 2017</td>
<td>Pursuing</td>
</tr>
<tr>
<td>Ms.Chaitanya D J</td>
<td>VTU, Belgaum & 2017</td>
<td>Pursuing</td>
</tr>
<tr>
<td>Mr. S CH Vijaya Bhaskar</td>
<td>VTU, Belgaum & 2017</td>
<td>Pursuing</td>
</tr>
<tr>
<td>Mr.Madhusudhanan S</td>
<td>VTU, Belgaum & 2019</td>
<td>Pursuing</td>
</tr>
</table>

Title of paper	Name of the author/s	
women safety device using panic button	Dr.Bharathi Gururaj	
Artificial intelligence–based neural network for the diagnosis of diabetes and COVID	Dr.Bharathi Gururaj	International jo
Multiple Parameter Patient Health Monitoring System	A.M. PRASANNA KUMAR, S.M. VIJAYA	International
Bizarre Object Recognition Under Surveillance	A.M. PRASANNA KUMAR, S.M. VIJAYA	International
ANNHRPAA Based Deep Learning Image Processing for Pneumonia Detection	A.M. PRASANNA KUMAR, S.M. VIJAYA	Journal of Ele
A Novel Face Biometric Framework based on Various Levels of Distinctions of Faces (https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=QQ7xQDcAAAAJ&sortby=pubdate&citation_for_view=QQ7xQDcAAAAJ:M3ejUd6NZC8C)	M Mathivanan , Vijaya Kumar H. R	The Inte
Retraction Note to: Secure routing scheme with multi-dimensional trust evaluation for wireless sensor network (https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=QQ7xQDcAAAAJ&sortby=pubdate&citation_for_view=QQ7xQDcAAAAJ:qxL8FJ1GzNcC)	M Mathapati, TS Kumaran, A Muruganandham, M Mathivanan	Journal of Am
Investigation on large vocabulary continuous Kannada speech recognition (https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=QQ7xQDcAAAAJ&sortby=pubdate&citation_for_view=QQ7xQDcAAAAJ:YOwf2qJgpHMC)	M. Mathivanan, Puttaswamy Gowda Vanajakshi T. Senthil Kumaran	Internation
Cross Coupled Power Effective Quick Level Shifter	Sai Kiran,N.Arun Vignesh,Prajith Prakash Nair,S.Kanithan,K.Srava ni,	2022 Internatio (https://ieeexplo
Hybrid Reverse Propagation ANN Adaptive Algorithm Based	A.M. PRASANNA KUMAR, S.M. VIJAYA	ACS

Title	Authors	Journal
Fuzzy rule-based fault location technique for thyristor-controlled series-compensated transmission lines	Dr.Bharathi Gururaj	International J
Support vector machine based fault section identification and fault classification scheme in six phase transmission line	Dr.Bharathi Gururaj	IAES Inte
Deterrence of Piracy Employing IR Transmitter and Steganography System	A.M. PRASANNA KUMAR, BHARATHI G	ACS
ANNHBPAA BASED NOISE CANCELLATION EMPLOYING ADAPTIVE DIGITAL FILTERS FOR MOBILE APPLICATIONS	A.M. PRASANNA KUMAR, S.M. VIJAYA	JOURNAL
Low complexity and efficient implementation of wimax interleaver in transmitte	Dr.Anitha S	
Power Generation using sound by Piezo Electric Material	Dr.Anitha S	Journal of Phy International Electrical and
Development and Validation of QT Interval Measurement Algorithm using windows/CVI	Dr.Anitha S	Journal of Phy International Electrical and
Implementation of image enhancement and image segmentation in disease diagnosis (lung cancer)	Dr.Anitha S	7th Internatio Co
Review on Campus Mithra: Design of Voice Based Attender Robot	Dr.Anitha S	
Rapid Low Power Voltage Level Shifter Utilizing Regulated Cross Coupled Pull Up Network	Sai Kiran,N.Arun Vignesh,Prajith Prakash Nair,S.Kanithan,K.Srava ni,	2021 Internatio
Study and Analysis of BTED Error Correction Codes for Cryptography Applications	Ramesha M,Bharathi Gururaj	Internationa
Design and development of low power BTED cryptography algorithm on FPGA	Ramesha M,Bharathi Gururaj	International
A Survey on Recent Techniques in Face Recognition for Various Databases	Vijaya Kumar HR, M Mathivanan	2021 10th IEEE Syster (https://ieeexplo
MOVEMENT PREDICTION AND ALERT GENERATION IN SLACK USING MOTION SENSORS INTEGRATED WITH MOBILE ADHOC NETWORKS	R GOPAL, M KUMARESAN, S ANNAMALAI, S VIJAYAKUMAR, M MATHIVANAN	Turkish Jo
A novel hybrid face recognition framework based on a low-resolution camera for biometric applications (https://scholar.google.com/scholar?cluster=15062975844879109458&hl=en&oi=scholarr)	M. Mathivanan Vijaya Kumar H. R.	Indonesian Jo
Secure routing scheme with multi-dimensional trust evaluation for wireless sensor network	A. Muruganandham & M. Mathivanan Mahantesh Mathapati, T. Senthil Kumaran	Journal of Am
NOISE CANCELLATION EMPLOYING ADAPTIVE DIGITAL FILTERS FOR MOBILE APPLICATIONS	A.M. PRASANNA KUMAR, S.M. VIJAYA	INDONESIAN
Channel Encoding System for Transmitting Image over Wireless Network	Dr.Bharathi Gururaj, Dr.G.Sadashivappa	International J
Fpga implementation of low power high speed bted algorithm for 8 bit error correction in cryptography system	Ramesha M,Bharathi Gururaj	International
Design and Modeling of a large deflection Micro cantilever using rectangular SCR",	Bhuvaneswari.H.B	

Arduino Energy Consumption Sensing System with LabVIEW User Interface	Bhuvaneswari.H.B ,Rahul R Rai and Kalyan Ram B	Te
Continuous kannada speech segmentation and speech recognition based on threshold using MFCC and VQ	Vanajakshi Puttaswamy Gowda Mathivanan Murugavelu,SenthilKumaran Thangamuthu	International J

List of Faculties Completing PhD During Assessment Period

Sl. No.	Name of faculty	Details of Faculty	University	Year of Completion
1	Dr. A. M. Prasanna Kumar	Professor	VTU , Belgaum	2020
2	Dr.Bharathi Gurruraj	Associate Professor	VTU , Belgaum	2021
3	Dr.Prajith Prakash Nair	Associate Professor	Jain University , Bangalore	2022

FACULTY PURSUING PHD

SL.NO	NAME OF FACULTY	DESIGNATION	UNIVERSITY	STATUS
1	Mr.Nagesh H B	Assistant Professor	VTU , Belgaum	Registered
2	Mrs.Aishwaryaa L	Assistant Professor	Bharath University , Chennai	Registered

5.7.2 Sponsored Research (5)   Institute Marks : 1.00

2021-22 (CAYm1)

Project Title	Duration	Funding Agency	Amount
Womens safety device using panic button	6 months	KSCST	7000.00
FDP ON INDUSTRY 4.0	ONE MONTH	AICTE	93000.00
			Total Amount(X): 100000.00

2020-21 (CAYm2)

Project Title	Duration	Funding Agency	Amount
Industry boiler Monitoring Using IoT	6 MONTHS	VTU	5000.00
Social Distancing detection and Monitoring using Yolo v3	6 MONTHS	VTU	5000.00
STTP ON INDUSTRY 4.0	6 MONTHS	AICTE	396667.00
			Total Amount(Y): 406667.00

2019-20 (CAYm3)

Project Title	Duration	Funding Agency	Amount
Drowsiness detection using EEG signal Analysis	6 MONTHS	FAER	5000.00
			Total Amount(Z): 5000.00

Cumulative Amount(X + Y + Z) = 511667.00

5.7.3 Development Activities (10)

Institute Marks : 10.00

Research laboratories and Product Development
1. Intel Fice Laboratories
2. CADANCE Laboratories
3. Signal Processing Laboratories
4. Embedded Laboratories
5. VLSI Laboratories
6. Microwave Laboratories

WORKING MODEL/Charts/Monogramset

WORKING MODELS

2021-22

WOMEN SAFETY DEVICE USING PANIC BUTTON

In this work a novel technique to generate a smart device that is capable of using technologies such as GPS,GSM and other microcontroller based circuits together to provide a safety device for women and individuals in general by monitoring external and internal threats

Design and Simulation of MEMS using Thermal Actuators for RF Application

In this work an analytical model of two hot arm horizontal thermal actuator at the begining.The experimental results are provided to prove the accuracy of the analytical model.It then documents the design and model of a bidirectional vertical thermal actuator
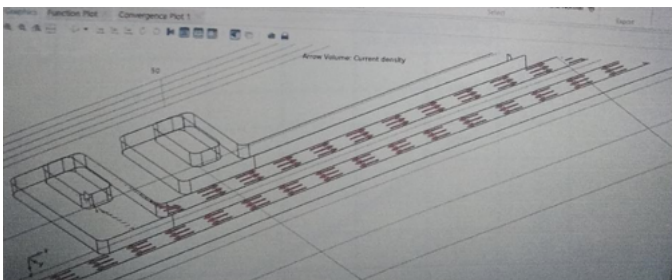
2020-21

GREENWAY FOR AMBULANCE BY AUTOMATIC CONTROL OF TRAFFIC LIGHTS
In proposed system we are trying to reduce the delay for the ambulance. To smoothen the ambulance movement, we come up with "Intelligent Traffic Signals Control System for Ambulance". We are developing a prototype" GREEN WAY" for clearing a way for ambulances during heavy traffic in roads. This project are trying to provide the green signals for ambulance by switching the signals
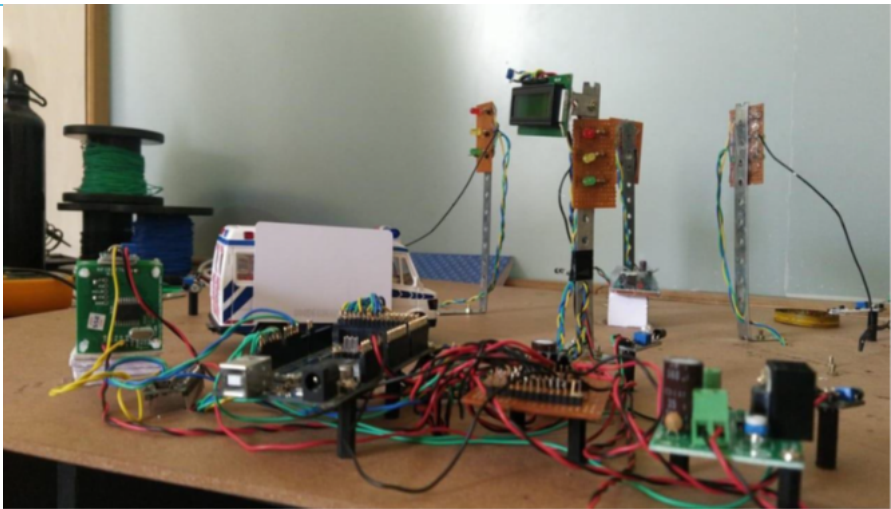
2019-2020

MOVABLE TRAFFIC DIVIDERS

The aim of the project is to formulate a mechanism of automated movable road divider that can shift lanes so that tey can have more number of lanes in the direction of the rush.The cumalative impact of the time and fuel that can be saved by adding extra lane to the direction of the rush will be significant and provides the clearence to the emergency vechicle.
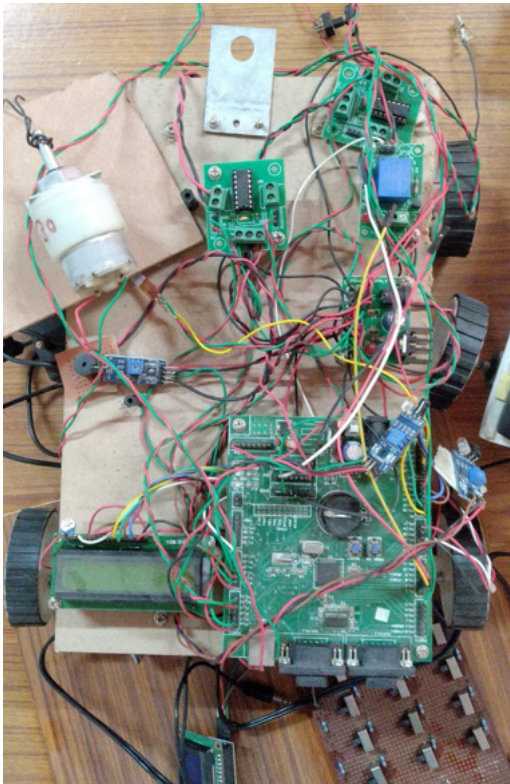
5.7.4 Consultancy(from Industry) (5)   Institute Marks : 0.00

2021-22 (CAYm1)

Project Title	Duration	Funding Agency	Amount
Market strategy, evaluation of new R&D based methodologies on electric power generation using solar energy harvesting and pane manufacturing	2 YEARS	M/S SUN JEEVAN SOLAR SYSTEMS	50000.00
			Total Amount(X): 50000.00

2020-21 (CAYm2)

Project Title	Duration	Funding Agency	Amount

2019-20 (CAYm3)

Project Title	Duration	Funding Agency	Amount

Cumulative Amount(X + Y + Z) =

5.8 Faculty Performance Appraisal and Development System (FPADS) (30)   Total Marks 30.00

Institute Marks : 30.00

The Management of ACSCE motivates the faculty to perform better and improve themselves by appreciating their dedication to the profession through the following methods

• Reimbursing registration fees for attending conferences for paper presentation.

• Felicitating the faculty members for their exemplary service in the Institution.

• Reimbursing fees for the paper publications in reputed journals (Web of Science/ Scopus, etc)

Feedback about faculty is collected twice a semester from the students and is evaluated by HOD and the Principal. If the feedback is less than 75 %, the concerned faculty is informed and asked to improve their performance. They are encouraged to undergo FDPs that help to improve themselves.

 The feedback form collected from students include the following points

• Punctuality/class time utilization

• Ability to explain

• Interaction/Motivating students

• Subject Knowledge

• Presentation of the subject/communication

• Motivating the Students

Every year the assessment of faculty is based on their self-appraisal form. The key sections in the faculty appraisal form include

• Journal Publications

• Conferences Attended

• Book/Chapter Publications

• Training Programmes / Workshops/ Seminars/ FDPs/Webinars attended

• Training Programmes / FDPs / Workshops / Seminars organized

• Patents • Academic achievements

• Faculty Interaction with the outside world

• Membership of Professional Bodies (ISTE/ IEEE/ CSI/ IEI etc)

Every year the faculty members of the department submit the appraisal form to the HOD. The HOD reviews self-appraisal forms and provides remarks/ comments and submits them to the principal along with the academic results & students feedback. The principal reviews the self-appraisal and provides remarks/ comments and submits it to the Management for further processing. The sample copy of Faculty Appraisal Form is as follows

FACULTY APPARAISAL FORM 2019-20

FACULTY APPRAISAL FORM 2020-21

ACS College of Engineering

Faculty Appraisal Form for the Odd and Even Semester of AY 2020-21

1. Name :
2. Designation :
3. Department :
4. Date of Joining :
5. Educational Qualification :
6. Additional Qualifications :
7. Total Years of Experience :
8. Journal Publications (National / International):

Sl.No.	Name of the Journal with ISSN No.	Title of the Paper	Volume & Page No.	Year and Month of Publication

9. Conferences Attended (National / International):

Sl.No.	Name of the Conference	Title of the Paper in the Proceeding / Presentation	Volume & Page No.	Year and Month of Publication

10. Book/Chapter Publications:

Sl.No.	Title of the Book	Name of Publisher	Month & Year of Publication	ISBN No.

11. Training Programmes / Workshops / Seminars / FDPs/Webinars attended:

Sl.No.	Name of the Training Programme / Workshop / Seminar / FDP	Organized By (Venue)	Duration & Year	Sponsoring Authority (AICTE/IEEE/ISTE etc.)

12. Training Programmes / FDPs / Workshops / Seminars organised:

Sl.No.	Title of the Project / Training Programme / FDP / Workshop/ Seminar	Funding Agency/ Source of Fund	Amount	Project Duration & Year	Status (Completed /Ongoing)

13. Patents:

Sl.No.	Title of the Invention / Innovative Concept / Product / Project	Details of Patent Published (in the Patent Office Journal) / Patent Granted / Related Details	Year

14. Academic achievements:

Sl.No.	Name of the Subjects handled in the ODD and Even Semester (AY 2020-21)	Pass %	Achievement

15. Faculty Interaction with outside world (Conference Session Chair / Guest Lecture / Editorial Board Membership / Reviewer for Journals / Paper Publication / R&D and Consultancy Projects / Academic Peer/ Evaluation etc.):

Sl.No.	Type of Interaction	Details	Year

16. Membership of Professional Bodies (ISTE IEEE CSI IEI etc.):

Sl.No.	Name of the Professional Body	Membership Category (Member/Life Member/Fellow etc.)	Membership No.	Year of Registration

17. Any other relevant information:

Declaration:
I hereby declare that the information provided above is true and correct to the best of my knowledge and belief.

Date:
Place: Signature of the Faculty

Remarks from HOD:

Remarks from Principal:

1

FACULTY APPRAISAL FORM 2021-22

ACS College of Engineering

Faculty Appraisal Form for the Even and Odd Semester of AY 21-22

1. Name :
2. Designation :
3. Department :
4. Date of Joining :
5. Educational Qualification :
6. Additional Qualifications :
7. Total Years of Experience :
8. Journal Publications (National / International):

Sl.No.	Name of the Journal with ISSN No.	Title of the Paper	Volume & Page Nos.	Year and Month of Publication
				October 2020

9. Conferences Attended (National / International):

Sl.No.	Name of the Conference	Title of the Paper in the Proceeding / Presentation	Volume & Page Nos.	Year and Month of Publication
		NIL		

10. Book Publications:

Sl.No.	Title of the Book	Name of Publisher	Month & Year of Publication	ISBN No.
		NIL		

11. Training Programmes / Workshops/ Seminars/ FDPs/Webinars attended:

Sl.No.	Name of the Training Programme / Workshop / Seminar / FDP	Organized By (Venue)	Duration & Year	Sponsoring Authority(AICTE/IEEE/ISTE etc.)

12. Projects undertaken / Training Programmes / FDPs / Workshops / Seminars organized:

Sl.No.	Title of the Project / Training Programme / FDP	Funding Agency/ Source of Fund	Amount	Project Duration & Year	Status (Completed/ Ongoing)

13. Consultancy Projects undertaken:

Sl.No.	Title of the Consultancy Project	Name of the Client Organization	Amount Received	Project Duration & Year	Status (Completed / Ongoing)

14. Patents:

Sl.No.	Title of the Invention / Innovative Concept/ Product / Project	Details of Patent Published (in the Patent Office Journal) / Patent Granted / Related Details	Year

15. Contributions to Institution:

	Academic / Administrative

16. Academic achievements:

Sl.No.	Name of the Subjects handled in the Even and Odd Semester (19-20 and 20-21 AY) Odd sem 19-20	Pass %	Achievements
	Name of the Subjects handled in the Even and Odd Semester 20-21 AY	Pass %	Achievements

17. Faculty Interaction with outside world (Conference Session Chair / Guest Lecture / Editorial Board Membership / Reviewer for Journals / Paper Publication /R&D and Consultancy Projects / Academic Peer etc.):

Sl.No.	Type of Interaction	Details	Year

18. Membership of Professional Bodies (ISTE / IEEE / CSI / IEI etc.):

Sl.No.	Name of the Professional Body	Membership Category (Member/Life Member/Fellow etc.)	Membership No.	Year of Registration

19. Research Guidance:

Sl.No.	Name of the Scholar	Reg. No. of the Scholar	Area of Research	Title of the Thesis	Status of Research	Year of Confirmation

20. Any other relevant information

Declaration:
I hereby declare that the information provided above is true and correct to the best of my knowledge and belief.

Date:
Place: Signature of the Faculty

1   2   3

5.9 Visiting/Adjunct/Emeritus Faculty etc. (10)   Total Marks 10.00

Visiting Faculty Details

1) Dr. G. Vinoth, B.E, M.S, Ph.D (U.S.A) , Innovation Management Services, Pongu Ventures Pvt Ltd

Actvities of Pongu Ventures

• To organize periodic workshops/ seminars/ interactions with entrepreneurs, investors, professionals and create a mentor pool for student innovators.

• To conduct various innovation and entrepreneurship-related activities prescribed by Central MIC in time bound fashion.

• Identify and reward innovations and share success stories.

• Network with peers and national entrepreneurship development organizations.

• Create an Institution's Innovation portal to highlight innovative projects carried out by institution's faculty and students.

• Organize Hackathons, idea competition, mini-challenges etc. with the involvement of industries.

• In the academic year 2019-20 18 IIC driven activities, 32 MHRD driven activities and 20 self driven activities were conducted and 485 participants actively participated in these activities

• Students and faculty members were motivated to join the innovative culture and give solutions for innovative projects and make a significant contribution to an existing product, process or service.

2) Dr Kalyana Kannan ,Center for Test and Data Sciences

Center for Test an Data Sciences (CTDS) is for real time industry projects, internships, sponsored research from companies and government agencies and technology training. CTDS is composed of industry professionals playing the role of mentors and serves as a bridge between industry and institutions, The center focuses on building talent and technology solutions for industries through early collaboration and mutual engagements. Currently the center is working on projects related to Data Analytics, Software Quality Management, Mechanical testing and Characterization.

Areas of Interest

• Agile Technology

• DevOps

• Data Sciences

• Microsoft – ERP • Materials Testing

• HR Platform – Select Smart

• PLM, Compliance – Pharma – Quality

• AI and Machine Language

• Open Source – Mean Stack

• Design Thinking

Projects

• Live Industry projects

• Sponsored Research

• Technology Training

6 FACILITIES AND TECHNICAL SUPPORT (80)   Total Marks 80.00

6.1 Adequate and well equipped laboratories, and technical manpower (30)   Total Marks 30.00

Institute Marks : 30.00

Sr. No	Name of the Laboratory	Number of students per set up(Batch Size)	Name of the Important Equipment	Weekly utilization status(all the courses for which the lab is utilized)	Technical Manpower Support		
					Name of the Technical staff	Designation	Qualification
1	Electronic Devices and Instrumentation Laboratory(18ECL37	20	4 Trace Oscilloscope, Function generator, Dual output preset DC power supply, CRO, DC Regulated Single Power Supply &Dual Power Supply. Linear IC Trainer Kit,D C Power Supply Unit, Signal Generator,CRO, 30 MHz, CADDO 804, Power supply Tech lab dual scope oscilloscope-20 MHz,Digital Storage Oscilloscope with colour LCD 60MHz,AC Multi voltmeter 3MHz,Signal generator 2Mhz - AD2025,Signal Generator, MODULATOR,Attenuators,CRO,Optical Fibre Communication ,Solid State Klystron Power supply,Klystron Mount with Klystron tube,Solid State VSWR Meter,X-Band Signal generator,Klystron mount ,Power Divider,RF Detector,Micro Strip Ring resonator,OFC Kit,QPSK &DPSK Trainer Kit ACER Intel ® core (TM) 2 Duo CPU E7500@ 3GHz,1.58GHz, 1Gb RAM.	6hrs/week	Barath kumar	Tutor	BE
2	Digital System Laboratory(18ECL38	20	Digital IC Trainer Kits, Digital IC Tester. 10 - Dell Intel Core i5 6th Gen, 4Gb DDR3 RAM, 1Tb HDD, 2Gb Graphics, DVD Writer , Wi-fi, LED Display.LPC 1768 ARM Cortex M3 starter kit with accessoriesACER Intel ® core (TM) 2 Duo CPU E7500@ 3GHz,1.58GHz, 1Gb RAM40 AH Tubular Battery Lenovo Intel ® core ™ i3-7100 CPU @ 3.90GHz,3.91GHz 4Gb RAM, 64-bit operating system ACER Intel ® core (TM) 2 Duo CPU E7500@ 3GHz,1.58GHz, 1Gb RAM	12hrs/week	santosh	Instructor	Diploma
3	Microcontroller Laboratory(18ECL47)	20	MSP430 Development Kit,8051 Microcontroller kit with adapter & cables, DSP Starter Kit (DSK) Products includes C6713 development Board with 512K flash & 5MB SDRAM &softwares with experiments & Power supply, programmer quick start & customer support guide, Matlab Software,20-Lenovo Intel ® core ™ i3-7100 CPU @ 3.90GHz,3.91GHz 4Gb RAM, 64-bit operating system, ALS-NIFL-39 Matrix Keyboard, Multiplexed 1 Segment Display, Logic Controller I/F, Stepper Motor I/F, 14A Printer I/F-with Cable & 07 48 Lines D/I/O card with timer.	12hrs/week	Philip	Instructor	Diploma
4	Analog Circuits Laboratory(18ECL48)	20	4 Trace Oscilloscope, Function generator, Dual output preset DC power supply, CRO, DC Regulated Single Power	6hrs/week	Barath kumar	Tutor	BE
5	Digital Signal Processing Laboratory(18ECL57	20	MSP430 Development Kit,8051 Microcontroller kit with adapter & cables, DSP Starter Kit (DSK) Products includes C6713 development Board with 512K flash & 5MB SDRAM & softwares with experiments & Power supply, programmer quick start & customer support guide, Matlab Software,20-Lenovo Intel ® core ™ i3-7100 CPU @ 3.90GHz,3.91GHz 4Gb RAM, 64-bit operating system, ALS-NIFL-39 Matrix Keyboard, Multiplexed 1 Segment Display, Logic Controller I/F, Stepper Motor I/F, 14A Printer I/F-with Cable & 07 48 Lines D/I/O card with timer.	12hrs/week	santosh	instructor	Diploma
6	HDL Laboratory(18ECL58	20	LENOVO Intel(R) core(TM) i5- Universal Multivendor development 6500T CPU@ 2.50GHz 8.00 GB SD RAM 250GB HDD Kit, Interfacing cards, Pattern Generator Cards	12hrs/week	Philip	Instructor	Diploma

Sr No	Lab Name	Capacity	Details	Hrs/week	Name	Designation	Qualification
7	Embedded System Laboratory(18ECL66	20	Digital IC Trainer Kits, Digital IC Tester. 10 - Dell Intel Core i5 6th Gen, 4Gb DDR3 RAM, 1Tb HDD, 2Gb Graphics, DVD Writer , Wi-fi, LED Display.LPC 1768 ARM Cortex M3 starter kit with accessoriesACER Intel ® core (TM) 2 Duo CPU E7500@ 3GHz,1.58GHz, 1Gb RAM40 AH Tubular Battery Lenovo Intel ® core ™ i3-7100 CPU @ 3.90GHz,3.91GHz 4Gb RAM, 64-bit operating system ACER Intel ® core (TM) 2 Duo CPU E7500@ 3GHz,1.58GHz, 1Gb RAM	12hrs/week	Barath kumar	Tutor	BE
8	Communication Laboratory(18ECL67	20	Signal Generator, MODULATOR,Attenuators,CRO,Optical Fibre Communication ,Solid State Klystron Power supply,Klystron Mount with Klystron tube,Solid State VSWR Meter,X-Band Signalgenerator,Klystron mount ,Power Divider,RF Detector,Micro Strip Ring resonator,OFC Kit,QPSK &DPSK Trainer Kit Lenovo Intel ® core ™ i3-7100 CPU @ 3.90GHz,3.91GHz 4Gb RAM, 64-bit operating system, RF Power Meter, Microwave Test Bench Detector Diode.	12hrs/week	Santosh	Instructor	Diploma
9	Computer Networks Lab(18ECL76)	20	LENOVO Intel(R) core(TM) i5-6500T CPU@ 2.50GHz 8.00 GB SD RAM 250GB HDD Universal Multivendor development Kit, Interfacing cards, Pattern Generator Cards	18hrs/week	Philip	Instructor	Diploma
10	VLSI Laboratory(18ECL77	20	18-Acer systems with Dual core processor,1-HCL system,1-Lenova system,4G RAM, Mentor Graphic Higher Education Program, Cadence Tools, Printer.	18hrs/week	Barath kumar	Tutor	BE

6.2 Additional facilities created for improving the quality of learning experience in laboratories (25)   Total Marks 25.00

Institute Marks : 25.00

Sr. No	Facility Name	Details	Reason(s) for creating facility	Utilization	Areas in which students are expected to have enhanced learning	Relevance to POs/PSOs
1	Wi-fi	Wi-fi facility available in each department	For accessing Internet	Students and Faculties	Knowledge Updation and Sharing	PO5,PSO2
2	Green Board	All labs are equipped	For better explanation	Students	Knowledge Updation	PO10
3	MSP 430	16 bit CPU,Watch Dog Timer,UART,SPI Bus,ADC	Facility for Project work in Microcontroller based Systems	Students	Microcontrollers	PO 4,5,12, PSO1
4	Power Converters	Inverters, Controlled Rectifiers,Choppers, AC voltage Controllers	Facility for Project work in Power Electronics based Systems	Students	Power Electronics	PO4,12, PSO2

6.3 Laboratories: Maintenance and overall ambiance (10)   Total Marks 10.00

Institute Marks : 10.00

*All the laboratories are well equipped with internet facilities and installed with the necessary softwares to be needed for the conduction of laboratory experimentation as per university curriculum and also enable the students and faculty members to carry out additional experimentation relevant to the curriculum the labouratories are well equipped to carry out mini project as well as an acadamic project work and demonstration and exhibition.

1.WI-FIinternet facility has been provided to the students and faculty members.

2.computers are provided with necessary licensed softwares in each lab to facilitate the students and faculty members to carry out their practical sessions.

3.all the laboratories are maintained by qualified and experianced lab instructors and lab assistants.

4.students are permitted to utilize the laboratory facilities to carry out their academic project work and mini project work beyond the college working hours on demand and request basis.

5.Remedial lab sessions and sdditional lab sessions are provided to the students to carry out missed practical sessions due to holidays snd leave taken by students on medical reasons and other reasons.

6.the labs are kept open from 8:30 am to 4:00 pm for the benifit of students.

7.Laboratory facilities are extended to the students during weekends and holidays to enable the students to complete their acadamic project and mini project work.

All the labs are equipped with requisite lab equipments as per the university curriculum. all the components and equipments are in working condition

*all the students should carry out their experimentation individually and they will be assessed for each experiment separately.

*each students is alloted with an individual computer or Trainer kits to carry out their practical experimentation during the practical classes/sessions.

*the lab has good ambience as the PCs are arranged in a way that student can feel comfortable during laboratory experimentation.

*all equipments are calibrated before conduction of the experimentation.

*serviving and maintenance of computer hardware, lab equipments and components are done at department level and college level.

*Air Conditioned (A/C)seminar hall with LCD Projector and Audio visual equipments are available in the department for conducting technical seminars,placement preparation sessions and workshops

*Auditorium/conference room for conducting conference and workskop.

6.4 Project laboratories (5)

Total Marks 5.00

Institute Marks : 5.00

Sl. No.	Facility Name	Utilization	
1	Softwares a. MATLAB b. XILINX c. KEIL d. CABENCE e. HFSS ANTENA	Softwares are used to carryout respective domain related Projects.	
2	Hardwares a. Trainer kits b. Power supply c. Digital CRO'S d. Signal generators e. Microcontroller kit	Hardwares are used to carryout respective domain related Projects.	

6.5 Safety measures in laboratories (10)

Total Marks 10.00

Institute Marks : 10.00

Sr. No	Laboratory Name	Safety Measures
1	Electronic Devices and Instrumentation Laboratory Digital System Laboratory Microcontroller Laboratory Analog Circuits Laboratory Digital Signal Processing Laboratory HDL Laboratory Embedded System Laboratory Communication Laboratory Computer Networks Lab VLSI Laboratory	First Aid Box, Fire Extinguisher First Aid Box, Fire Extinguisher First Aid Box, Fire Extinguisher First Aid Box, Fire Extinguisher First Aid Box, Fire Extinguisher First Aid Box, Fire Extinguisher First Aid Box, Fire Extinguisher First Aid Box, Fire Extinguisher First Aid Box, Fire Extinguisher First Aid Box, Fire Extinguisher

7 CONTINUOUS IMPROVEMENT (50)

Total Marks 50.00

7.1 Actions taken based on the results of evaluation of each of the POs & PSOs (20)

Total Marks 20.00

Institute Marks : 20.00

POs Attainment Levels and Actions for Improvement- (2021-22)

POs	Target Level	Attainment Level	Observations
PO 1 : Engineering Knowledge			
PO 1	1.8	1.98	Target achieved.
Action 1:For knowledge updating of the students, recent technical information will be discussed with students. Action 2:More number of problems are solved in classrooms Action 3:For slow learners extra classes are conducted			
PO 2 : Problem Analysis			
PO 2	1.8	2.13	Target achieved.
Action 1: Assignments having complex problems will be given to students for further improvement in the course. Action2: Complex problems are solved in classrooms			
PO 3 : Design/development of Solutions			
PO 3	1.8	1.83	Target achieved.
Action 1:ICT based teaching will be enhanced to explain and solve complex problems and continuous monitoring is done. Action 2: Extra classes will be handled to make the student understand better. Action 3: Using tools, simulation will be done.			
PO 4 : Conduct Investigations of Complex Problems			
PO 4	1.8	1.82	Target achieved.
Action 1:For fundamental courses like 18EC33-Electronic Devices, extra classes will be handled to make the student understand better. Action 2: ICT based teaching will be enhanced to explain and solve complex problems and continuous monitoring is done.			
PO 5 : Modern Tool Usage			
PO 5	1.8	1.84	Target achieved.
Action 1: Tools like Cadence,Matlab, Xilinx are provided in the laboratories. Action 2:Workshops are conducted to provide hands on training on modern tools. Action 3:Industrial visits were conducted to know the modern tools.			
PO 6 : The Engineer and Society			
PO 6	1.8	1.90	Target achieved.
Action 1: Students are advised to do projects which fulfills the needs of society, health monitoring, safety aspects in hazardous environments etc Action 2: Students are advised to be member of IETE society to build network with outside world and contribute to the needs of society. Action 3: Students are advised to host and also participate in cultural events. Action 4: Students are advised to read newspapers, magazines, technical and non-technical articles daily to know about societal, health, safety, legal and cultural issues and share the information among other students			
PO 7 : Environment and Sustainability			
PO 7	1.8	1.86	Target achieved.
Action 1: Students are advised to read newspapers, magazines, technical and non-technical articles daily to know about social, health, safety, legal and cultural issues and share the information among other students. Action 2: Students are advised to learn more through the course 18CIV59-Environmental Studies.			
PO 8 : Ethics			
PO 8	1.8	2.12	Target achieved.
Action 1: In the course 18CPC39/49-Constitution of India, Professional Ethics and Cyber Law , more case studies and presentations are made to enhance ethical principles and exhibit high degree of professionalism.			
PO 9 : Individual and Team Work			
PO 9	1.8	1.88	Target achieved.
Action1: In the course 18ECMP68-Mini-project and 18ECP78 Project Work Phase - 1, and 18ECP83-Project Work Phase-2 students are mentored and guided to do projects related to social and real time issues. Action 2: Industrial visits were conducted to know the importance of team work. Action 3:In the course 18ECS84-Technical Seminar more sessions of soft-skill trainings are given to the students.			
PO 10 : Communication			
PO 10	1.8	2.08	Target achieved.
Action 1: Soft skills training is imparted to students to enhance various aspects of communication/technical talks by individual and group presentations. Action2: Students are advised to put more concentration on document writing and presentations Action 3: Students are advised to participate in technical events in department and outside college through project expos and technical paper writing and presentation conferences.			
PO 11 : Project Management and Finance			
PO 11	1.8	1.76	Target is not achieved.
Action 1:Leadership qualities will be inculcated to students by allowing them to participate in Project expo and other events in technical symposiums Action 2: In the course 18ECMP68-Mini-project and 18ECP78 Project Work Phase - 1, and 18ECP83-Project Work Phase-2 students are advised and encouraged to participate in project exhibition.			
PO 12 : Life-long Learning			
PO 12	1.8	1.66	Target is not achieved

Action1 : Library hours are properly utilized by monitoring the students to ensure the effective use of journals, Magazines, Reference Books, NPTEL videos and internet facilities to browse and update the latest technological developments and current happenings in the industries and society. Action 2: Faculty members may adopt ICT based teaching to improve the teaching-learning process. Number of library hours for students may be increased to facilitate them to update and upgrade their knowledge. Action 3: Students are encouraged to read newspapers, magazines, technical and non-technical articles daily to know about societal, health, safety, legal and cultural issues and share the information among other students Action 4: Students are advised to be members in professional societies like IEEE, IETE society etc. to build a rapport with outside world and contribute to the needs of society Action 5:Students are motivated to publish papers in National and International journals

PSOs Attainment Levels and Actions for Improvement- (2021-22)

PSOs	Target Level	Attainment Level	Observations
PSO 1 : To Analyze, design and develop solutions by applying foundational concepts of Electronics and Communication Engineering.			
PSO 1	1.8	1.64	Target is not achieved. In the course 18EC32-Network Theory , the understanding and solving complex problems is tedious for students In the course 18EC33-Electronic Devices, the student have difficulty in understanding the basic concepts behind the design of circuits. In the course 18EC52-Digital Signal Processing, the understanding and solving complex problems is tedious for students.
Action 1: For slow learners extra classes will be handled to make the student understand better. Action 2: Assignments will be given to students to analyze the methods which are used to solve and arrive at solutions. Action 3: To enhance professional skills: seminars, guest lectures, technical talks will be arranged with academic and industrial experts.			
PSO 2 : Design and implement the products using cutting edge technologies in hardware and software, to demonstrate leadership qualities among students, to promote research and development activities for betterment of organization and society.			
PSO 2	1.8	1.81	Target achieved.
Action 1: Along with project work, the students are advised to think Innovatively in their interested subjects and take up that idea to implement. Action 2; IIC activities is conducting for students. Action 3: Motivating students to choose multi disciplinary projects.			

7.2 Academic Audit and actions taken thereof during the period of Assessment (10)   Total Marks 10.00

Institute Marks : 10.00

Academic audit was conducted in the institution by an internal expert committee (AAC: Academic Audit Committee) constituted by the Principal. The academic audit team meets UG students for taking their feedback about the teaching, research and infrastructure.

The academic audit focuses on:

- Assuring quality of learning process
- Determining desired learning outcomes
- Assessing teaching and learning process
- Implementing quality education
- Student assessment and evaluation

The academic audit is based on

- Annual Reports of the Departments
- Annual Quality Assurance Report AQAR of the institution
- Feedback from stakeholders
- Visits to Departments
- Presentation of Achievements by the Departments

The following documents are made available to the AAC committee.

- Copy of the Time Table
- Course File
- Lab. Equipment Details
- Students Projects
- Various Grants received by the Institute/Department
- Internal evaluation marks
- Details of Remedial classes
- Result Analysis

AAC Members

Sl. NO	Name	Role in AAC	Affiliation
1	Dr. M. S. Murali	Chairman	Principal, ACSCE
2	Dr. S Selvanandam	Member Secretary	Vice Principal, ACSCE
3	Dr. S Siddesh	Member Secretary	Professor, ACSCE
4	Dr. Bharati Gururaj	Member Secretary	HOD-ECE, ACSCE
5	Dr.A M Prasannakumar	Member	Professor, ACSCE
6	Dr. Prajith Prakash Nair	Member	Associate Professor, ACSCE

The institution has an **Internal Quality Assurance Cell (IQAC)** to monitor and maintain the standard of academic affairs of the institution. The cell is chaired by the Principal and the activities of the cell are being planned, executed and coordinated by the department heads.

The Internal Quality Assurance Cell of ACS College of Engineering (ACSCE) is performing following tasks on regular basis:

1. Improvement in quality of teaching and research by regular inputs to all concerned based on feedback from students.
2. Providing inputs for best practices in administration for efficient resource utilization and better services to students and staff.
3. Providing inputs for Academic and Administrative Audit and analysis of results for improvement in areas found weak.

The major activities of IQAC are

- Documentation of all academic and outreach programs activities
- Prepare the annual report to be sent to the UGC (All AQARs prepared till the academic year 2021-2022 has been submitted to the National Accreditation and Assessment Council (NAAC) and the same has been uploaded in the institution's website)
- Preparation of periodic reports to be read by the Principal in the BOM meeting Conducting academic audit
- Documentation of the self-appraisal reports of the faculty members
- Documentation of annual student feedback reports
- Planning and execution of quality assurance measures in academic and curricular aspects Provision of data to be published in the News letter (half–yearly)
- Organizing seminars/workshops related to quality assurance aspects of the University

Student Mentor Process:

Each faculty member mentors around 20 students. For each student, a mentor book is maintained where academic details are noted. Regular counselling has been done by mentors.

Action taken during the period of assessment:

1. Encourage Faculties to do NPTEL, IIT Bombay Spoken Tutorial, ATAL program, etc.

2. Organized STTP/ conference/FDP program in collaboration with reputed agencies like AICTE/DST etc at the institute.

3. Encourage faculties to attend more numbers of FDP, Workshops, etc.

4. Increase the number of department library books.

5. Initiation of getting accreditation from reputed organizations.

6. Encourage faculties to use more numbers of pedagogies.

7. Encourage faculties to do more online courses.

8. Encouraging existing faculties to register for Ph.D.

9. Encourage faculties to apply for funding and consultancy work.

The variety of elements for continuous assessment and feedback mechanisms in ACS College of Engineering enable effective direct and indirect monitoring and measurement of outcomes and appropriately identify and address gaps. The learning outcomes are also reviewed regularly by external examiners and external experts in the Departmental and Faculty Board of Studies Meetings, Academic Audit Committee (AAC) and IQAC on Education.

7.3 Improvement in Placement, Higher Studies and Entrepreneurship (10)

Total Marks 10.00

Institute Marks : 10.00

Placement and Higher studies

- Pre-pacemet traning will be given to the students in third year only
- In pre-placment training the students ae trained on the soft skills like Aptitude, Group discussion etc.. by the experts.
- Techincal traing on various core subjects will given by the faculty
- Mock interviews will be conducted by the placement department
- Career guidance programmes are conducted.
- Students are motivated to go for higher studies.
- Students are guided to prepare for competitive exams like GRE, GMAT, GATE and TOEFEL.
- The students are motivated through guest lectures to go for higher studies in India and abroad.
- The Letter of Recommendation is verified and given by the faculty members to students to pursue their higher studies in various Universities

Item	LYG	LYG m1	LYG m2
	2021-2022	2020-2021	2019-2020
Total No. of Final year students (**N**)	47	43	36
No. of students placed in companies or Government sector (**X**)	26	26	30
Number of students admitted to Higher studies with valid qualifying scores/ranks (GATE or equivalent state or National level Tests, GRE, GMAT etc.) (**Y**)	0	1	2
No. of students turned entrepreneur in engineering/technology (**Z**)	0	2	0
X+Y+Z	26	29	32
Placement Index : (X+Y+Z) / N	55.31%	67.44%	88.88%

7.4 Improvement in the quality of students admitted to the program (10)

Total Marks 10.00

Institute Marks : 10.00

Item		2022-23	2021-22	2020-21
National Level Entrance Examination	No of students admitted	0	0	0
	Opening Score/Rank	0	0	0
	Closing Score/Rank	0	0	0
State/ University/ Level Entrance Examination/ Others CET	No of students admitted	36	21	7
	Opening Score/Rank	51499	52450	64286
	Closing Score/Rank	166209	181016	202698
Name of the Entrance Examination for Lateral Entry or lateral entry details DCET	No of students admitted	4	0	0
	Opening Score/Rank	4623	0	0
	Closing Score/Rank	11767	0	0
Average CBSE/Any other board result of admitted students(Physics, Chemistry&Maths)		74	76	71

8 FIRST YEAR ACADEMICS (50)

Total Marks 45.75

8.1 First Year Student-Faculty Ratio (FYSFR) (5)

Total

Institute N

Please provide First year faculty information considering load for the particular program

Name of the faculty member	PAN No.	Qualification	Date of Receiving Highest Degree	Area of Specialization	Designation	Date of joining	Teaching load (%)			Currently Associated (Yes / No)	Nature Of Association (Regular / Contract)	D le ca C A is
							CAY	CAYm1	CAYm2			
Dr.B H Veena	ABVPV4837A	M.Sc. and PhD	03/10/1992	Mathematics	Professor	03/08/2015	100	100	100	Yes	Regular	
Dr.Pradeep Ku	BWHPP1151K	M.Sc. and PhD	26/06/2013	Mathematics	Associate Professor	01/08/2013	100	100	100	Yes	Regular	
Mrs.Deepa	BGHPD4862K	M.Sc	06/02/2005	Mathematics	Assistant Professor	27/08/2009	100	100	100	Yes	Regular	
Dr.Selvananda	BEPPS2037R	M.Sc. and PhD	31/01/2009	Physics	Professor	28/07/2014	100	100	100	Yes	Regular	
Mrs.Anandhi D	BQNPA3860N	M.Sc	08/09/2007	Physics	Assistant Professor	05/02/2014	100	100	100	Yes	Regular	
Dr.Pradeepa S	BQYPP5794F	M.Sc. and PhD	18/06/2015	Chemistry	Assistant Professor	21/12/2015	100	100	100	Yes	Regular	
Dr. M S Shiva I	AKCPM6895R	M.Sc. and PhD	17/07/2017	Chemistry	Associate Professor	10/08/2009	100	100	100	Yes	Regular	
Dr. Siddesha H	ALXPS3767N	ME/M. Tech and PhD	16/03/2017	Composite Materials Process BySevere Plastic Deformation	Associate Professor	01/08/2011	100	100	100	Yes	Regular	
Mr. Kumar B M	BXEPK1086N	M.E/M.Tech	09/12/2008	Thermal Engineering	Assistant Professor	08/08/2011	100	100	100	Yes	Regular	
Dr. Sunil Raj B	BCAPB6294G	ME/M. Tech and PhD	24/02/2023	Solar Thermal Engineering	Assistant Professor	23/07/2012	100	100	100	Yes	Regular	
Dr. Suresh P M	ADBPP0581H	ME/M. Tech and PhD	09/03/2011	Fluid mechanics	Professor	01/07/2016	100	100	100	Yes	Regular	
Mrs. Gayathri (	AXQPG5162N	M.E/M.Tech	30/03/2009	Environmental Engineering	Assistant Professor	23/07/2015	100	100	100	Yes	Regular	
Mr. Praveen A	BZRPP5653B	M.E/M.Tech	08/12/2010	Power Electronics	Assistant Professor	25/07/2019	100	100	100	Yes	Regular	
Mr. Ram Kuma	AKKPK7249K	M.E/M.Tech	15/04/1993	Industrial Electronics	Assistant Professor	03/03/2021	100	100	0	Yes	Regular	
Mr. Gowtham k	BLYPG3275K	M.E/M.Tech	01/06/2017	Electrical Drives Embedded Control	Assistant Professor	02/11/2017	100	100	100	Yes	Regular	
Dr.Raghavendi	BFZPR7142P	M.Sc. and PhD	08/02/2020	Mathematics	Associate Professor	30/07/2012	100	100	100	Yes	Regular	
KAVYA C H	EHUPK8680K	M.Sc	13/06/2016	Mathematics	Assistant Professor	18/03/2019	100	100	100	Yes	Regular	
VENKATESH 1	AOQPV2695Q	M.Sc	14/03/2010	BIOCHEMISTRY	Assistant Professor	09/11/2012	100	100	100	Yes	Regular	
Mr. GOWRI SH	AZGPG6914J	M.E/M.Tech	01/11/2013	COMMUNICATION SYSTEMS	Assistant Professor	26/08/2019	100	100	100	Yes	Regular	
Mrs. ASWINI S	EFWPS5240P	M.E/M.Tech	18/03/2019	CSE	Assistant Professor	01/08/2018	100	100	100	Yes	Regular	
Mrs. SHRUTHI	ENUPS5284R	MA	22/04/2019	CONSTITUTIONAL AND ADMINISTRATIVE LAW	Assistant Professor	10/08/2022	100	0	0	Yes	Regular	
Mr. VINAY KUN	BDXPP9221K	MA	19/08/2015	KANNADA	Assistant Professor	23/08/2022	100	0	0	Yes	Regular	
Mrs. IRAMMA '	AOTPH6496L	MA	27/01/2017	ENGLISH	Assistant Professor	10/08/2022	100	0	0	Yes	Regular	
Mrs.NAVYA	NRBPS8914J	M.E/M.Tech	03/04/2021	STRUCTERAL ENGINEERING	Assistant Professor	10/08/2022	100	0	0	Yes	Regular	
Mr.Santhosh K	FUTPS7739J	M.Sc	21/12/2022	Physics	Assistant Professor	08/08/2022	100	0	0	Yes	Regular	

Mr.NagendraB;	CPBPP7881Q	M.Sc	01/12/2022	Physics	Assistant Professor	21/12/2022	100	0	0	Yes	Regular
Mr.Guruswamy	AVNPG2757L	M.Sc	05/03/2010	Mathematics	Assistant Professor	10/08/2022	100	0	0	Yes	Regular
Mrs.Bhargavi k	EJEPB2992F	M.Sc	30/01/2021	Mathematics	Assistant Professor	11/07/2022	100	0	0	Yes	Regular
Mrs.SANDHYA	DGAPG8806D	M.E/M.Tech	14/10/2020	CSE	Assistant Professor	29/08/2022	100	0	0	Yes	Regular
Mrs.GANGA	VWBPG3564M	M.E/M.Tech	11/11/2019	CSE	Assistant Professor	24/02/2021	100	100	0	Yes	Regular
Mrs.SAHANA E	CTJPB4025L	M.E/M.Tech	10/03/2022	STRUCTURES	Assistant Professor	04/10/2021	100	100	0	Yes	Regular
Mrs.DIVYA P	BRSPD7696F	M.E/M.Tech	01/06/2013	CSE	Assistant Professor	29/08/2022	100	0	0	Yes	Regular
Mrs. NISHANT	BFWPA3633P	M.Sc	15/02/2011	Chemistry	Assistant Professor	08/08/2022	100	0	0	Yes	Regular
Mr.ABHISHEK	BOAPA5762E	M.Sc	28/02/2019	Mathematics	Assistant Professor	04/06/2022	100	0	0	Yes	Regular
Mrs.SHRUTHI	FQWPS0877Q	M.Sc	07/02/2012	Mathematics	Assistant Professor	30/07/2014	0	100	100	No	Regular	3(
Mrs.DIVYA S	BCPPD7749P	M.Sc	30/04/2014	Mathematics	Assistant Professor	16/08/2019	0	100	100	No	Regular	0!
Mr. GUNASEK	AZNPG2274N	M.Sc. and PhD	01/10/2019	Physics	Assistant Professor	25/10/2017	0	100	100	No	Regular	0(
Ms.DIVYA HE(	AKFPH8961C	M.Sc	01/07/2016	Physics	Assistant Professor	17/08/2017	0	100	100	No	Regular	1!
Dr.SELVA GAN	FEOPS0367R	M.Sc. and PhD	31/08/2015	Chemistry	Associate Professor	02/08/2017	0	100	100	No	Regular	1!
Ms.SHWETHA	BLSPS3935E	M.Phil	07/07/2010	ENGLISH	Assistant Professor	17/09/2018	0	100	100	No	Regular	28
Dr.JYOTHIRLII	AZUPJ2564M	M.A and Ph.D	12/04/2012	KANNADA	Assistant Professor	12/10/2018	0	100	100	No	Regular	0(
Dr.KAVITHA S	DQRPK9480E	ME/M. Tech and PhD	01/11/2018	STRUCTURES	Associate Professor	01/02/2018	0	0	100	No	Regular	1!
Ms.PALLAVI G	CSSPP4842D	M.E/M.Tech	09/02/2014	GEO TECHNICAL ENGINEERING L	Assistant Professor	01/08/2018	0	100	100	No	Regular	0;
Mrs.VIJYALAX	CUECK5370A	M.E/M.Tech	04/05/2013	CSE	Assistant Professor	19/07/2019	0	100	100	No	Regular	0!
Mrs.GAYATHR	CNNPK2224G	M.E/M.Tech	06/01/2015	CSE	Assistant Professor	26/08/2019	0	100	100	No	Regular	0(
Mr.VISHWANA	ANRPN0680P	M.E/M.Tech	02/02/2014	SOFTWARE ENGINEERING	Assistant Professor	30/08/2019	0	100	100	No	Regular	0(
Mrs.Sumathi	FIIPS0697J	M.E/M.Tech	15/01/2016	COMMUNICATION SYSTEMS	Assistant Professor	04/02/2019	100	100	100	Yes	Regular	
Dr. S. Anitha	ALQPA0498R	ME/M. Tech and PhD	01/08/2013	Signal and Image Processing	Professor	06/02/2017	100	100	100	Yes	Regular	

Year	Number Of Students(approved intake strength) N	Number of Faculty members(considering fractional load) F	FYSFR (N/F)	*Assessment= (5*20)/FYSFR(Limited to Max.5)
2020-21(CAYm2)	540	33	16	5.00
2021-22(CAYm1)	540	35	15	5.00
2022-23(CAY)	630	36	18	5.00
Average	0	0	0	0

8.2 Qualification of Faculty Teaching First Year Common Courses (5)   Total Marks 3.67

Institute Marks : 3.67

Year	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 20:1	Assessment Of Faculty Qualification [(5x + 3y) / RF]
2020-21	13	19	27	4.00
2021-22	12	21	27	4.00
2022-23	9	25	31	3.00

Average Assessment: 3.67

8.3 First Year Academic Performance (10)   Total Marks 7.08

Institute Marks : 7.08

Academic Performance	2022-23	2021-22	2020-21
Mean of CGPA or mean percentage of all successful students(X)	6.84	7.23	7.17
Total Number of successful students(Y)	57.00	23.00	44.00
Total Number of students appeared in the examination(Z)	57.00	23.00	44.00
API [X*(Y/Z)]	6.84	7.23	7.17

Average API[(AP1+AP2+AP3)/3] : 7.08

Assessment [1.5 * Average API] : 7.08

8.4 Attainment of Course Outcomes of first year courses (10)   Total Marks 10.00

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)   Institute Marks : 5.00

1.THEORY COURSES:

(The data for Co attainment is considered from the performance of students in internal tests and final university examinations)

·Three internal tests are conducted during 5th, 10th and 15th week of the semester. Common question papers are set for all the courses common to all the programs.

·For the 2018 CBCS Scheme from the academic year 2018-19 onwards 40% of weightage is given for the performance in the internal test and 60% of weightage is given for the performance in final VTU examinations. Three internal tests were conducted for 50 marks and average of all the three tests were correspondingly reduce to 30 marks. Remaining 10 marks is towards assignment /unit test/written test/quizzes. A university examination for all courses under Semester End Examination (SEE) is conducted for a maximum of 100 marks and correspondingly is reduced to 60 marks for awarding the results.

·For the academic year 2019-2020 and 2020-21 of even semester due to COVID-19 pandemic situation the internal tests were conducted online. The procedure was as follows:

oGoogle link – MS Team link was provided to the students in the whattsup group for the question paper just before 10 minutes from the commencement of test timing.

oThe student had to login to the MS team for his attendance and also the test session was monitored by the class teacher in MS team.

oStudents have to submit the scanned copy of the internals and upload in the google from link-MS team link within 30 minutes of the closer the test timing.

·For the 2021 CBCS Scheme from the academic year 2020-21 onwards 40% of weightage is given for the performance in the internal test and 60% of weightage is given for the performance in final VTU examinations. Three internal tests were conducted for 50 marks and average of all the three tests were correspondingly reduce to 30 marks. Remaining 10 marks is towards assignment

/unit test/written test/quizzes. A university examination for all courses under Semester End Examination (SEE) is conducted for a maximum of 100 marks and correspondingly is reduced to 60 marks for awarding the results.

2.LABORATORY COURSES:

·For the academic year 2019-20, 2020-21 batch 40% of weightage is given for the performance in the internal tests called Continuous Internal Evaluation (CIE) and 60% of weightage is given for the performance in University examination/ Semester End Examination (SEE). The CIE marks awarded shall be based on the weekly evaluation of laboratory journals/ reports after the conduction of every experiment evaluated for 30 marks and internal test will be conducted for 10 marks. Total internal marks are awarded for 40 marks and final university were conducted for 100 marks and correspondingly reduced to 60marks for awarding the results.

·For the academic year 2019-2020 and 2020-21 of even semester due to COVID-19 pandemic situation lab sessions and lab tests are held online. The lab rubrics will be changed as evaluation for all departments

3.CALUCLATION OF CO ATTAINMENT:

- CO attainment is based on 2 parameters: Internal Assessment (IA) and University End Examination (SEE).
- Internal Assessment (IA) is considered as direct method and University End Examination (SEE) is considered as indirect method for CO attainment.
- The target set for the CO attainment is 60% of Marks scored.

Assessment Processes:	
Direct Assessment Processes:	Indirect Assessment Processes:
Internal test	Exit Survey
Continuous Assessment (Assignments)	

The attainment level Rubrics considered for CO attainment is as follows:

Level 3	60% of the students scored 60% marks
Level 2	50% of the students scored 60% marks
Level 1	40% of the students scored 60% marks

Target and attainment levels /Rubrics are same for the Internal Assessment (IA) and University End Examination.

Following procedure is followed for calculation of course outcomes attainment:

- Internal Assessment questions and assignment questions are mapped to COs.
- All the mapped questions from the Internal Assessment papers and assignment questions are considered for overall course attainment.
- The semester end examinations marks are mapped to all CO's and the same is considered for calculation of CO attainment.
- Percentage of students scoring target marks in the internal assessment tests. Assessment and University semester end examination is calculated.
- All satisfying values obtained are considered for deciding various levels of course outcome attainment.

8.4.2 Record the attainment of Course Outcomes of all first year courses (5)

Institute Marks : 5.00

Course Name	Course Outcomes	CIE attainment	SEE attainment	Total attainment
Calculus and Linear Algebra	CO1	2	2	2
18MAT11 C101	CO2	3	2	2.5
	CO3	3	3	3
	CO4	3	2	2.5
	CO5	3	3	3
Engineering physics	CO1	3	2	2.5
18PHY 12/22 C102	CO2	3	3	3
	CO3	3	2	2.5
	CO4	3	3	3
	CO5	3	2	2.5
Basic electrical engineering	CO1	3	2	2.5
18ELE13/33 C103	CO2	3	3	3
	CO3	3	2	2.5
	CO4	3	3	3
	CO5	3	2	2.5
Elements of Civil Engineering	CO1	3	2	2.5
18CIV14/24 C104	CO2	3	3	3
	CO3	3	2	2.5
	CO4	3	3	3
	CO5	3	2	2.5
Engineering graphical Design Lab	CO1	2	3	2.5
	CO2	3	3	3
18EGDL15/25 C105	CO3	2	2	2
Engineering physics lab	CO1	2	3	2.5
18PHYL16/26 C106	CO2	3	2	2.5
	CO3	2	2	2
	CO4	3	3	3
	CO5	2	2	2
Basic Electrical Engineering Lab	CO1	3	2	2.5
18ELEL17/27 C107	CO2	3	2	2.5
Technical English –I	CO1	3	2	2.5
18EGH18 C108	CO2	3	3	3
	CO3	3	2	2.5
	CO4	3	3	3
	CO5	3	2	2.5
Advanced Calculus and Numerical Methods	CO1	3	2	2.5
18MAT 12/22 C109	CO2	3	3	3

	CO3	3	2	2.5
	CO4	3	3	3
	CO5	3	2	2.5
Engineering Chemistry	CO1	3	2	2.5
18CHE 12/22 C110	CO2	3	3	3
	CO3	3	2	2.5
	CO4	3	3	3
	CO5	3	2	2.5
C programming for problem solving	CO1	3	2	2.5
18CPS13/23 C111	CO2	3	3	3
	CO3	3	2	2.5
	CO4	3	3	3
	CO5	3	2	2.5
Basic electronics	CO1	3	2	2.5
18ELN14/24 C112	CO2	3	3	3
	CO3	3	2	2.5
	CO4	3	3	3
	CO5	3	2	2.5
Elements of mechanical engineering	CO1	3	2	2.5
18ME15/25 C113	CO2	3	3	3
	CO3	3	2	2.5
	CO4	3	3	3
	CO5	3	2	2.5
Engineering Chemistry Lab	CO1	2	3	2.5
18CHEL16/26 C114	CO2	3	1	2
Programming in c laboratory	CO1	3	2	2.5
18CPL17/27 C115	CO2	3	3	3
	CO3	2	3	2.5
	CO4	3	2	2.5
Technical English –II	CO1	3	2	2.5
18EGH28 C116	CO2	3	3	3
	CO3	3	2	2.5
	CO4	3	3	3
	CO5	3	2	2.5

8.5 Attainment of Program Outcomes from first year courses (20)

Total Marks 20.00

8.5.1 Indicate results of evaluation of ezch relevant PO and/ or PSO, if applicable (15)

Institute Marks : 15.00

POs Attainment:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C111	2	2	2	2	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C112	2	2	2	2	2	1	2	PO8	PO9	PO10	PO11	PO12
C113	1	1	2	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C114	2	2	1	2	2	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C115	2	2	2	2	2	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C116	2	2	2	2	2	PO6	PO57	3	2	2	2	3
C117	2	1	2	2	2	PO6	PO7	2	3	2	3	2
C118	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	2	2	PO11	2
C121	2	2	1	2	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C122	2	2	2	2	PO5	PO6	PO7	PO8	PO9	PO10	PO11	1
C123	2	2	2	1	1	PO6	PO7	PO8	PO9	PO10	PO11	1
C124	2	2	2	2	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C125	1	2	2	2	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C126	2	2	3	2	2	2	3	3	2	3	2	2
C127	2	2	1	2	3	2	2	1	2	2	2	1
C128	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	2	2	PO11	2
C231	2	2	2	2	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C232	1	3	2	3	2	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C233	2	2	2	2	1	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C234	2	2	3	2	2	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C235	2	3	3	3	3	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C236	2	2	2	2	3	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C237	2	2	2	2	2	2	1	3	2	2	3	3
C238	2	2	2	2	2	PO6	PO7	2	2	2	2	2
C239	PO1	PO2	PO3	PO4	PO5	PO6	PO7	3	1	2	PO11	2
C241	2	3	2	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C242	2	2	3	3	2	PO6	PO7	PO8	PO9	PO10	PO11	1
C243	2	2	2	2	1	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C244	2	2	1	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C245	3	3	3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C246	3	2	2	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CL247	2	3	2	2	2	PO6	PO7	2	2	2	1	2
CL248	1	1	1	2	2	PO6	PO7	2	2	2	1	2
C249	2	3	PO3	PO4	PO5	2	PO7	1	2	PO10	PO11	PO12
C351	2	3	2	2	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C352	3	3	3	PO4	3	PO6	PO7	PO8	PO9	PO10	PO11	1
C353	2	2	3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C354	2	2	3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C355	2	3	3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C356	2	3	1	2	3	PO6	PO7	2	2	1	2	1
C357	1	1	1	1	2	PO6	PO7	3	2	2	2	1
C358	2	2	2	PO4	PO5	PO6	3	PO8	PO9	PO10	PO11	PO12
C359	3	3	2	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C361	2	2	3	2	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C362	2	2	2	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C363	2	2	2	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C3642	2	3	2	PO4	PO5	1	1	PO8	1	PO10	PO11	PO12
C3653	1	1	1	2	3	PO6	PO7	2	3	2	2	2
C366	2	2	1	2	2	PO6	PO7	2	2	1	2	2

C367	2	2	3	2	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C368	2	2	3	2	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C471	2	2	2	1	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C472	2	2	2	2	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C4733	2	2	2	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C4743	2	2	2	PO4	PO5	1	2	PO8	PO9	PO10	PO11	PO12
C4753	2	2	3	2	2	2	PO7	PO8	PO9	1	1	1
C476	2	1	1	2	2	1	2	1	2	1	1	1
C477	2	2	3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C481	2	2	2	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C4824	2	3	2	2	1	2	3	2	3	1	2	1
C483	3	2	2	2	3	1	1	2	2	2	2	2
C484	3	3	3	2	2	1	1	2	3	2	2	2
C485	3	3	3	2	2	1	1	2	3	2	2	2

PO Attainment Level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Direct Attainment	2.02	2.15	2.10	2	2.1	1.46	1.83	2.11	2.14	1.81	1.89	1.68
CO Attainment	2.02	2.15	2.10	2	2.1	1.46	1.83	2.11	2.14	1.81	1.89	1.68

PSOs Attainment:

Course	PSO1	PSO2
C111	1	1
C112	2	2
C113	3	1
C114	2	2
C115	2	2
C116	3	2
C117	2	2
C118	PSO1	2
C121	2	2
C122	2	2
C123	2	3
C124	3	1
C125	2	2
C126	2	1
C127	PSO1	3
C128	PSO1	2
C231	2	2
C232	2	3
C233	2	2
C234	1	2
C235	PSO1	PSO2
C236	3	PSO2
C237	3	3
C238	2	2
C239	2	1
C241	2	2
C242	2	1
C243	2	2
C244	3	3
C245	2	2
C246	3	2
CL247	2	3
CL248	2	3
C249	1	1
C351	3	2
C352	2	1
C353	2	2
C354	1	1
C355	1	1
C356	1	2
C357	2	1
C358	PSO1	PSO2
C359	1	1
C361	2	1
C362	2	2
C363	1	2
C3642	PSO1	2
C3653	PSO1	2
C366	2	1

C367	1	1
C368	2	1
C471	PSO1	2
C472	PSO1	2
C4733	2	2
C4743	2	PSO2
C4753	PSO1	2
C476	1	2
C477	2	2
C481	1	1
C4824	1	2
C483	1	2
C484	1	2
C485	1	2

PSO Attainment Level

Course	PSO1	PSO2
Direct Attainment	1.87	1.83
CO Attainment	1.87	1.83

8.5.2 Actions taken based on the results of evaluation of relevant POs (5)   Institute Marks : 5.00

POs Attainment Levels and Actions for Improvement- (2021-22)

POs	Target Level	Attainment Level	Observations

PO 1 : Engineering Knowledge

PO 1	2	1.73	Basic Engineering fundamental knowledge of students needs to be improved.

Action 1: Emphasized on Mathematical fundamentals before actually teaching concerned subject topics and made them solve more problems. Action 2: More problems will be given for practice. Action 3: More emphasis is given to teach fundamental concepts.

PO 2 : Problem Analysis

PO 2	1.99	1.72	Students analytical skills are to be improved to analyze complex Engineering Problems.

Action 1:Mini projects are done to improve the analytical skills in the higher semesters Action 2: Preference given to hands on sessions during class hours in the coming semesters

PO 3 : Design/development of Solutions

PO 3	2	1.66	Students ability to design solutions for complex problems needs to be improved

Action 1:Encourage to carry out Projects on societal and environmental concerned issues Action 2:Students were made to design and implement additional programs during lab sessions .

PO 4 : Conduct Investigations of Complex Problems

PO 4	1.85	1.66	Students need to be made more research oriented towards analysis and synthesis of results.

Action 1:Students were advised to refer relevant sources during literature survey to gain research-based knowledge. Action 2:Case studies are assigned to Students. Workshops are conducted to conduct investigations on complex problem with exhaustive input sets.

PO 5 : Modern Tool Usage

PO 5	1.5	1.43	Usage of modern tool in the program needs to be improvised.

Action 1:Hands-on session is conducted to learn modern tools.

PO 6 : The Engineer and Society

PO 6	1.5	1.39	Ability to map technology to give solutions to societal problems, needs to be strengthene

Action 1:Students are encouraged to consider the impact of engineering solutions on Society, Health, safety etc., during induction program Action 2 : Awareness created among students by conducting socio economic lectures. development.

PO 7 : Environment and Sustainability

PO 7	1.9	1.41	Student need to be motivated to develop real time application by considering the impact on environmental contexts.

Action 1:Students are encouraged to carry out projects related to environment and design sustainable solutions. Action 2 : NSS activities are planned for socio economic development.

PO 8 : Ethics

PO 8	1.5	0.96	Student knowledge to be enhanced more on professional ethics and responsibilities.

Action 1:Students were briefed about Ethics in Constitution of India and Professional Ethics. Action 2:Guest Lectures on professional ethics is conducted.

PO 9 : Individual and Team Work

PO 9	1.5	1.2	Few Students need to be improved in Functioning effectively as an individual and as a team leader.

Action 1:Students are made to present individually in Technical seminar. Action 2:Group activities are conducted Action 3: Promote students leadership qualities by providing platform for co-curricular and extra-curricular activities.

PO 10 : Communication

PO 10	2	0.9	The communication and presentation skills areto be further improved among the students.

Action 1:Students were advised to speak in English Action 2:Training and Placement department conducts soft skills training, technical training, Group Discussions and etc., to improve the communication and write-ups. Action 3:Course wise student presentations are conducted

PO 11 : Project Management and Finance

PO 11	1.5	1.03	Planed to attain in the next academic year.

Action 1:Guest lecture is conducted to learn cost estimation and cost-effective techniques by taking practical examples.

PO 12 : Life-long Learning

PO 12	1.6	1.58	Learning habit among students can be strengthened.

Action 1:Students were instructed to understand and learn the concepts well, because they have to use certain concepts throughout their profession. Action 2:Motivate students for higher studies Action 3:Motivate students for learning new technologies

PSOs Attainment Levels and Actions for Improvement- (2021-22)

PSOs	Target Level	Attainment Level	Observations
PSO 1 : To Analyze, design and develop solutions by applying foundational concepts of Electronics and Communication Engineering.			
PSO 1	1.8	1.64	Target is not achieved. In the course 18EC32-Network Theory , the understanding and solving complex problems is tedious for students In the course 18EC33-Electronic Devices, the student have difficulty in understanding the basic concepts behind the design of circuits. In the course 18EC52-Digital Signal Processing, the understanding and solving complex problems is tedious for students.

Action 1: For slow learners extra classes will be handled to make the student understand better. Action 2: Assignments will be given to students to analyze the methods which are used to solve and arrive at solutions. Action 3: To enhance professional skills: seminars, guest lectures, technical talks will be arranged with academic and industrial experts.

PSO 2 : Design and implement the products using cutting edge technologies in hardware and software, to demonstrate leadership qualities among students, to promote research and development activities for betterment of organization and society.

PSO 2	1.8	1.81	Target achieved.

Action 1: Along with project work, the students are advised to think Innovatively in their interested subjects and take up that idea to implement. Action 2; IIC activities is conducting for students. Action 3: Motivating students to choose multi disciplinary projects.

9 STUDENT SUPPORT SYSTEMS (50)   Total Marks 50.00

9.1 Mentoring system to help at individual level (5)   Total Marks 5.00

Institute Marks : 5.00

The institution has well defined mentoring process for all the programs. The mentoring system is established with the following objectives.

1. Interact with the students and help them to face challenges.
2. Monitor the academic progress.
3. Enhance interpersonal skills.
4. Understanding the student potential and enhance their career planning skills.
5. Motivate the students to participate in Co-curricular and extra-curricular events

Process of mentoring:

At the start of the first semester, a Mentor is assigned with 20 students. Each mentor keeps a Mentor Book that includes information about the mentors, parents or guardians, including name, address, phone number, and academic information. The Mentee is instructed to fill out the entire mentor book with relation to his/ her personal information. The Mentor book includes information on attendance, performance on internal examinations, information about counseling following the internal tests, and university results, followed by an undertaking from the student and parent. The mentor records every exchange between himself and his mentee over the whole semester. For the eight semesters, this data on mentor-mentee interactions is maintained. The mentor book also includes information about the academic details like projects, internships, conferences, and seminars, as well as co-curricular and extracurricular activities.

SI.No.	Proctor level	Particulars	
		Mentor	Faculty act as a Mentor
1	Level-1, Mentor System	No. of students	20
		Frequency of meeting	Meeting is conducted every month after the internal assessment.
		Parent Teacher interaction	The parent feedback is collected.
2	Level-2, Mentor System	Mentor Coordinator /HOD counselling	The feedback collected will be referred by mentor coordinator/HOD for corrective measures based on the requirement.
3	Level-3, Mentor System	Counselling by Principal	After the second level ,the students will be counselled by Principal if required.
4	Level-4, Mentor System	Professional Counselling	After the third level of counselling ,the students may be referred to Professional counsellors based on the need.

SAMPLE MENTOR BOOK

"Be A successful Engineer"

Academic Details

1st Year (1st Semester) University Exam. Details:

Sl. No.	Subject Code	Subject Name	1st	2nd	3rd	4th	SGPA
1.	21MAT11	Calculus and differential	97				
2.	21PHY21	Engineering physics	77				
3.	21ELE13	Basic electrical engine	72				
4.	21CIV14	Element of civil and mechanics	73				
5.	21EV15	Engineering visualisation	93				
6.	21PHY16	Engineering phy lab	92				
7.	21ELE17	Basic electrical engineering lab	78				
8.	21EGH18	Technical english	88				

1st Year (1st Semester) Subject Teacher's Details:

Sl. No.	Name of the Course / Subject	Subject Teacher's Name	Dept.
1.	Calculus and differential equation	Mrs Divya / Dr. Pradeep kumar KT	
2.	Engineering physics	Dr selvangdan S / Mrs Arundhi D	
3.	Basic electrical engineering	Mr. Ramkumar	
4.	Element of civil and mechanics engineering	Dr. HS Govardhan Swamy	
5.	Engineering visualization	Mr. Chandrashekar	
6.	Engineering physics lab	Dr. Selvanathan S / Mrs Arundhi D	
7.	Basic electrical lab	Mr. Praveen Patel	
8.	Technical english	Mrs Shwetha	

1st Year (1st Semester) Training Details:

Type of Training	From	To	Duration	Organization Details

Name of the Class Teacher (1st Sem.)	Department	Contact No.
Mr. Ramkumar	Electrical	9742730599.

Signature of Class Teacher   Signature of Proctor   Signature of HoD

ACSCE - BANGALORE   P - 5   PROCTOR REGISTER - Ver-1

Sl. No.	Date	Time	Duration	Remarks
1.	19/02/22	11:30 - 12:30	1 hr	I will improve physics and electrical in next internals.
2.	08/4/22	12:30 1	1 hr	Less marks in Civil & E.V.
3.	29/04/22	12:19 1:00	45 min	Less marks in civil
4.	20/5/22	12:45 2:45	2 hr	Less marks in electrical.

Proctor Interaction Details with the Student (1st Semester)

Suggestions	Sign. of Student	Sign. of Proctor	Sign. of Proctor Supervisor	Sign. of HoD
Concentration on physics & electrical subjects.				
Improvement required in civil and E.V.				
Improvement required in civil				
Improvement required in electrical				

Behavioral / Psychological Profile during (1st Semester)

Suggestions	Sign. of Student	Sign. of Proctor	Examined by	Examined by

The mentoring process has improved the overall performance of the students.

9.2 Feedback analysis and reward /corrective measures taken, if any (10)   Total Marks 10.00

Institute Marks : 10.00

- A scale from 1 to 5 is used to rate Faculty feedback (5-point scale).
- An Assessment Committee led by the Head of the department analyses the student response after it has been collected.

The feedback collected from students is analyzed by Department Advisory Board (DAB). Performance of each individual faculty is assessed and corrective measures are listed (if any). Feedback will be shared to individual faculty with necessary advice on the factors to be improved.
All the courses mentioned in the feedback form are analyzed as follows

Faculty Feedback Form

Student Feedback Form Sample Report

ACS College of Engineering
(Approved by AICTE, New Delhi, Govt. of Karnataka & Affiliated to Visvesvaraya Technological University, Belgaum)
Sponsored by : MOOGAMBIGAI CHARITABLE AND EDUCATIONAL TRUST

STUDENT FEEDBACK FORM ODD / EVEN SEMESTER
DATE: 13/12/20

ACADEMIC YEAR / SEMESTER / SECTION : 2020-2021, V SEM, BRANCH: ECE

S.No.	Sub. Code	Subject Title	Faculty Name	1 Punctuality / Class Time Utilization	2 Ability to explain	3 Interaction with Students	4 Subject Knowledge	5 Presentation of the subject	6 Motivating the students	Total (Max. 30)
1	18ES51	Technological Innovation Management & Entrepreneurship	Dr. H B Bhuvaneswari	5	4	3	4	5	5	26
2	18EC52	Digital Signal Processing	Mr. Prajith Prakash Nair	5	5	3	4	5	5	27
3	18EC53	Principles of Communication System	Dr. A M Prasanna Kumar	5	5	5	4	4	4	27
4	18EC54	Information theory & coding	Mrs. Bharathi Gururaj	5	4	5	5	3	5	27
5	18EC55	Electromagnetic Waves	Mr. Prajith Prakash Nair	5	4	4	5	5	5	28
6	18EC56	Verilog HDL	Mrs. Vijaya Dalawai	5	5	5	5	5	5	30
7	18ECL57	DSP lab	Mr. Prajith Prakash Nair	5	4	5	4	4	5	27
8	18ECL58	HDL Lab	Mrs. Vijaya Dalawai	5	5	5	5	5	5	30

Scale :   5 – Excellent   4 – Very Good   3 – Good   2 – Fair   1 - Poor

A list of the corrective actions taken by the Head of the department

- Remedial measures are suggested for improvement and are documented if feedback is less than 80%.
- Necessary advice by the Head of the department
- Encouraging faculty to participate in Faculty Development Programs (FDP) that focus on efficient teaching techniques.

Effectiveness

The improvement of the faculty performance with respect to parameters is reflected in the subsequent feedback.

ACTION TAKEN SCREENSHOTS

ACS College of Engineering
(Approved by AICTE, New Delhi, Govt. of Karnataka & Affiliated to Visvesvaraya Technological University, Belgaum)
Sponsored by : MOOGAMBIGAI CHARITABLE AND EDUCATIONAL TRUST

STUDENTS FEED BACK & ACTION TAKEN REPORT ODD / EVEN SEMESTER
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ACADEMIC YEAR / SEMESTER / SECTION: 2021-2022(EVEN)/VI   DATE: 14.07.2022

S.No.	Sub. Code	Subject Title	Faculty Name	1 Punctuality / Class Time Utilization	2 Ability to explain	3 Interaction with Students	4 Subject Knowledge	5 Presentation of the subject	6 Motivating the students	Total (Max. 30)	Action Taken
1	18EC61	Digital Communication	Mr. Nagesh HB	5	4	5	5	4	5	27	Advised to take-up some Real time examples for explanation.
2	18EC62	Embedded Systems	Mrs. Renuka Kelkar	5	5	5	5	5	4	29	Concentrate on Programming part
3	18EC63	Microwave and Antennas	Dr. A. M. Prasanna Kumar	5	5	5	5	4	5	29	Design to be neatly explained.
4	18EC642	Artificial Neural Networks	Mrs. Vijaya Dalawai	5	5	5	5	5	5	30	Cases to be taken with real time examples
5	18CV653	Occupational Health and safety	Mrs. Sahana	5	4	4	5	4	5	27	Advised to use ICT tools to show real time cases
6	18ECL66	Embedded Systems Lab	Mrs. Renuka Kelkar	3	5	5	5	5	4	27	Concentrate on Programming part of Hardware also.
7	18ECL67	Communication Lab	Mr. Nagesh HB	5	5	5	5	5	5	30	Advised to concentrate on write up of students correctly for programs
8	18ECMP68	Mini-Project	Dr. A. M. Prasanna Kumar	5	5	5	5	5	5	30	Mini Project Exhibition conducted.

Head of the Department   Principal

9.3 Feedback on facilities (5)   Total Marks 5.00

Institute Marks : 5.00

Student's feedback about college facilities are gathered annually. In accordance with the comments, necessary actions are done. The students can share their opinions and recommendations regarding the amenities. After discussions, the institutions head, in consultation with the management, took corrective action. Student feedback is gathered, analyzed, and corrected actions are used as the basis for assessment.

The following procedures are followed for collecting facility feedback:

1. The procedure of gathering Feedback
2. Feedback evaluation
3. Corrective measures

Feedback gathering procedure:

Objectives	Descriptions
Feedback gathered regarding college facilities.	Yes
Feedback collection process	Feedback forms are given to the students
Feedback cumulative reports are Collected	Head of the Department/Principal
The frequency of feedback gathering	Once in an academic year
Measurements used in calculations	5 point- scale(excellent, very good, good, fair, poor)
Purpose	To improve the quality of teaching

Students Feedback Survey on Facilities

Rate the availability of the following facilities:

(Excellent) 5 - - 4 - - 3 - - 2 - - 1 (Not Satisfactory)

	5	4	3	2	1
Class Rooms	5	4	3	2	1
Laboratories	5	4	3	2	1
Restrooms	5	4	3	2	1
Common Rooms	5	4	3	2	1
Cafeterias / Canteen	5	4	3	2	1
Parking	5	4	3	2	1
Drinking Water	5	4	3	2	1
Fire Extinguisher	5	4	3	2	1
Play Ground	5	4	3	2	1
Sports Equipments	5	4	3	2	1
Auditorium	5	4	3	2	1
Swimming Pool	5	4	3	2	1
Gymnasium	5	4	3	2	1

Rate the satisfaction of the following facilities:

(Excellent) 5 - - 4 - - 3 - - 2 - - 1 (Not Satisfactory)

	5	4	3	2	1
State of Technology used in laboratories	⑤	④	③	②	①
State of equipments in laboratories	⑤	④	③	②	①
ICT Tools	⑤	④	③	②	①
Cleanliness	⑤	④	③	②	①
Orderliness	⑤	④	③	②	①

9.4 Self-Learning (5)   Total Marks 5.00

Rate the satisfaction of the following facilities:

(Excellent) 5 - - 4 - - 3 - - 2 - - 1 (Not Satisfactory)

	5	4	3	2	1
State of Technology used in laboratories	⑤	④	③	②	①

Institute Marks : 5.00

Self–Learning: The academic performance of the student enhances through self-learning. It helps the students to gain the knowledge and learning beyond syllabus. The Institution takes maximum care to provide the necessary facilities to ensure self-learning. The facilities include Library(at college level and at department level),Internet facility, online journal subscription, VTU e consortium resources, VTU Edusat program.

A. **The Institution needs to specify the facilities, materials for learning beyond syllabus, Webinars, Podcast, MOOCs etc. and demonstrate its effective utilization. Detailed list of resources for self-directed learning:**

LIBRARY

The ACSCE Library and Information Centre started in the year 2009 at Kambipura, Bengaluru managed by the Moogambigai Charitable and Educational Trust with an initial collection of 6000 volumes of textbooks, 82 National & International Print Journals and with other necessities. It has housed in the college building Ground Floor with a total area of 360 Sq. Mtrs. with good and well equipped with lightings, furniture's & ventilation.Presently it is moved to 6th floor of the same building with the 15,488 Sq. Ft. with all the advanced facilities & services (details mentioned in the next slides). To catering to the needs of all specialties of UG & PG, Research & Developmental activities having the collection of around 16500 volumes, 62 National & International Print Journals, Back Volume of Journal, e- Resources and many more with seating capacity of 320 students & faculty well ventilation, lightings & furnitures.

Library NDL Approval
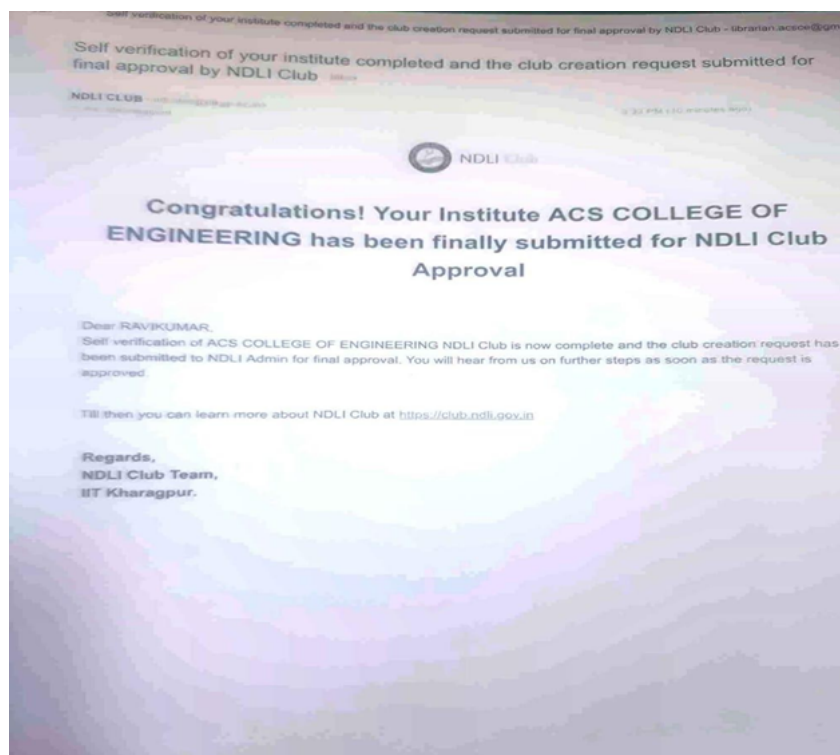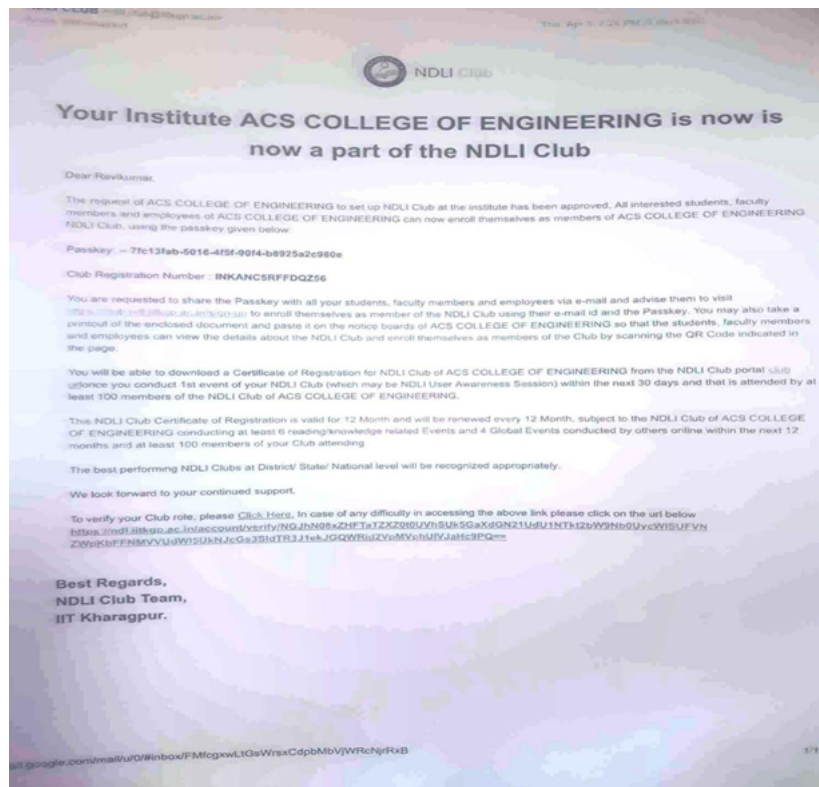
LIBRARY FACILITIES

- Automated through RFID circulation counters.
- Reference Section.
- Digital Library service.
- e-Journals facility.
- Print version Journals and Magazines.
- Previous Question papers.
- Internet centre for browsing.

LIBRARY VIEW

LIBRARY ADVISORY COMMITTEE

S.No	Name of the Faculty	Designation a	Library Advisory committee (LAC) Designation
1.	Dr. M S Murali	Principal	Chairperson
2.	Dr. Prasanna Kumar	Professor	Member
3.	Prof. Sivasankar	Asst. Professor	Member
4.	Mr. Kiran. R	Chief Librarian, Library	Member
5.	Mr. Ravikumar. N	Librarian, Library	Member

Library Resources as on February, 2020

Sr. No.	Source Details	Collection
1.	Collection of Titles/Textbooks	
	Total No. of Textbooks	19860
	Total No. of Title	3598
2.	Current Year Periodicals	
	National Journals	53
	International Journals	17
	New Papers	12
3.	e-Resources (Online Journals) through VTU Consortium	
	Elsevier, Taylor & Fracis, Springer Nature, Institute of Civil Engineers, Emerald (Mgt.) Datebase:BSB BIS Standards, Scopus (only for VTU) e-books Prepetual Acecess) Remote access, Turnitin (Plagiarism Software Olin Tool)	
4.	Institutional Membership	British Library
5.	Bound Volume of Journals	88
6.	Non-Book Materials	
	CD-ROM/DVDs	657
	In addition we have EDUSAT e-Learning Program & NPTEL Lecture notes	
7.	Computers	25
8.	Book Bank	250

Books & Journals details as on February, 2020

SL. No	Department	No of Titles	No of Volumes	No. of Journals National	No. of Journals International	E – journals Member of VTU Consortium
1	Comp. Science Engg.	546	3104	8	2	Elsevier Taylor & Francis, Springer Nature, Institute of Civil Engineers, Emerald (Management) Databases :BSB BIS Standards, Scopus Database (only for VTU) E-Books (Prepetual Acecess)Packt, Taylor & Francis, MGH, Elsevier SD, New Age K-Nimbus e-library+ Remote Acces, Netanalytiks Platforms & Turnit in (Plagiarism Software Online Tool)
2	Electronics & Communication Engg.	696	3910	8	2	
3	Mechanical Engg.	440	2542	8	2	
4	Civil Engg.	454	2589	8	2	
5	Aeronautical Engg.	465	2126	6	2	
6	Biomedical Engg.	514	1898	6	2	
7	Aerospace Engineering	32	179	6	2	
8	Science & Humanities	451	3512	3	3	
	T O T A L –	3598	19860	53	17	

E-Learning

ACS College of Engineering has the E-learning facility that helps teachers to provide opportunities for mutual discussion, access to online resources. This basically enhances the quality of education by making communication smooth and fast between the teacher and learner. E-learning is the innovative mode of learning with the help of communication technologies (ICTs). It comprises of the use of ICT based tools (e.g. Internet, computer, telephone, radio, video, and others) and content created with technology (e.g. animations) to support teaching and learning activities.

[su_accordion] [su_spoiler title="Online Data Base" style="fancy"] NPTEL
Jgate [/su_spoiler] [su_spoiler title="E-Reference" style="fancy"] 1.Cambridge Dictionaries Online
2.Foreign Language Dictionary-French
3.Foreign Language Dictionary-Spanish
4.Glossary
5.Librarian's Index to the Internet
6.Merriam-Webster
7.One Look Dictionaries
8.Scholarpedia
9.Subject Dictionary-Library and Information Science
10.Subject Dictionary-Library and Information Science
11.Subject Dictionary-Science
12.Subject Dictionary-Technology
13.Wikipedia [/su_spoiler] [su_spoiler title="General & Search Engine" style="fancy"] 1.BASE (Bielefeld Academic Search Engine)
2.Intute – Free online service with access to the best resources available on the internet
3.List of top companies in Indian and abroad
4.Nobel Prize Internet Archive
5.Selected internet resources in all subjects
6.Social Science Information gateway [/su_spoiler] [su_spoiler title="Open Access E-Books" style="fancy"] 1.Access to Global online Research in Agriculture (AGORA)
2.Bioline international – Open Source Journals
3.CIMMYT : an international Maize and Wheat Improvement Centre
4.Directory of Open Access Journals
5.EPW (Economic and Political Weekly)
6.European Scientific Co-operative on Phyto therapy – European Phyto journal – free online
7.Evidence-Based Complementary and Alternative Medicine

Activate

8.Electronic Resources for Mathameticians Science

9.Free Medical Journals

10.Free On-line Chemistry journals

11.Health Inter Network Access to Research Initiative

12.High Wire Press hosts the largest repository of free full-text peer-reviewed content

13.Indian Academy of Sciences (IAS)

14.International Network for the Availability of Scientific Publications (INASP)

15.INSPIRE- HEP L iterature Database

16.Indian Academy of Sciences Publications

17.Journal of Postgraduate Medicine

18.myownjournal

19.Med Indian-medical journals – full text of 33 Journals

20.Molecular Diversity Preservation International (MDPI)

21.National Preservation Office – NPO

22.Nature Proceedings – Preprint server for the Life Science community.

23.Nature Publishing Group – Open Access Journals

24.Nutrition Bytes – Free full text

25.OMICS Publishing Group – Open Access Journals

26.Open Access Library (OALIB) – Free Access to 263,388 Academic Articles

27.Open Science Directory – Developed by EBSCO and the Hasselt University Library

28.Palgrave Macmillan – Open Access Journals

29.Physics related free access journals

30.PSI gate provides access to evaluated network based information services and resources in the physical sciences.

31.Public Library of Science – premier open-access journals in Biology and Medicine

32.Publisher of more than 150 peer-reviewed Open Access Journals

33.SAGE Open Subject Collections

34.Social Science Research Network (SSRN) – Worldwide dissemination of social science research.

35.Springer Open gives you free access in Science, Technology and Medicine.

36.The African Journal Archive

37.The U.S. National Institutes of Health (NIH) free digital archive of biomedical and life sciences journal literature.

38.University of Tennessee – Research Guides – Citation Formats and Style Manuals, Databases and other e-resources collection.

39.Wiley Open Access Journal [/su_spoiler] [/su_accordion]

Encouragement for e-shikshana and online courses:

The institute has registered with multiple portals in order to give students and staff access to sign up for various online courses and certifications through the organizations listed below, as well as to stay up to date with cutting-edge technical innovation.

Infosys Limited

PRIVACY & DATA PROTECTION AGREEMENT
On the Processing of Personal Information/Data by Contract
("Data Processing Agreement"/ "DPA")

By and Between
"Infosys"
[InfosysLimited](and their subsidiaries, parent, and affiliates)
with its registered office at
[Plot No. 44 & 97A, Electronics City, Hosur Road, Bangalore -560100, Karnataka, India]
And
"Partner"
[ACS College of Engineering,Bangalore] (and their subsidiaries, parent, and affiliates)
with its registered office at
[#202,Kambipura,Mysore Road,Bangalore-560074,Karnataka,India]

each a "Party"; together "Parties"

1. **Definitions:**

i. 'Personal data/information'(hereinafter "PI") shall mean any information/data relating to an identified or identifiable natural person ('data subject'). For the purpose of this definition, PI may also include **Sensitive Personal Information**, as per Applicable Privacy Laws, including without limited to (i) a first name, last name or initials; (ii) a home or other physical address, including street name and name of city or town; (iii) an email address or other online contact information; (iv) a telephone number; (v) a social security number, tax ID number or other government-issued identifier; (vi) an Internet Protocol ("IP") address or host name that identifies an individual; (vii) a persistent identifier held in a "cookie" that is combined with other available data that identifies an individual; (viii) birth dates, (ix) Personally identifiable financial information, passport related details, (x) PHI (Protected Health Information) identifiers, racial or ethnic origin, political opinions, religious or philosophical beliefs, trade-union membership, health or sex life. Additionally, to the extent any other information (such as, but not necessarily limited to, IP addresses, other unique identifier, or biometric information) is associated or combined with PI, then such information also will be considered PI. PI may as well include information relating to legal entities, if so required by the applicable law.

ii. 'Applicable Privacy Laws' refers to all laws, rules, regulations and standards that are designed to protect the privacy rights or privacy expectations of the Parties (the term includes all subsidiaries and affiliates of the Parties), their employees, clients and client - customers and any other third party vendors.

iii. 'Data Controller' or 'Controller' means the entity that determines the purposes and means of Processing of Personal Data, either alone or jointly with another entity.

iv. 'Data Subject' means any individual whose Personal Information is collected, used and/or processedunder this DPA for the business purpose(s) of the Parties. Explanation: list includes employees, clients, client customers, agents, contractors.

v. 'Technical and Organizational Security Measures' means those measures aimed at protecting personal data against accidental or unlawful destruction or accidental loss, alteration, unauthorized

- **University of Aberdeen**

UNIVERSITY OF ABERDEEN

School of Engineering
Fraser Noble Building, King's College
Aberdeen AB24 3UE, Scotland, UK

Direct Tel: +44 (0) 1224 272817
Fax: +44 (0) 1224 272497
Mobile: +44 (0) 7908 003241
email: k.nakkeeran@abdn.ac.uk

MEMORANDUM OF AGREEMENT
FOR ACADEMIC COLLABORATION
Between
ACS COLLEGE OF ENGINEERING
(A UNIT OF RAJARAJESWARI GROUP OF INSTITUTIONS, BANGALORE, INDIA)
and
SCHOOL OF ENGINEERING, UNIVERSITY OF ABERDEEN
SCOTLAND, United Kingdom

Whereas the above named institutions recognize that academic collaboration would be of mutual benefit and would provide strengths in research and education and their mutual interest in engaging themselves in academic cooperation with the Rajarajeswari Group of Institutions and the School of Engineering, University of Aberdeen, Scotland, UK, it is agreed that:

Faculty

Each institution will promote the exchange of faculty for teaching and/or for collaborative research programs in the area of Engineering.

Students

2.01 Each institution will promote internship or/and semester exchange of qualified undergraduate and/or graduate students in the other's academic programs.

a. Exchange: Each student involved in an exchange program will be subject to the admission requirements, tuition and fees of the host institution. Language competency must be at a level that will allow participating students to attend classes in the language of the host institution.

b. Internship: Students will not pay tuition or fees that are involved at the host institution in an internship program as it does not include enrolling in classes. Application for the internship should be submitted to the faculty coordinators of this agreement.

2.02 Students will be responsible for their own transportation to and from the host institution, as well as for their room board, insurance and any other necessary fees while attending the host institution.

·ICT Academy

Value Added Courses

These courses are conducted by professionals and industry experts and help students stand apart from the rest in the job market by adding further value to their resume.

NPTEL Participated Student details

ACS COLLEGE OF ENGINEERING
207,KAMBIPURA,MYSORE ROAD

Url: http://www.acsce.edu.in/

- SPOC Name - DR T.SENTHIL KUMARAN
- Designation - PROFESSOR
- Partnering since - 2016-08-02
- College Id - 709 Institute Type - ENGINEERING, TECHNOLOGY AND MANAGEMENT

NPTEL is very happy to be associated with ACS COLLEGE OF ENGINEERING institute and its students. We are thankful to DR T.SENTHIL KUMARAN for being a pillar of support in NPTEL initiatives.

Course Run	Present	Gold	Elite	Silver	Sucessful	Participation
Jan-Apr 2022	28	1	8	5	8	6
Jul-Dec 2021	14	0	7	1	3	3
Jan-Apr 2021	4	0	1	1	2	0
Jan-Dec 2020	20	0	7	4	7	2

Spoken Tutorial -IIT Bombay

भारतीय प्रौद्योगिकी संस्थान मुंबई
पवई, मुंबई-400 076, भारत
Indian Institute of Technology Bombay
Powai, Mumbai-400 076, India

दूरभाष/Phone : (+91-22) 2572 2545
फैक्स/Fax : (+91-22) 2572 3480
ईमेल/Website : www.iitb.ac.in

IIT Bomba

Letter of Association

19th August 2021

To,
The Principal,
ACS College of Engineering
Mysore Road, Bengaluru, Karnataka 560074

We are happy to announce the **ASSOCIATION** of Knowledge Partner Spoken Tutorial MOOCs Training Program, IIT Bombay with **ACS College of Engineering, Bengaluru, Karnataka.**

The Program is a part of the National Mission on Education through ICT, MoE, Govt. of India, to spread IT Literacy all over India. We are promoting the learning and usage of Free & Open Source Software (FOSS), through an Audio-Video teaching tool, viz, 'Spoken Tutorial'. We support and motivate colleges to train students on Basic Computer Skills, Software and IT. The course and the training is offered for Rs. 25,000 per year to all the Colleges.

You are making an outstanding contribution by using ICT based teaching and learning methodology for students of your College.

Yours Sincerely,

For and On behalf of
Spoken Tutorials,
Indian Institute of Technology Bombay

Shyama Iyer.

Mrs. Shyama Iyer
National Coordinator
Spoken Tutorial Project, IIT Bombay

Student registration in Spoken tutorial in the year of 2021

| Spoken Tutorial | Software Training ▾ | Creation ▾ | News ▾ | Academics ▾ | About ▾ | Forums | Statistics ▾ | Login | Register |

☰ Workshop/Training Statistics

State	---------- ∨	Type	---------- ∨	Total number of Workshop/Training	24
City/Town	---------- ∨	Foss	---------- ∨	Total number of Institutes	1
Institution Type	---------- ∨	Date Range	2020-07-01	Participants Count	794
Institution	acs college of engineering		2021-07-01	Total participants (women)	398
Department	---------- ∨	Language	---------- ∨	Total participants (men)	396

◉ Completed Trainings   ○ Pending Attendance Trainings

[Filter] [Reset Filter]

● 2021
● 2020

🔍 Enlarge chart

#	State	City	Institution	FOSS	Department	Type	Organiser	Date	Participants	Action
1	Karnataka	Bangalore	ACS College of Engineering	HTML	CBSE	Mapped	DR. SENTHILKUMARAN	01 Jul 2021	24	View Participants

#	State	City	Institution	FOSS	Department	Type	Organiser	Date	Participants	Action
1	Karnataka	Bangalore	ACS College of Engineering	HTML	CBSE	Mapped	DR. SENTHILKUMARAN	01 Jul 2021	24	View Participants
2	Karnataka	Bangalore	ACS College of Engineering	Java	Biomedical Engineering	Mapped	DR. SENTHILKUMARAN	01 Jul 2021	25	View Participants
3	Karnataka	Bangalore	ACS College of Engineering	Android app using Kotlin	Computer Science Engineering (CSE B.Tech)	Mapped	DR. SENTHILKUMARAN	01 Jul 2021	45	View Participants
4	Karnataka	Bangalore	ACS College of Engineering	Android app using Kotlin	Computer Science Engineering Department 2	Mapped	DR. SENTHILKUMARAN	01 Jul 2021	44	View Participants
5	Karnataka	Bangalore	ACS College of Engineering	PHP and MySQL	Faculty Development Programs (FDPs) (PMMMNMTT)	Mapped	DR. SENTHILKUMARAN	01 Jul 2021	36	View Participants
6	Karnataka	Bangalore	ACS College of Engineering	Java	Faculty Development Programs (FDPs) (PMMMNMTT)	Mapped	DR. SENTHILKUMARAN	01 Jul 2021	38	View Participants
7	Karnataka	Bangalore	ACS College of Engineering	HTML	Faculty Development Programs (FDPs) (PMMMNMTT)	Mapped	DR. SENTHILKUMARAN	01 Jul 2021	46	View Participants
8	Karnataka	Bangalore	ACS College of Engineering	HTML	Computer Science Engineering (CSE B.Tech)	Mapped	DR. SENTHILKUMARAN	01 Mar 2021	45	View Participants

	State	City	College	Course	Type	Faculty	Date	Count	
12	Karnataka	Bangalore	ACS College of Engineering	LaTeX	Faculty Development Programs (FDPs) (PMMMNMTT)	Mapped	DR. SENTHILKUMARAN	01 Mar 2021	24	View Participants
13	Karnataka	Bangalore	ACS College of Engineering	Arduino	Electronics and Communication Engineering (B.Tech)	Mapped	DR. SENTHILKUMARAN	01 Mar 2021	40	View Participants
14	Karnataka	Bangalore	ACS College of Engineering	Python 3.4.3	Electronics and Communication Engineering (B.Tech)	Mapped	DR. SENTHILKUMARAN	01 Mar 2021	31	View Participants
15	Karnataka	Bangalore	ACS College of Engineering	HTML	Computer Science Engineering Department 2	Mapped	DR. SENTHILKUMARAN	01 Feb 2021	44	View Participants
16	Karnataka	Bangalore	ACS College of Engineering	Python 3.4.3	Computer Science Engineering Department 2	Outside	DR. SENTHILKUMARAN	01 Jan 2021	44	View Participants
17	Karnataka	Bangalore	ACS College of Engineering	Python 3.4.3	Computer Science Engineering (CSE B.Tech)	Mapped	DR. SENTHILKUMARAN	01 Jan 2021	45	View Participants
18	Karnataka	Bangalore	ACS College of Engineering	C and Cpp	Computer Science and Engineering (B.Tech)	Mapped	DR. SENTHILKUMARAN	01 Jan 2021	99	View Participants
19	Karnataka	Bangalore	ACS College of Engineering	C and Cpp	Biomedical Engineering	Mapped	DR. SENTHILKUMARAN	01 Jan 2021	26	View Participants
20	Karnataka	Bangalore	ACS College of Engineering	Python 3.4.3	Computer Science and Engineering	Mapped	DR. SENTHILKUMARAN	01 Jan 2021	2	View Participants

HACKTHON CONDUCTED BY ACSCE IN 2020

Smart India Hackathon -2022

Events conducted details for the Academic Year 2021-2022

Sl.No.	Name of the Conference/Webinar/FDP etc. organized	Date-Month-Year	Resource Person with Designation	% of students
1	Webinar on Embedded System & IOT	06-Dec-2021	Satish Pantech Solutions Pvt.Ltd	85%
2	Webinar on Industry 4.0 Smart Factories	31-Jan-2022	Dr. S. V. Sathish, Professor & HOD Mechanical Department, PES University	80%
3	Webinar on Hands on LabVIEW & Virtual Instrumentation	31-Jan-2022	Mr.Vasanth Kumar V, Assistant Manager, VI Solutions	70%
4	Webinar on 5G Key Technologies for Industry 4.0 & Hands-on Using Matlab 5G toolbox OMNET++ & NS3	01-Feb-2022	Dr. Siddalingappa Birader, Dayananda Sagar Acadamey of Technology & Management	**70%**
5	Webinar on Hands on LabVIEW Based Data Acquisition & Sensor Integration	01-Feb-2022	Mr. Rajkumar, Senior Application Engineer, VI Solution	90%
6	Webinar on Industry 4.0,Implementation with IOT & its research challenges	02-Feb-2022	Dr. Muralidhar Kulkarni, Professor, Department of ECE, NIT	85%
7	Webinar on Digital Transformation Technologies Cloud Overview with Industry 4.0	03-Feb-2022	Mr. Santhosh A Chachadi, Manager, Cloud Operations, SAP LABS India	**80%**
8	Webinar on Hands-on LabVIEW Based Control System Design & UI Development	03-Feb-2022	Mr. Rajkumar, Senior Application Engineer, VI Solution	80%
9	Webinar on Implementation of Industry 4.0, Adoption in Various Sectors and Case Studies	04-Feb-2022	Mr. Vasanth Kumar & Mr. SatyaNarayan, Assitant Manager, VI Solutions	70%
10	Webinar on Stress Management, Emotion & Physical Health	04-02-2022	Dr. Shivashankar P Shenoy	85%
11	Seminar on Carrer Guidance Program	09-Apr-2022	Mr. Ramesh P	75%
12	Industrial Visit on Di-facto Robotics & Automation Pvt Ltd	28-Apr-2022	Mr. Arun Kumar Singh	80%
13	Workshop on Microwave Technology	06-May-2022	Mr. RaviKumar, Technilab Instruments	**85%**

14	Workshop on IOT & its Implementation	09-May-2022	Mr. Kushal, Edgate Technologies	75%
15	Seminar on Career Guidance	10-May-2022	Mr. Chowdary, BE Pratical Solution	90%
16	Project Exhibition	29-Jul-2022	Dr. A M Prasanna Kumar	85%

9.5 Career Guidance, Training, Placement (10)   Total Marks 10.00

Institute Marks : 10.00

Training and Placement Cell of A C S College of Engineering has evolved and emerged as a destination for many National and Multi-National organizations to recruit the fresh talent nurtured in the campus. In the journey towards excellence, many milestones were also set by the Department in terms of Quality and Quantity. The excellent infrastructure facilitates the smooth functioning of various Training & Placement activities.

Training and Development Programs are conducted for students and faculty in a phased manner in order to achieve the desired results and set targets. Regular mentoring and one-on-one counseling has been done to the students facing difficulties in recruitment activities.

The consistent placement record illustrates the commitment towards progress of the institution. Many high profile companies like SRIT-Dubai, Capgemini, Tech Mahindra, Mphasis, hp, Siemens, Robert Bosch, L&T Infotech, IBM, Microland, Infosys Technologies, PARK Controls & Communications, SUBEX, Alpha9Marine solutions, visit and conduct Placement activities regularly.

Vision

To reduce the gap between candidate skills and industry needs by producing competent resources equipped with personality development and campus recruitment training along with professional etiquette & providing them the best possible opportunities to thrive in their career.

Mission

The training and Placement team of ACS college of Engineering is dedicated towards achieving maximum placements and spares no effort in maintaining sterling rapport with industries. Preparing the recruitment schedule of the year by inviting corporations for association and coordinating with the HR Team to ensure the smooth functioning of the final recruitment process are its major responsibilities. Meanwhile, numerous training programs, workshops, seminars, Industry interactions, and also industry visits are conducted by the team. Regular one-on-one counseling is done for the betterment of the students facing difficulties in different rounds of interviews. Faculty Development Programs are conducted concentrating on 360 degree improvement in student performance along with the skill development of the faculty. The department also holds the responsibility of entrepreneurship development cell that nurtures job givers. The training and placement cell, guided by certain rules and principles, majorly the team strives for the well-organized and successful processing of all the events taken up.

Training Activities

Induction Program to the students in the 1st year of Engineering Personality Development Training

Career Guidance Seminars by experts

Personalized counseling to those students who need help in preparing for placements Campus Recruitment Training by experienced Industry professionals.

Company Specific Trainings
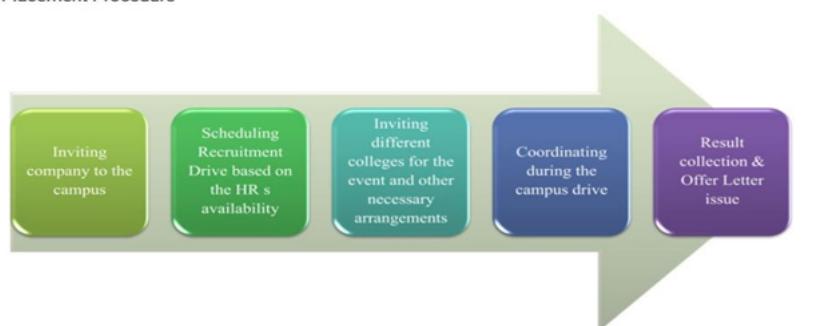
Facilities Provided to the Recruiters

- Auditorium with seating capacity of 3000 to conduct Pre-placement Talk
- Integrated Labs with around 200 computers having robust Internet connection for online tests
- Vast space for offline tests
- Separate rooms for conduction of Group Discussion and Personal Interview
- Enthusiastic team of volunteers for assistance
- Excellent environment for smooth running of the process

Our Recruiting Partners

Placed students list 2020-21

ACS College of Engineering
Approved by AICTE New Delhi, Affiliated to VTU, Belagavi
(A Unit of RajaRajeswari Group of Institutions)
CET Code : E186 COMED-K : E060 PGCET : T818

Sl no	Name of the companies	CS	ECE	BME	Civil	AE	Mech	AS	TOTAL
1	IBM/Kyndryl,	0	0	2	0	1	0	0	3
2	360 RELATORS	0	0	1	0	0	0	0	1
3	Accenture	2	1	0	0	0	0	0	3
4	ALORICA	NA	1	NA	NA	NA	NA	NA	1
5	AROGYAAAYU ENTERPRICE	0	1	0	0	NA	0	0	1
6	Bangalore Medical Systems Pvt LTD	NA	NA	1	NA	NA	NA	NA	1
7	BEL	0	1	NA	NA	0	0	0	1
8	Bosch	0	0	0	0	0	0	0	1
9	BRIGHTCHAMPS PVT	2	NA	0	0	0	0	0	2
10	Byju's	0	0	0	0	0	1	0	1
11	Capgemini	1	0	3	0	0	1	0	4
12	CARE INDIA Solutions	NA	NA	1	NA	NA	NA	NA	1
13	Career Band TRB II -	1							1
14	Chegg India	1	NA	NA	NA	NA	NA	NA	1
15	Cognizant	0	1	BME	Civil	AE			1
16	CSR Campus Drive Pvt	2	0	NA	NA	NA	NA	NA	2
17	Customer Support Engineer, Bangalore Medical Systems Pvt	NA	NA	1	NA	0	0	0	1
18	Deduce Technologies	0	0	0	3	0	0	0	3
19	FACE	3	0	0	0	1	0	0	4
20	First hire	0	1	0	0	0	0	0	1
21	Focus 4 – D Career	0	0	1	NA	0	0	0	1
22	FUJITSU	0	1	0	0	0	0	10	1
23	GrassRoot (Infosys)	1	1	0	0	9	0	0	11
24	GSAS Microsystem	0	1	0	0	0	0	0	1
25	HCG	1	0	0	0	0	0	0	1
26	HCL (SmartBrain)	1	0	0	0	0	0	0	1
27	HCL(SmartBrain),	0	2	0	0	0	0	0	2
28	Hectronic	0	0	NA	NA	NA	NA	1	1
29	HP PPS Services India Private Lim	0	0	1	NA	NA	NA	NA	1
30	HTC	1	0	NA	NA	NA	NA	0	1
31	Hulmani constucrtions	0	0	0	2	0	0	0	2
32	Impetus	5	0	0	NA	NA	NA	NA	5
33	Infinite	3	0				NA	NA	3
34	INFOSYS	2	0	1	NA	NA	1	NA	4
35	J K Tech Family	2	0	0	NA	NA	0	NA	2
36	Karnataka Firing Service	0	0	0	NA	NA	1		1
37	KPISOFTWARE TECHNOLIGES PVT	1	0	0	NA	NA	0	NA	1
38	LTI Lets solve Pvt	1	0	0	NA	0	0		1
39	Main Tech	0	1	0	1	NA	1	NA	3
40	NETSURF	0	0	0	0	0	0	NA	1
41	NIT	1	0	0	0	NA	0	NA	1

Sample Offer Letter

2021

Cognizant

22-Nov-2021

Dear Athira K,
B.E., Electronics & Communication Engineering
ACS College of Engineering, Bangalore

Candidate ID – 18969296

Thank you for exploring career opportunities with **Cognizant Technology Solutions India Private Limited ("Cognizant")**.You have successfully cleared our initial selection process and we are pleased to make you an offer of employment. This offer is based on your profile and performance in the selection process.

You have been selected for the position of **Programmer Analyst Trainee**

During your probation period of 12 months, which includes your training program, you will be entitled to an Annual Total Remuneration (ATR) of INR **401,988/-**. This includes an annual target incentive of INR **22,500 /-** as well as Cognizant's contribution of INR **19,500/-** towards benefits such as Medical, Accident and Life Insurance. The incentive amount may vary, depending on Cognizant's performance and your performance. The other details about your compensation are detailed in **Compensation and Benefits**. Your compensation is highly confidential and if the need arises, you may discuss it only with your Manager.

On successful completion of the probation period, clearing the required training assessments and subject to you being part of a delivery project, your Annual Total Remuneration (ATR) would stand revised to INR Rs. **450,500/-**. This includes an annual target incentive of INR **22,500/-** as well as Cognizant's contribution towards benefits such as Medical, Accident and Life Insurance, as applicable.

Your appointment will be governed by the terms and conditions of employment as presented in **Employment Agreement**. You will also be governed by the other rules, regulations and practices in vogue and those that may change from time to time. Your compensation is highly confidential and if the need arises, you may discuss it only with your Manager.

Please note:

1. This appointment is subject to satisfactory background verification including professional reference checks and you securing a minimum of 60% aggregate (all subjects taken into consideration) with no standing arrears in your Graduation/Post-Graduation.

This offer from Cognizant is valid for 3 months and hence you are expected to accept or decline the offer through the company's online portal within this time-period. In case we do not receive any response from you within this time-period, this Offer shall stand withdrawn and will be considered as void. Any extension to the offer validity will be at the sole discretion of Cognizant

2. Prior to commencing employment with Cognizant you must provide Cognizant with evidence of your right to work in India and other such documents as Cognizant may request.

3. Prior to joining Cognizant, you must successfully complete the prescribed Internship or Continuous Skill Development (CSD) program as detailed below:

At Cognizant, we invest in skill and capability development of our campus selects even before they join us. This is through Cognizant Internship and Continuous Skill Development (CSD) program. These programs focuses primarily on technical skills development. You could enroll in either of these as per your college processes while in the final semester and continue with skill building until you join Cognizant. This forms a critical part of your employment with Cognizant. Your onboarding with Cognizant would be prioritized

Regd Office: 115/535, Old Mahabalipuram Road, Okkiam Thoraipakkam, Chennai - 600 097

---

accenture

**Accelerate
the career of
your dreams**

To,

Name : Shreyas D K

Re: Important information post your clearance of the interview process during the Campus Visit

Dear Shreyas D K,

This confirms you have cleared the initial interview process. Your journey for getting an Offer of Employment from Accenture has just begun. Please go through this communication to acquaint yourself of the various actions that your candidature will go through before a release of Offer of Employment by Accenture.

- **Document verification and checks** - Post accepting this Letter of Intent, you will have to submit certain prerequisites / documents. The Offer release will be contingent upon successful verification of your documents that will be submitted by you. Once you receive the offer, we would like you to accept the offer within 7 Days from the day you receive the Offer Letter.

At all stages of the hiring process, you are expected to declare all facts honestly and act with utmost integrity while applying for any opportunity. In case of any misrepresentation of information/facts in your candidate registration process or at any stage of the hiring process, this Letter of Intent or any subsequent offer issued to you shall stand revoked.

- **Information on Accenture's Pre-joiner-Learning Module** - As part of providing our new joiners a unique learning experience, Accenture proposes a learning module - Technology Fundamentals Online Learning program (Hereinafter" program"). We would like to share the details of this program in advance for your ease of information and familiarity with its conditions.

  - The training module of this program is typically made available to potential new joiners at least 45 days before onboarding to give them a reasonable time to learn at their pace and comfort. Details of which are as under:

    - Under the program, the learning modules hosted on a technology platform will prepare the potential new joiner to be code ready.

    - Post onboarding/joining Accenture, and after the Induction the potential new joiner will need to go through the Technology fundamental assessment (based on the pre on-boarding online learning program).

    - On successful completion of the program and clearance of the Technology fundamental

2021

(10)

⊥∫ᵀ TESSOLVE

A HERO ELECTRONIX VENTURE
16ᵗʰ August 2021

Chethan Kumar L

Dear Chethan Kumar L,

With reference to your application and the subsequent interview you had with us, we are pleased to appoint you as **"Test Engineer 1"** as per the terms and conditions given below:

1. You are required to undergo technical training for the period of one month, starting from 20ᵗʰ August 2021, during which period you will be paid a stipend of Rs.10000 (Rupees Ten Thousand Only). The salary and other emoluments and benefits, as per Annexure, will be applicable upon successful completion of Technical Training.

2. The details pertaining to your appointment letter and salary are strictly confidential between you and the company and you should not discuss these details with anyone within or outside the company, except your Senior Manager or the HR in-charge.

3. You shall be on probation for a period of six months, with effect from the date of completion of Technical Training. Should your work be found satisfactory at the end of the period of probation, your appointment will be confirmed in writing. Unless so confirmed in writing, you shall continue to be on probation. The probation period is extendable at the sole discretion of the management.

4. From the probation period start date, you will abide by the Provident Fund, Medical and LTA and Leave Rules, as applicable to you.

5. During the probationary period and after confirmation, your service will be terminable at the discretion of the company on giving ninety days of notice or on payment of ninety days pay in lieu of such notice. If you wish to resign from the services of the company during probation period and after confirmation, you will do so by giving ninety days prior notice.

6. During the period of your employment with the company you shall not secure or try to secure any other employment, whether full time or part time, or engage in any commercial business or pursuit on your own account or as an agent for others. During your employment with the company, you shall not undertake any course or study without getting permission from the management.

7. During the period of your employment with the company you may be required to work on customer projects. If you were to resign from the services of the company, you shall not work for the same customer or customer's customer (for the projects handled within last one year) either directly as an employee/contractor or through another organization, for a period of six months from your separation from the company.

TESSOLVE SEMICONDUCTOR Pvt.Ltd
Plot No: 31 (P2), Electronic City, Phase II, Bangalore 560 100, India T: +91 80 4181 2626 F: +91 80 4120 2626
W: www.tessolve.com   CIN:- U72300KA1993PTC054929

Course Name	Skill Training in Soft Skills & Trending Technology
Course Duration in Total:	110 Hours
Soft Skills:	40 Hours
Technical Skills:	60 Hours
Group Discussion & Mock Sessions:	10 Hours
Course Delivery:	Virtual Instructor Lead Training (VILT) – Hands on Experience at the Institution Campus

Modules:

Soft Skills	• Business Communication
	• Personal Communication
	• English Grammar, Vocabulary & Accent
Technical Skills	• SQL
Interview Preparatory Skills	• Group Discussions
	• Mock Interviews

Career

acsce

Training Details
ACS College of Engineering
Department of Training & Placement
List of Modules for Pre-placement & Company Specific Training Program @ ACSCE

Academic year : 2020-21

Semester : 7th

Branch: ECE,CSE,AE,AS,BME,Civil,Mech

Sl no	Sem	Name of modules			No. of Hours	No. of days
		Pre-Placement Training				
1	7th	Module list	Number System,		5Hours	7days
			Percentage			
			Profit & Loss, simple interest & Compound Interest			
			Averages			
			Ratio & proportion			
			Time & Work			
			Problems on Age			
			Time, Speed & distance			
			Probability			
			Clocks & calenders			
			Data Interpretation			
2	7th	Company Specific Training	Group Discussion		5Hours	3days
			Interview Skills			
			Email Writing			
			Resume Writing			
			Statement & conclusion			
			Analytics Puzzles			
			Data Sufficiency			
			Cubes			
			Venn Diagrams			

Training and Placement Officer
A.C.S. College of Engineering
Kambipura, Mysore Road, Kengeri Hobli
Bangalore-560 074

Training Activities

The training and placement cell of the institute organize training activities for the students on the soft skills, aptitude, technical and Placement. The structure of training and placement and its content as follows.

Sl. No	Year	Training Program	Contents	
1	1st Year (I&II Semester)	Soft Skills Verbal	Resume Building Extempore Speaking Power Presentations Picture Perfect Group Discussion Personal Grooming Personal Interview Self Inventory Mgmt.	Parts of Speech, Tenses Subject Agreement Error Spotting Reading Comprehension Essay/ Paragraph writing E-mail Writing & Etiquettes Logical Reasoning and Verbal Ability Vocabulary Analogies
2	2nd year (III & IV Semester)	Soft Skills Verbal Basics of Aptitude/ Case Studies	Basics of Aptitude / Case Studies Number Theory Percentage, Profit & Loss Rations, Proportions & Partnership Allegation & Mixtures Time & Work Time, Speed & Distance Syllogism and set theory Permutation & Combination Probability Geometry Logical Reasoning	

3	3rd Year (V & VI Semester)	Aptitude Soft Skills	Basics of Aptitude / Case Studies Number Theory Percentage, Profit & Loss Rations, Proportions & Partnership Allegation & Mixtures Time & Work Time, Speed & Distance Syllogism and set theory Permutation & Combination Probability Geometry Logical Reasoning
4	4th Year (VII & VIII Semester)	Quantech Training	C & C++ Data Structures Networking Java Microcontroller Microprocessor, Solid Edge, Catia, Auto CAD STAAD, Quality Control

The summary of various training activities conducted by training and placement department is given in the table

Sl. No	Academic Year	Name of the Program	No. Of Students Trained	Name of The Training Company	Program Details
1	2021-22	Pre Placement Training	47	Quan Tech Origin	Quantitative and Logical Reasoning
2	2020-21	Pre Placement Training	43	Quan Tech Origin	Quantitative and Logical Reasoning
3	2019-20	Pre Placement Training	41	Quan Tech Origin	Quantitative and Logical Reasoning

Placement activities

The training and Placement cell plans campus recruitment drives for all the programs. The placement cell   conducts student registration process through which entire students' data will be collected. The department placement coordinator communicates the campus visit schedule to the students and placement drive will be conducted.The list of companies visiting the campus annually is shown in the following table

Sl. No.	Name of the company
1	Elintlabz
2	SLK Software
3	Infosys
4	Qspiders
5	NTT Data
6	Palle Technologies
7	Nestaway
8	TCS
9	Cognizant
10	Wipro
11	IBM
12	Sonata software
13	Huawei Technologies
14	Bujus
15	Main Tec(HCL)

16	FACE
17	Wipro
18	Accenture
19	Capgemini
20	HCL Technologies
21	Statogent
22	VRIZE
23	Cinif Technologies
24	BrightChamp
25	Tech Mahindra
26	Sasken Technologies
27	Freenkart
28	Amazon
29	Mindtree
30	6D Technologies
31	Accord Global Technologies
32	NTT Data
33	Expleo Group
34	Hexaware
35	Agile Point
36	Vtiger
37	Unacademy
38	HUDL
39	Juspay
40	Aptean
41	Mphasis
42	ABC
43	24/7
44	VEE TECHNOLOGIES
45	KNOWX

9.6 Entrepreneurship Cell (5)   Total Marks 5.00

Institute Marks : 5.00

Entrepreneurship Cell (5)

About IIC Institute Institution's Innovation Council (IIC) at ACS College of Engineering established in the academic year 2019-20 under the guidance of AICTE and Ministry of Education to systematically foster the culture of Innovation. The primary objective of Innovation.

Council is to encourage, inspire and take care of young students by supporting them to work with new ideas and transform them into prototypes while they are informative years. The motto of ACS IIC is to create a vibrant local innovation ecosystem and prepare institute for Atal Ranking of Institutions on Innovation Achievements Framework. Establish function ecosystem for scouting ideas and pre-incubation of ideas. Develop better cognitive ability for technology students. Vision To provide the needs of students as well as faculty entrepreneurs with innovative ideas of social significance and there by disseminating a culture of entrepreneurship in campus which will boost our education system and there by growing the national economic and social development. Mission To develop a system with required infrastructure that can enable students, faculty to innovate, and prototype their ideas with industrial standards, support from Government, industry and reputed academic institutions around the world, and help them to realize their potentials Objectives of IIC.

- Students/Faculty associated with ICs will have exclusive opportunity to participate in various Innovation related initiatives and competitions organized from institution level to international level.
- Win exciting prizes/Certificates for Innovations.
- Meet/Interact renowned Business Leaders and lead academicians.
- Opportunity to build and prototype new ideas
- Mentoring by industry experts
- Experiment with new technologies
- Visit new places and see new culture

CERTIFICATE

Institution Innovation Council (IIC) established at

ACS College of Engineering, BANGALORE, Bangalore

had undertaken various activities prescribed by Innovation Cell, Ministry
of HRD, Govt. of India to promote Innovation and Start-up in campus
during the IIC calendar year 2018-19.

Prof.Anil D.Sahasrabudhe
Chairman, AICTE

Shri. R. Subrahmanyam
Secretary, MHRD

Dr. Abhay Jere
CIO, MHRD, Innovation Cell

Certificate No : 2206   Issued On : 2019-11-06

- Brief Mention Of Key Functionaries At The IIC Institute

SL. No.	Name of the Member	Key Role/Position assigned in IIC
1	Dr.M.S.Murali	Head of the Institution
2	Dr.G.Ramanan	President
3	Dr.P.Theerthamalai	Vice-President
4	Mr.A.Krishna Kumar	Convener
5	Dr.G.Vinoth	External Member
6	Dr.Mareeswari V	ARIIA Coordinator
7	Dr.S.Kavitha	IPR activity coordinator
8	Dr.T.Senthil Kumaran	NIRF Coordinator
9	Dr.R.Mukesh	Startup policy coordinator
10	Dr.S.Anitha	Internship activity coordinator
11	Mr.Inamul Hasan	Innovation activity coordinator
12	Mrs.Sunita Chalgeri	Social media coordinator
13	Mr.B.A.Sunil Raj	Faculty Member
14	Mrs.Vijaya Dalwai	Faculty Member
15	Mr.B.V.Vishal	Faculty Member
16	Mrs.G.Kavya	Faculty Member
17	Mr.Siva J	Faculty Member
18	Mr.Ganesh	Faculty Member
19	Mr.Hemanth	Faculty Member
20	Mr.Hari	Faculty Member
21	Mr.Syed Shabbaz	Student Member
22	Mr.Amogh Raj	Student Member
23	Mr.Vinay Kumar Pattar	Student Member
24	Ms.Sharon V	Student Member
25	Ms.Nivethidha R	Student Member
26	Mr.Chandan	Student Member
27	Mr.Nandan	Student Member
28	Mr.Mohd. Shoaib	Student Member
29	Mr.Sumit V Sawkar	Student Member
30	Ms.Vesthasini	Student Member

- Highlight Achievements

27	• Number of I&E and IPR activities Conducted
18	• No. of students & faculty ideas generated
14	• No. of students/faculty Innovation/prototypes developed
5	• No. of Student/faculty Start-ups/Ventures established
19.89L	• Amount spent on promotion and awareness on Innovation Entrepreneurship in the campus
1.15L	• Amount grant or fund supported to student & Faculty lead Innovations, start-ups and IPR

- Highlight Selected Start-Ups Established By Students/Faculties With Mention Of Founder/Co-Founder Name

Sl No	Name of the Students	Title of Innovation	Title of Award	Awarded by
1	Syed shabbaz and Amulya gowda	Electro pot device	Won the best Prototype award with cash prize of Rs.40,000/-	NEC business Incubator
2	Sudhanva R Gowda and Harish R Gowda	Eco friendly fiber reinforced geoploymer concrete	won the Best Innovative award with Rs.20000/- case prize	NEC business Incubator
3	Raghavendra L	Crop Analysis Using UAV	Best Innovation award	VTU cell
3	Tejas Chandra Tejaswini B M Narendra N	Solar Integrated Bio Composite Helmet	Co-Incubatee Award & Rs. 1500/ Cash Prize	NEC business Incubator
4	Bharath B Vishnu	Green tech power generator	Co-Incubatee Award & Rs. 1500/ Cash Prize	NEC business Incubator

G. Highlight selected best Innovations & images with mention of inventor/innovation name

Developed Solar Integrated Bio Composite Helmet

Presented Green tech power generator

Fabricated Eco friendly fiber reinforeced geoploymer concrete

Developed Eco-friendly bricks using aluminium dross

9.7 Co-curricular and Extra-curricular Activities (10)   Total Marks 10.00

Institute Marks : 10.00

The Physical Education & Sports Department is quite active on campus. The school significantly supports students general growth and supports their participation in sports. For the students physical and mental health and fitness, sports are actually a way of life. The

school holds that a well-designed, comprehensive curriculum is crucial for the development of the body and mind.

Sports & Recreation

We encourage students to involve in extracurricular activities for their holistic personal developments. ACS has recreational excellent facilities for sports including gymnasium, swimming pool, tennis courts, basketball court, volleyball court, athletics tracks and a spacious ground   for   sports   such   as   football,   cricket   and   hockey.

There is an annual state-level swimming gala which is an extremely popular event, organized by the swimming club. Finally, there is Crosse, or the cross-campus race, an integral part of ACSCE athletic tradition. Our Science Club tries to infuse the fun of science into students and encourage them   to   focus on   comprehending   science   than   just   learning   it   for   exams.

There is an Aero modeling club, a HAM club, an electronics club and EPIC, HAM radio operators, designers and builders of aero planes, race cars and satellites. Most students are active in the Science Club events and publish an English magazine to keep all the students up to date on campus happenings. ACS also organizes competitions in music, drama, literature, debating, fine arts and Indian folk arts like Rangoli. Performing Arts Festival (PAF), a cultural extravaganza, is one of ACS College of engineering's finest attempts to bring the best of students' talents. From the joining, all students and staff in ACS are entitled to free medical facilities and insurance coverage.

SPORTS :

- The college has a basketball court which conforms to the national standards in the open field.
- The college has volley ball and throw ball courts in the open field.
- Cricket is practiced in the college field every day and more rigorously on holidays and
- Sundays. Cricket batting pitch with net for practice is created in the field.
- Football is also practiced by the students in the evening in the ground.

VOLLY BALL COURT

BASKET BALL

CRICKET STADIUM

FOOTBALL COURT

Annual Sports Meet – 2019

The ACS College of Engineering organize sports meet on 26-04-2019 & 27-04-2019 Organized by : ACSCE

Date & Time : 26-04-2019 & 27-04-2019

Venue : ACSCE Campus & Ground

The College playground of ACS College of Engineering was filled with great zeal, excitement and frolicsome atmosphere on 26-04-2019 & 27-04-2019 as the college celebrated its Annual Sports Extravaganza. Almost 1000 students from the college participated in the event.

The program began with our Management's support. The principal Dr.M.S.Murali welcomed the esteemed gathering and emphasized on the importance of sports in life. In his address, he also applauded the coordinators Dr.C.S.Pillai and Dr.R.Siva subramaniyam, for their outstanding contribution for the event.

The students displayed a wide array of colourful and reverberant events such as Volley Ball, Throw Ball, Basket Ball and Track events. The principal applauded the effort of the students and the teachers for making the event a huge success. The Physical Education Director Mr.Santhosha M S thanks all the volunteers, Teaching and Non Teaching staff for their support for making the event a huge success.

After the students' events the parents and staff members also participated enthusiastically in the events scheduled for them. The Principal and Vice Principal distributed the certificates and prizes for all categories. The day ended with a cheerful note, heralding the year 2019, also filled with promises for all the young sports enthusiasts.

AAROHANA 2021

ACS College of Engineering hosted Virtual Cultural Fest AAROHANA 2021 on 16th and 17th of July 2021.

Fest was streamed live on YouTube with the below link: **https://www** (http://www.youtube.com/watch?v=4LK4o0ANJ68)**,youtube.com/watch?v=4LK4o0ANJ68** (http://www.youtube.com/watch?v=4LK4o0ANJ68) Following 25 Interesting events were planned and executed

1. Drawing and Sketching
2. Painting
3. Creative writing
4. Essay(English)
5. Essay(Kannada)
6. Photography
7. Anthakshari and Cinema Quiz
8. Face painting
9. Meme making
10. Hair Styling
11. COD-Call of Duty(Online Game)
12. NFS-Need for speed(Online Game)
13. Cosplay
14. Mehandi
15. Calligraphy
16. Nail art
17. Collage
18. Instagram Reels
19. Singing
20. Dancing
21. Debate(Kannada)
22. Debate(English)
23. Mimicry
24. Dumb charades
25. Vegetable carving

The grand Virtual show commenced by the arrival of Dignitaries. It was accompanied by a melodious Saraswati Vandana from Chaithanaya shree, CSE, 8th sem, There was a colorful welcome followed by lighting of the lamp. hailing the goddess of knowledge and wisdom. It was followed by a welcome speech by Principal Dr M S Murali. Then there was bouquet presentation to the invited guests and the grand event began. Events started with the truly mesmerizing singing show followed by, dancing, Instagram reels, Drawing and Sketching Painting, Creative writing, Essay(English), Essay(Kannada), Photography, Anthakshari and Cinema Quiz, Face painting, Meme making, Hair Styling, COD-Call of Duty(Online Game), NFS-Need for speed(Online Game), Cosplay , Mehandi, Calligraphy, Nail art, Collage, Debate(Kannada), Debate (English), Mimicry, Dumb charades, Vegetable carving.Cultural heads Hemanth Kumar

G , Asst. Prof., Dept. of BME and Mrs Deepa , Asst. Prof., Dept. of Mathematics allotted 1 faculty and 6 students from every department to coordinate the events. All the faculty coordinators and student coordinators successfully executed all the events with ease.

SL. NO.	Department	Events	Faculty Coordinator	Student Coordinator	
1.	Aeronautical Engineering	1. Drawing and Sketching 2. Painting 3. Creative writing	Mr Radha krishnan	2nd year	1.Gagana
					2.Sanjith
				3rd Year	1.Abhishek
					2.Yashaswini
				4th year	1.Vishnu Prasad
					2.Sannidhi
2.	Aerospace Engineering	1. Photography 2. Anthakshari and Cinema Quiz 3. Face painting	Mr Siva	2nd year	1. Veethasmi
					2. Bryan John
				3rd year	1. kashyapa
					2. Akasha
				4th Year	1. Jiji C Joy
3.	Biomedical Engineering	1. COD-Call of Duty(Online Game) 2. NFS-Need for speed(Online Game) 3. Cosplay	Mrs Surekha	2nd year	1. Rohith
					2. Lavanya
				3rd year	1. Pratheeksha
					2. Deepthi
				4th Year	1. Rajeshwari
					2. Kosal
4.	Civil Engineering	1. Instagram Reels 2. Singing 3. Dancing	Mrs. Pallavi	2nd year	1.Nanditha
					2.Immanuel
				3rd year	1.Bhuvanashree
					2.Sharathkumar
				4th Year	1.Yeshwanth

					2.Varshitha M
5	Computer science	1. Debate(Kannada) 2. Debate(English) 3. Mimicry	Ganga B.M 9591416150	2nd year	1.Harsh M
					2.Astha
				3rd year	1.Ritu Shyam
					2.Amshavi
				4th Year	1.Chaitanayshree
					2.Swetha M
6	Electronics and Communication Engineering	1. Essay(English) 2. Essay(Kannada) 3. Meme making	Ashwini A M	2nd year	1.Pavan Raj
					2.Nikitha
				3rd year	1.Niteesh
					2.Nidhishree
				4th Year	1.Akshay Aaradya
					2.Vidya
7	Mechanical Engineering	1. Mehandi 2. Calligraphy 3. Hair Styling		2nd year	1. Tejas
					2. Rebekah
				3rd year	1. PoOja
					2. Vishal
				4th Year	1. Deepak Gowda

8	Physics	Nail art	Mrs. Anandhi	1st Year	1. Hemanthgreddy
					2. nikithaM
					3. Poorvi
9	Chemistry	Dumb charades	Dr. Pradeep S M	1st Year	1.Archa Bajpai
					2.AbhisheK Patil
					3. Prajwal K
10	Mathematics	Vegetable carving	Mrs. Divya S	1st Year	1.SyeedMasood Ahmed
					2.linda sunil

10 GOVERNANCE, INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES (120)

Total Marks 120.00

10.1 Organization, Governance and Transparency (40)

Total Marks 40.00

10.1.1 State the Vision and Mission of the Institute (5)

Institute Marks : 5.00

Vision :
Engineering the future of the nation by transforming the students to be technically skilled managers, innovative leaders and environmentally receptive citizens.
Mission :
To implement holistic approach in curriculum and pedagogy through Industry Integrated Interactions to meet the needs of Global Engineering Environment. To develop students with knowledge, attitude and skill of employability, entrepreneurship (Be Job creators than job seekers), research potential and professionally ethical citizens.

10.1.2 Governing body,administrative setup,functions of various bodies,service rules, procedures, recruitment and promotional policies (10)

Institute Marks : 10.00

The Institute is run by Moogamibigai Charitable and Educational Trust, was founded in 1992 with the main objective of Promoting Higher Education in Karnataka. Various professional institutions like Medical, Dental, Nursing institutions and functioning under the aegis of the Trust generally termed as RajaRajeswari Group of Institutions. RajaRajeswari Group of Institutions was established by our founder Chairman Dr.A.C.Shanmugam, B.A.LLB, FIMSA, FRCPS (Glasgow, UK), his pioneering vision and mission has contributed for the establishment of valued educational institutions. ACS College of Engineering, an institution of academic excellence was established in the year 2009 with a cherished desire to serve the cause of humanity through education. This college is affiliated to Visvesvaraya Technological University, Belagavi and approved by the AICTE and the Govt. of Karnataka. Accredited by NAAC – "A", NBA of the branches of Aeronautical and Bio-Medical engineering, International Accreditation by HLACT, Texas, UK. It offers Under Graduate programs in eight engineering disciplines, besides masters programs. Departments such as Aeronautical Engineering, civil Engineering, Bio-Medical Engineering, Computer Science Engineering, Electronics and Communication Engineering, Mechanical Engineering, Science Humanities, offer research programs leading to Ph.D program of VTU.

ACSCE equips its students not only with the technical knowledge to enable them to meet the challenges of global standards but also integrates value education, environmental awareness and communication skills into its curriculum to mould the students as responsible citizens.

The college is located in a beautiful lush green landscape, free from polluted environment and excellent atmosphere and ambience ideally suited for growth of the soul & mind. It is located behind RRMCH on the Bengaluru-Mysore Highway 15 Km from the Bengaluru City Railway Station and 2km from kengeri Railway Station.

Governing Council Members

S. No	Name	Qualification	Designation
1	**Dr. A.C. Shanmugam** Founder Chairman, Managing Trustee RRGI Bangalore.	B.A, L.L.B	Chairman
2	**Sri. A.C.S. Arun Kumar** President, Raja Rajeswari Group of Institutions, Bangalore	B. Tech (Hons), MBA	Member
3	**Prof. R.M. Vasagam** Former Vice-Chancellor, Anna University, Former Scientist ISRO, Bangalore	M.E	Member
4	**Prof. Venkatachalappa. M** Former Prof & Head, Department of Mathematics, Central College, Bangalore	Ph.D.	Member
5	**Prof. Sundara Moorthy T.K** Former Scientist ISRO & Mission Director Indian Communication Satellite System, Bangalore.	ME	Member
6	**Mr. Vijayakumar** Visvesvaraya Technological University, Nominee	ME	Visvesvaraya Technological University Nominee
7	**Director Cum regional officer, AICTE** South Regional office Bangalore	-	AICTE Nominee
8	**Director of Technical Education,** Government of Karnataka, Bangalore	-	Govt. Nominee
9	**Dr. T. Senthil Kumaran** Professor & Head, Department of Computer Science and Engineering	Ph.D.	Member
10	**Dr. M.S. Shivakumar** Professor & Head, Department of Chemistry	Ph.D.	Member
11	**Dr. M.S. Murali** Principal	Ph.D.	Ex-Officio Member Secretary

GOVERNING COUNCIL FUNCTIONS

1. To monitor the academic and other related activities of the college
2. To consider and execute the recommendations of the Staff Selection Committee

3. To consider the important communications, policy decisions received from the University, Government, AICTE/ PCI, etc. To monitor the students and   faculty development programmes
4. To implement the recommendations of the Governing council
5. To pass the annual budget of the college.
6. To approve the income and expenditure of the college annually. General supervision and control of the affairs of the college
7. To maintain its own record of its proceedings
8. The Governing Council shall hold, control and administer the property and funds of the College as well as other funds placed at the disposal of the College for any specific object.
9. The Governing Council can enter into, vary, carry out, confirm and cancel contracts on behalf of the College. To consider the Annual Report, the Annual Accounts and the Financial Estimates.To fix admission, tuition and other fees to be charged from students reading and/or residing in the College (subject to any limitations laid down by the University).
10. To appoint Principals and other members of teaching and non-teaching staff excluding Class-IV employees of the College in accordance with the procedure laid down. To grant on the recommendation of the Principal, Study Leave and Leave without pay to the teaching staff of the College subject to the Rules and Regulations of the Institution
11. To institute, suspend or abolish such teaching and non-teaching posts, as may be considered necessary.
12. To open an account or accounts in the name of the College with such scheduled bank or banks as the Governing Body may think fit and to keep the funds of the College deposited with such banks.
13. To make rules and to alter, amend or repeal the same, provided, all such alterations and amendments and repeals receive the approval
14. To delegate, at its discretion, any of its power as may be necessary from time to time to the Principal.
15. To exercise such other powers and to do such other acts or things as may be necessary or expedient for the proper performance of its duties.

Governing Council Meeting Schedule

Governing Council Meeting

Sl.No	Minutes of meeting scheduled	Members attended
1		Dr. A C Shanumugam
2		Sri A C S Arun Kumar
3		Prof. R M Vasagam
4		Sri. C N Seetharam
5		Prof. Venkatachalappa M
6	07-01-2019	Mr. Sundramoorthy
7		Dr. Manjunatha B
8		Dr. Ramesh Unni Krishnan
9		Prof. H U Talwar
10		Prof. R R Elangovan
11		Dr. Punal M Arabi
12		Dr. M S Murali

Sl.No	Minutes of meeting scheduled	Members attended
1		Dr. A C Shanumugam
2		Sri A C S Arun Kumar
3		Prof. R M Vasagam
4		Sri. C N Seetharam
5		Prof. Venkatachalappa M
6	22-01-2020	Mr. Sundramoorthy
7		Dr. Manjunatha B
8		Dr. R Shaktivel
9		Prof. H U Talwar
10		Dr. T Senthil Kumaran
11		Dr. Punal M Arabi
12		Dr. M S Murali

Sl.No	Minutes of meeting scheduled	Members attended

1		13-11-2020	Dr. A C Shanumugam
2		30-01-2021	Sri A C S Arun Kumar
3		18-07-2021	Prof. R M Vasagam
4		19-02-2022	Sri. C N Seetharam
5			Prof. Venkatachalappa M
6			Mr. Sundramoorthy
7			Shri. Vijaya Kumar K
8			Dr. R Shaktivel
9			Prof. H U Talwar
10			Dr. T Senthil Kumaran
11			Dr. Punal M Arabi
12			Dr. M S Murali

Sl. No	Governing Council Meeting Scheduled	Members Attended
1		Dr. A.C. Shanmugam
2		Sri. A.C.S. Arun Kumar
3		Prof. R.M. Vasagam
4		Sri. C.N. Seetharam
5		Prof. Venkatachalappa M
6	01-07-2022	Mr. Sundramoorthy
7	20-02-2023	Shri. Vijaya Kumar K
8		Dr. R. Shaktivel
9		Prof. H.U. Talwar
10		Dr. T. Senthil Kumaran
11		Dr. M.S. Shivakumar
12		Dr. M.S. Murali

GOVERNING COUNCIL MEETING Circular

ACS College of Engineering

(Approved by AICTE, New Delhi, Govt. of Karnataka & Affiliated to Visvesvaraya Technological University, Belgaum)

Sponsored by : MOOGAMBIGAI CHARITABLE AND EDUCATIONAL TRUST

NBA | NAAC 'A' Accredited | ISO 9001:2015 |
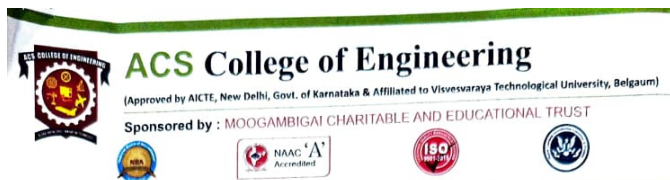
Ref: ACSCE-Blr/ACA-GCM-26/2022-23   Date: 03.02.2023

To
All the Members of the Governing Council
ACSCE, Bengaluru

Respected Sir,

Sub: 26th Governing Council Meeting to be held on 20.02.2023 – reg.

     I request you kindly make it convenient to attend 26th Governing Council Meeting on Monday the 20th February 2023 at Board Room of ACS College of Engineering, Bengaluru. The Agenda subjects for the meeting are as under:

AGENDA:

1. To read & record the minutes of 25th Governing Council Meeting held on 02.07.2022.
2. Ratification of Appointments made after 01.07.2022 and fresh appointments for the academic year 2023-24.
3. To identify the scope for increasing intake and starting up of New Courses for the academic year 2023-24.
4. Budget approval for the academic year 2023-24.
5. Promotion and Revision of Salary for the academic year 2023-24.
6. Readiness for NBA visits for the Department of Computer Science & Engineering and Submission of Application for getting Accreditation for Aerospace Engineering and Electronics & Communication Engineering.
7. Approval for Vision, Mission, PO and PSO for Institute and Engineering Departments.
8. Preparation for International Conference / Publication of Research Papers in Journals and Publishing Conference Proceedings.
9. Celebration of Arohana and Sports Day - 2023.
10. Any other subjects with the permission of the chair.

    Thanking you,

Yours faithfully,

Dr. M S Murali
Principal & Member Convener
ACSCE, Bengaluru

Campus
207, Kambipura, Mysore Road, Bengaluru - 560 074
Ph: 080 - 2974 8222, 2974 8333 Fax: 080 - 2974 9988
E-mail: info@acsce.edu.in, principal@acsce.edu.in
www.acsce.edu.in

Minutes of Meeting

ACS College of Engineering

(Approved by AICTE, New Delhi, Govt. of Karnataka & Affiliated to Visvesvaraya Technological University, Belgaum)

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Minutes of the 26th Governing Council Meeting held on 20.02.2023 at 10.30AM in the Board Room of ACSCE.
List of members present in the meeting is enclosed.

At the outset, Dr. M S Murali, Principal & Member Convener, Governing Council welcomed all the members and requested them to go through the Agenda items and solicited their valuable suggestions for the overall improvement to the Institution. The following Agenda subjects have come up for discussion and decision there on:

1. **To read and record the minutes of 25th Governing Council Meeting held on 02.07.2022:**
   The minutes of the 25th Governing Council Meeting held on 02.07.2022 was read and recorded.
2. **Ratification of appointments made after 01.07.2022 and fresh appointments for the academic year 2023-24.**
   The Member convener placed before the council the list of appointments made after 01.07.2022. After discussion the appointments made by the Management for the academic year 2022-23 was ratified. And also Member Convener requested to fulfill the vacant position in the Departments for the academic year 2023-24. Further, the convener informed to Identify and appointment of Faculty Members for the New Branches approved by AICTE & VTU.
3. **To identify the scope for increasing intake and starting up of New Courses for the Academic year 2023-24.**
   The Member Convener placed before the council regarding the AICTE approved new UG courses, reduction of intake, increase in intake and closure of UG courses for the academic year 2022-23. The Governing Council Members suggested bringing emerging courses which are useful for the society as well students in future for the upcoming academic year 2023-24.
4. **Budget approval for the academic year 2023-24.**
   The Member Convener placed the Budget Proposal for the Academic Year 2023-24 before the members of the Governing Council. The council after detailed discussion approved the budget for 2023-24. And also Member Convener approached to approve budget for the Labs for Newly approved courses
5. **Promotion and Revision of Salary for the academic year 2023-24.**
   The Member Convener brought before the committee for the appreciation of list of Faculty Members completed their Ph.D in the academic year 2022-23 and also conveyed regarding promoting of Faculty members and the revision of salary made to the staff members for the academic year 2022-23. The Member Convener presented the proposal for the promotion and revision of salary for the academic year 2023-24 and the committee members had approved the same.
6. **Readiness for NBA visits for the Department of Computer Science & Engineering and Submission of Application for getting Accreditation for Aerospace Engineering and Electronics & Communication Engineering.**
   The Member Convener placed before the committee regarding NBA Visit for the Department of Computer Science and Engineering in the month of March 2023. The member Convener was informed to take necessary action on this by considering the importance of Accreditation. The Member Convener approached to approve for the submission of Application for NBA for the Departments of Aerospace Engineering and Electronics & Communication Engineering.
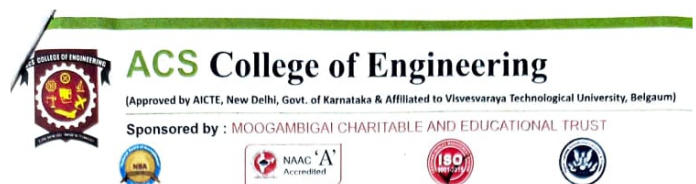
7. **Approval for Vision, Mission, PO, PSO for Engineering Departments.**
   The Member Convener placed before the council members regarding Vision and Mission of the Institute as well the Engineering departments. The discussions held with the departments regarding PO, PSO's and the same was approved by the departments. The details of the same were conveyed to the council and approached the committee members to approve the same.
8. **Preparation for International Conference / Publication of Research Papers in Journals and Publishing Conference Proceedings.**
   As discussed in the previous meeting the member convener informed about the schedule of the International Conference organizing by the Institution on 27th, 28th and 29th April 2023.
9. **Celebration of Arohana and Sports Day for the academic year 2023-24.**
   A detail discussion was held regarding the celebration of Sports Day and Cultural Day at ACSCE College Campus following the SOP norms. The committee unanimously decided to conduct the above said event and decision may be taken time to time in consultation with the Management.
10. **Any other subject with the permission of the chair.**
    The council felt that the faculty members must have the presence of interest to publish Research Article and apply for funding project with various funding agencies.

With this the Governing Council Meeting was concluded with Vote of Thanks to the chair.

Dr. A C SHANMUGAM
CHAIRMAN

Prof. R M VASAGAM
Advisor & Member

Prof. VENKATACHALAPPA
Advisor & Member

AICTE Nominee

DTE Nominee
Dr. T SENTHILKUMAR
Member

Sri. A C S ARUN KUMAR
VICE CHAIRMAN

Sri. C N SEETHARAM
Advisor & Member

Sri. SUNDARAMOORTHY
Advisor & Member

Dr. VIJAYAKUMAR K
VTU Nominee

Dr. M S SHIVAKUMAR
Member

Dr. M S MURALI
Member Secretary & Principal

Copy to all the Members

Campus
207, Kambipura, Mysore Road, Bengaluru - 560 074
Ph: 080 - 2974 8222, 2974 8333 Fax: 080 - 2974 9988
E-mail: info@acsce.edu.in, principal@acsce.edu.in
www.acsce.edu.in

10.1.3 Decentralization in working and grievanceredressal mechanism (10)

Institute Marks : 10.00

Decentralization: The institution is governed at different levels. The responsibility of the day to day running of the institution is decentralized into the following levels:

1.Governing Council

2.Management

3.Princial

4.Head of the Department

 5.Faculty

6.Students

The Governing Council meets as and when required, but at least once in a year to review the progress made and also give a direction to the Management while approving the programs and proposals received from the stakeholders. The Management after obtaining the approvals for the various programs envisaged, implements the same keeping in view the procedures for such implementation. The Management is vested with the responsibility of taking all the financial decisions and negotiation.

The Principal ensures that the college curriculum is academically viable and consistent with college objectives as well as the affiliating University directives. The Principal conducts regular meetings with all the Heads of the departments regarding academic activities, adherence to the university/institute academic calendar, student's progress, placement and training issues, research and extension activities, industry institution interaction, consultancy assignments, alumni interaction etc. The primary role of the Head ofthe Department is to provide strong leadership. HOD will be responsible for planning academic strategy for the development of the department in line with the strategic plans of the institution. The HOD drives the department on a day to day basis and is responsible for work allotment, Time Table, complying with the academic calendar, teaching, supervising the other staff and assessment. Faculty are given representation in different committees/cells and required to direct different programs. They are encouraged to develop administration skills by being in control of different scholastic, co-curricular, and extracurricular exercises. They act as a bridge between the administration and students. Students are the main stakeholders who are encouraged to play an active role in the management through representation as class representatives and as members of various committees. Anti-Sexual Harassment Committee, Grievance Redressal Committee, Anti Ragging Committee are some of the committees that exists in the college. The names of committee members with their contact numbers are displayed on notice boards/website for the information of stake holders. If any grievance is reported, it is addressed to the convener of the committee who will take up the matter with the Principal and follow up the matter until proper action is taken. Following are the list of various committees .

Sl. No.	COMMITTEES	HEADS	EMAIL	PHONE No
1	Academic Committee	Dr.H S Siddesha, HOD-ME	siddeshahs@acsce.edu.in (mailto:siddeshahs@acsce.edu.in)	7259125170
2	Disciplinary Committee	Dr. Suresh P.M, Professor-ME	sureshpm@acsce.edu.in (mailto:sureshpm@acsce.edu.in)	9886756991
3	Cultural Committee	Dr.H S Gowardhanaswamy, HoD, Civil	gowardhanaswamy@acsce.edu.in (mailto:gowardhanaswamy@acsce.edu.in)	9663736535
4	Library Committee	Dr.Prasanna Kumar Professor - ECE	amprasannakumar@acsce.edu.in (mailto:amprasannakumar@acsce.edu.in)	8867560052
5	Hostel /Canteen Committee	Dr. R. Mukesh, HOD - AS	vsmprm@gmail.com (mailto:vsmprm@gmail.com)	7760998700
6	Anti-Ragging Committee	Dr. M. S. Murali, Principal	principal.acsce@gmail.com (mailto:principal.acsce@gmail.com),	9880855302
7	Students Welfare Committee	Prof. Danya Prakash R.Babu, Assistant Professor, Aero	danyaprakash@acsce.edu.in (mailto:pillai.cs5@gmail.com)	9886692625
8	Professional /NSS/YRC Committee	Dr. Shiva Kumar .M.S, HOD, Chemistry	msss.res@gmail.com (mailto:msss.res@gmail.com) shivakumarms@acsce.edu.in (mailto:shivakumarms@acsce.edu.in)	9008831720
9	Magazine Committee	Dr.Ramanan, HOD-AE	drramanang@acsce.edu.in (mailto:drramanang@acsce.edu.in) gramanan1987@gmail.com (mailto:gramanan1987@gmail.com)	9965418124
10	Grievance Redressal Committee	Dr. M.S.Murali, Principal Dr. C S Pillai	principal.acsce@gmail.com (mailto:principal.acsce@gmail.com), mamatha.monikaraj@gmail.com (mailto:mamatha.monikaraj@gmail.com)	8073078780
11	Sexual Harassment Elimination Committee	Dr. Bhuvaneshwari, HOD - BME	bhuvaneshwari@acsce.edu.in (mailto:bhuvaneshwari@acsce.edu.in)	9448394177
12	Sports Committee	Dr.C.S.Pillai, Asso. Prof –	pillai.cs5@gmail.com (mailto:pillai.cs5@gmail.com)	9964144757

13	R&D Committee	Dr. T. Senthil Kumaran, Dean	senthilkumaran@acsce.edu.in (mailto:senthilkumaran@acsce.edu.in)	9444192800
14	Placement committee	Mrs. Komala, Training and placement officer	komalathyagaraj234@gmail.com (mailto:komalathyagaraj234@gmail.com)	9342867979
15	Mentoring of student welfare	Dr.Pradeep kumar K.T, Asso Prof.-Maths	ktpradeepkumar@gmail.com (mailto:ktpradeepkumar@gmail.com)	9480648622
16	Women empowerment	Dr. Bhuvaneshwari, HOD - BME	bhuvaneshwari@acsce.edu.in (mailto:bhuvaneshwari@acsce.edu.in)	9448394177
17	SC/ST/BCM Cell	Mr. Kumar B M, Asst Prof. - ME	kumarvanitha80@gmail.com (mailto:kumarvanitha80@gmail.com)	9611243006
18	Alumni Association	Mrs.Kavita patil, Asst Prof. - CSE	kavita.patil@gmail.com (mailto:kavita.patil@gmail.com)	9972948000

IQAC COMMITTEES - 2022-23

Sl. No.	Name of the Committee		
1.	**ACADEMIC COMMITTEE**		
	Head	Members	Activities
	Dr. H.S Siddesha, HOD – ME	1. Dr. Suresh P M 2. Dr. Bharathi Gururaj 3. Prof. Gayathri	Smooth running of classes, result review, Academic Activity review, etc
2.	**DISCIPLINARY COMMITTEE**		
	Dr.H.S. Gowardhanaswamy, HoD,Civil	1. Dr. Anitha 2. Dr. Subashchandrabose 3. Dr. Pradeep S.M 4. Dr. Ragavendhra 5. Prof. Dhanyaprakash 6. Prof. Nagesh 7. Prof. Sunitha chalageri 8. Prof. Sunilraj 9. Prof. Srinidhi Acharya 10. Prof. Shiva Shankar K M 11. Prof. Gayathri. G 12. Prof. Immanuel hassan	Respond to allegations of misbehaviors or academic misconduct, educate students about impact of their behaviors, Honest conduct & rights of others, investigate and respond to complaints made about ACSCE; investigate allegations and take action.
3.	**CULTURAL COMMITTEE**		
	Dr.H.S. Gowardhanaswamy, HoD,Civil	1. Dr. Suresh P M 2. Dr. Anitha 3. Dr. Raghavendra.K 4. Dr. Bharathi Gururaj 5. Prof. Deepa 6. Prof. Ashwini 7. Prof. Shivashankar P 8. Prof. Kavitha Patil 9. Prof. Ganga 10. Prathiksha (Student Coordinator) 11. Rohith (Student Coordinator)	Conducting cultural events, facilitating student participation in other institutions at State/Inter State/ University Level.
4.	**LIBRARY COMMITTEE**		
	Dr. Prasanna Kumar, Professor ECE	1. Mr. Ravikumar. N 2. Prof. Sivasankar	Library functioning/automation, updating library as per AICTE norms.
5.	**HOSTEL & CANTEEN COMMITTEE**		

Dr. R. Mukesh, HoD - AS	1. Mr. Paramashivam (Warden) 2. Mr. Prasanth (Instructor) 3. Mr. Hari Krishna (Instructor) 4. Mr. Athipathi Raj (Estate Officer)	Maintenance & attending to grievances if any and Night inspection of hostels, Maintenance.

6.	**ANTI-RAGGING COMMITTEE & SQUAD**		
	Dr. M.S.Murali, Principal	1. Dr. Bhuvaneshwari 2. Dr. C.S.Pillai 3. Dr. Anitha S 4. Mr. Athipathi Raj (Estate officer) 5. Mr. Paramesha R N 6. Mr. Chandan (Student Coordinator) 7. Ms.Geetha (Student Coordinator)	Display boards of anti ragging; observation of anti ragging in the campus including hostel.
	SQUAD		
	Dr. M. S. Murali, Principal	1. Dr. H.S Siddesha 2. Dr. Shiva Kumar 3. Dr. Bharathi Gururaj 4. Mr. Kushal K (Student Coordinator) 5. Mr. C Yuvaraj (Student Coordinator) 6. Ms. Sanjana (Student Coordinator)	

7.	**STUDENTS WELFARE COMMITTEE**		
	Prof. Danya Prakash R.Babu, Assistant Professor, Aero	1. Dr. Selvanandhan S 2. Dr.Bharathi Gururaj 3. Prof. Shivashankar 4. Prof. Srinidhi Acharya 5. Prof. Radhakrishnan 6. Amogh raj (Student Coordinator) 7. Sangeetha (Student Coordinator)	Listening & resolving student grievances, addressing student facilities

8.	**PROFESSIONAL /NSS/YRS COMMITTEE**		
	Dr. Shiva Kumar. M. S, HOD, Chemistry	1. Dr. Pradeepa,S.M 2. Dr. Raghavendra 3. Prof. Satish H 4. Chaithanyashree- Student Coordinator 5. Nitish - Student Coordinator	Conducting ISTE sponsored programs, To give a personality boost with the help of selfless social work with student's personality.

9.	**MAGAZINE COMMITTEE**		
	Dr. Ramanan G, HOD, Dept of AE	1. Dr. Raghavendra.K 2. Dr.Subash Chandra Bose 3. Prof. Sunita Chalegeri 4. Spoorthi - Student Coordinator 5. Sagar -Student Coordinator	To initiate action to publish magazine from ACSCE. To initiate to bring out the News Letter regularly.

10	**GRIEVANCE REDRESSAL COMMITTEE**		
	Dr. M. S. Murali, Principal Dr. C S Pillai, Professor CSE	1. Dr.Subash Chandra Bose 2. Prof. Albert Allen D Mello 3. Prof. Ashwini 4. Prof. Prajith Nair 5. Prof. Surekha 6. Abishek Kumar - Student Coordinator 7. Ashish - Student Coordinator	Listening & resolving student grievances, addressing student facilities

11	**SEXUAL HARASSMENT ELIMINATION COMMITTEE**		
	Dr. Bhuvaneshwari, HOD - BME	1. Dr. Anitha 2. Prof.Vijaya Dalawai 3. Prof. Radha Krishnan.P 4. Syamili - Student Coordinator 5. Poojitha- Student Coordinator	Addressing the issue of Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal)
	SQUAD		
	Dr. M.S.Murali, Principal	1. Dr. B. H Veena 2. Prof. Nanditha Krishna 3. Prof. Siva J	

12	**SPORTS COMMITTEE**		

	Mr. Praveen - PED Dr. C. S. Pillai, Professor – CSE	All HOD's and Dept. Coordinators 1. Abishek Kumar - Student Coordinator 2. Akash - Student Coordinator	Conducting sports events, facilitating student participation in other institutions at State/Inter State Level
13	**R&D COMMITTEE**		
	Dr.T. Senthil Kumaran,- CSE, Dean R&D	Head of R&D Centers	Planning, developing and focuses on overall responsibility of all research and development activities.
14	**PLACEMENT COMMITTEE**		
	Mrs.Komala, Training and placement officer	1. Prof. Kavya 2. Prof. Albert Allen 3. Prof. Sunil Raj B. A 4. Prof. Nagesh. H. B. 5. Dr.Paramaguru V	Establishing the contacts with reputed firms, arranging campus interview, conducting programs e.g. soft skills, encouraging students for group discussions.
15	**MENTORING OF STUDENT WELFARE**		
	Dr. Pradeep kumar K.T, Assoc. Prof.-Maths	1. Prof. Shivashankar K M 2. Prof. Siva J 3. Prof. Deepa	Listening & mentoring the students. Supporting students mentally.
16	**WOMEN EMPOWERMENT**		
	Dr. Bhuvaneshwari, HOD - BME	1. Dr. B.H.Veena 2. Dr. Anitha 3. Prof. Gayathri Joshi 4. Sinchana- Student Coordinator 5. Lakshmi- Student Coordinator	Empowering women to participate fully in economic life across all sectors is essential to build stronger economies, achieve internationally agreed goals for development and sustainability, and improve the quality of life for women.
17	**SC/ST/BCM Cell**		
	Mr.Kumar B M , Asst Prof-ME	1. Dr.Pradeep S.M 2. Prof. Praveen Patil 3. Prof. Deepa	Promotes the special interests of students in the reserved category and provide special inputs in areas where the students experience difficulties.
18	**ALUMNI ASSOCIATION**		
	Mrs. Kavitha Patil, Asst Prof-CSE	1. Dr. M.S.Shiva Kumar 2. Prof. Nagesh H B 3. Prof. Immanuel Hassan 4. HemaHariharan- Student Coordinator 5. Gagana- Student Coordinator	Formulation of Alumni Association

10.1.4 Delegation of financial powers (10)   Institute Marks : 10.00

The institution has a structured procedure for mobilization of funds and its optimal utilization, which ensures effective and optimal utilization of finances for academic, administrative and development purpose. This ultimately helps in realizing the Institute's Vision and Mission.As per the guidelines in the service manual of Chapter 7 whichclearly explain how to utilize the funds and various authorities, variance report of sanctioned budget and actual expenditure are regularly maintainedThe delegation of powers for various functionaries is tabulated in 7.1 sub-heading in the service manual.

The various subcommittees and their financial powers, expenses towards hospitality for meetings and guests for various cadres, expenses towards industrial visits, honorarium towards guests and invitedlecturers are indicated in 7.2 sub-heading in the service manual. under 7.2 the following committees areframed to ensure smooth flow of the process

7.2.1 Department Purchase committee

7.2.2 Institutional Purchase committee from Rs. 10,000 up to Rs. 1.00 Lakh

7.2.3 Institutional Purchase committee more than Rs. 1.00 Lakh

7.2.4 Imprest amount towards hospitality for meetings & guests

7.2.5. Expenses towards industrial visit

7.2.6. Honorarium towards guest & invited lecturers

Every year, the budget is prepared well in advance after taking into consideration the requirement of every Department. Each Department prepares the budget based on the requirement such as equipment, computer and consumables required for next academic session. Principal put up the budget to the management for consideration and approval and Governing Body (GB) meeting and after discussion and necessary corrections/modifications; Governing Body recommends the budget for approval. The budget is reviewed by the management and approved after necessary changes. As and when required, the institution makes a provision for advance additional fund. The Principal and the Head of Departments discuss the requirement and decide the priorities while allotting financial resources for various purposes; and also ensure optimum use of available financial resources. The Governing body studies the annual expenditure, scrutinizes the budget and provides feedback for efficient use of financial resources. The institution has standardized procedure for sanctioning of funds for various activities and also for settlement of advance and passing of bills for payment. The Management has given complete support to Principal for organization of various co-curricular and extra- curricular activities like technical events, sponsoring of faculty and staff for various FDPs, skill development programs, providing financial support for attending conferences, workshops, pursuance of higher education etc. Financial support is also provided for participation of students at various nationallevel events. The management monitors all the major financial transactions. The budget is discussed in the meetings of GB of the institution The resolutions of the GB regarding approval for budget are forwarded to the trust for final approval of the budget. The purchase procedure such as calling quotation, technical bid, preparing comparative statement, negotiation meetings are followed for effective and efficient use of available financial resources. The committee ensures that suitable equipment with right specification is procured at competitive and optimal prices.

Financial powers delegated to Principal and HOD's:

Designation	Facility	Amount
Principal	Imprest amount	Upto 1,00,000/-
HOD's	Imprest amount	Upto 10,000/-

Service Rule Link : http://www.acsce.edu.in/acsce/wp-content/uploads/2016/08/Service-Manual.pdf

10.1.5 Transparency and availability of correct/unambiguous information in public domain (5)

Institute Marks : 5.00

The institute is having a website-committee which will be scrutinizing the program/ institute specific information before uploading on to the web. Because of this mechanism, the ambiguity will be avoided. However, if somebody is in need of further clarification, the same will be addressed by the concerned department/ section. However, the documents are also available at the relevant offices for the stake holders.

YES. All the information are available on Institutes website. ACSCE maintains complete transparency in its financial, academic, administrative and auxiliary functions by clearly defining its vision, mission, objectives and procedures and disseminating them at all levels. Proper procedures are strictly followed according to Govt. norms.

Transparency in Academic Functioning

ACSCE strictly adheres to the academic calendar that details the various activities in advance. Admission notifications are made through newspapers and on its website. Admission forms are processed online, with all the relevant details explained in the prospectus and on the website.

The entire academic plan is clearly explained to all students in a compulsory orientation programme on admission. The elaborate system of various committees and bodies coupled with a strong multiple-level feedback mechanism from all stakeholders, also ensures the dynamism required to keep pace with the changing educational environment.

The credits of each programme and outcomes are clearly specified. The internal assessment, comprising various components, ensures that students receive their evaluated answer sheets and monitor their progress, performance and fairness in the evaluation. There is provision for re-evaluation, remedial examinations and grievance redressal system.The fee is minimal, online and withdrawal and refund as per UGC norms.

Transparency in Administrative Functioning

Recruitments and Staff Promotions are also undertaken with utmost transparency. All posts are advertised online and the candidates will be screened and called for interview.

Employees can readily discuss and access their records in the various sections of the administrative office. The policies related to HR, Leave, Research and faculty empowerment are available in the service rule which is published in the Institutional website.

https://www.acsce.edu.in/mandatory-disclosure/ (http://www.acsce.edu.in/mandatory-disclosure/)

https://www.acsce.edu.in/iqac-committee-members-minutes-of-meeting/ (http://www.acsce.edu.in/iqac-committee-members-minutes-of-meeting/)

https://www.acsce.edu.in/acsce/wp-content/uploads/2021/10/NAAC/7.1.10.pdf (http://www.acsce.edu.in/acsce/wp-content/uploads/2021/10/NAAC/7.1.10.pdf)

https://www.acsce.edu.in/acsce/wp-content/uploads/2021/10/NAAC/7.1.1a%20Promotion%20of%20gender%20equity.pdf (http://www.acsce.edu.in/acsce/wp-content/uploads/2021/10/NAAC/7.1.1a%20Promotion%20of%20gender%20equity.pdf)

https://www.acsce.edu.in/acsce/wp-content/uploads/2021/10/NAAC/7.1.1b%20Gender%20sensitization%20action%20plan.pdf (http://www.acsce.edu.in/acsce/wp-content/uploads/2021/10/NAAC/7.1.1b%20Gender%20sensitization%20action%20plan.pdf)

10.2 Budget Allocation, Utilization, and Public Accounting at Institute level (30)   Total Marks 30.00

10.2.2 Utilization of allocated funds (15)   Institute Marks : 15.00

The budget allocated over the years for various programs by the institute are adequate and in case there is any deficiency, it is made from Institutes own resources. Apart from regular Budget, the departments are receiving various project grants to meet their expenditure. The budget allocation and utilisation for the last four years is adequate. Formal budget estimates are prepared by each department and are reviewed in HODs meeting with Principal.

Financial year	Requested budget (in Lakhs)	Approved budget (in Lakhs)	Adequate / Not adequate
2022-23	1320.50	1265.25	adequate
2021-22	1296.00	1233.55	adequate
2020-21	1142.68	1082.73	adequate
2019-20	1229.50	1142.99	adequate

10.2.3 Availability of the audited statements on the institute's website (5)   Institute Marks : 5.00

Institute's audited statements are available at the following link:

https://assessmentonline.naac.gov.in/storage/app/hei/SSR/104253/4.1.4_1637387778_6925.pdf
(https://assessmentonline.naac.gov.in/storage/app/hei/SSR/104253/4.1.4_1637387778_6925.pdf)

10.2.1 Adequacy of budget allocation (10)   Institute Marks : 10.00

The allocated funds are utilized properly and are adequate as per the Academic requirements. The budget funds are utilized on priority basis as per the requirements of each department based on availability of funds. However, all recurring and non-recurring expenditure of departments is met in full.

Financial year	Approved budget (in Lakhs)	Actual expenditure (in Lakhs)	Justification
2022-23	1320.50	1265.25	
2021-22	1296.00	1233.55	Budget has been utilized within the sanctioned fund meeting the requirement by all the departments and institutional requirement
2020-21	1142.68	1082.73	
2019-20	1229.50	1142.99	

Summary of currentfinancial 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 1 - CFY 2022-23

Total Income 148480434				Actual expenditure(till…): 123578777			Total No. Of Students 1444
Fee	Govt.	Grants	Other sources(specify)	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
148480434	0	0		91581889	31996888	0	85580.87

Table 2 - CFYm1 2021-22

Total Income 148480434				Actual expenditure(till…): 123355380			Total No. Of Students 1309
Fee	Govt.	Grants	Other sources(specify)	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
148480434	0	0	0	90670293	32685087	0	94236.35

Table 3 - CFYm2 2020-21

Total Income 151176802				Actual expenditure(till…): 108273187			Total No. Of Students 1309
Fee	Govt.	Grants	Other sources(specify)	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify --	Expenditure per student
151176802	0	0	0	74780312	33492875	0	82714.43

Table 4 - CFYm3 2019-20

Total Income 130290618				Actual expenditure(till…): 114299132			Total No. Of Students 1191
Fee	Govt.	Grants	Other sources(specify) ---	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify ---	Expenditure per student
130290618	0	0	0	84953001	29346131	0	95969.04

Items	Budgeted in 2022-23	Actual Expenses in 2022-23 till	Budgeted in 2021-22	Actual Expenses in 2021-22 till	Budgeted in 2020-21	Actual Expenses in 2020-21 till	Budgeted in 2019-20	Actual Expenses in 2019-20 till
Infrastructure Built-Up	100000	0	100000	0	100000	0	300000	298611

Library	1515000	1254866	1500000	1242442	1900000	1653339	1800000	1474538
Laboratory equipment	100000	0	100000	0	100000	0	700000	671712
Laboratory consumables	250000	200000	200000	193175	400000	386419	150000	115485
Teaching and non-teaching staff salary	65145000	62720286	64500000	62099293	58000000	55972279	67000000	64869144
Maintenance and spares	29795000	28661603	29500000	28377825	19000000	18421614	22000000	19968372
R&D	4545000	3929544	4500000	3890638	5000000	4211981	1600000	1403009
Training and Travel	808000	694772	800000	687893	2900000	2410695	1600000	1336143
Miscellaneous Expenses	27675000	26117705	28400000	26864114	26868000	25216860	27800000	24162118
Others, specify								
Total	**129933000**	**123578776**	**129600000**	**123355380**	**114268000**	**108273187**	**122950000**	**114299132**

10.3 Program Specific Budget Allocation, Utilization (30)

10.3.2 Utilization of allocated funds (20)

Budget Utilized:

Financial year	Approved Budget (in Lakhs)	Actual Expenditure (in Lakhs)	Percentage of Utilization	Justification
2022-23	2370000	1960000	82%	The budget has been utilized within the sanctioned fund meeting the requirement of ECE Department. And still, we are in
2021-22	310500	250102	80%	The budget has been utilized within the sanctioned fund meeting the requirement of ECE Department.
2020-21	297241	207318	70%	The budget has been utilized within the sanctioned fund meeting the requirement of ECE Department.
2019-20	224754	161853	72%	The budget has been utilized within the sanctioned fund meeting the requirement of ECE Department.

Institute Marks :

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 1 :: CFY 2022-23

2370000		Actual expenditure (till…): 1916000		Total No. Of Students 120
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
2000000	370000	1686000	230000	15966.67

Table 2 :: CFYm1 2021-22

310500		Actual expenditure (till…): 250102		Total No. Of Students 145
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
80000	230500	55104	194998	1724.84

Table 3 :: CFYm2 2020-21

297241		Actual expenditure (till…): 207318		Total No. Of Students 135
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
100000	197241	42498	164820	1535.69

Table 4 :: CFYm3 2019-20

224754		Actual expenditure (till…): 161853		Total No. Of Students 104
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
50000	174754	16649	145204	1556.28

Items	Budgeted in 2022-23	Actual Expenses in 2022-23 till	Budgeted in 2021-22	Actual Expenses in 2021-22 till	Budgeted in 2020-21	Actual Expenses in 2020-21 till	Budgeted in 2019-20	Actual Expenses in 2019-20 till
Laboratory equipment	1000000	861000	10000	7552	50000	12448	10000	6667
Software	1000000	825000	0	0	0	0	0	0
Laboratory consumable	50000	40000	70000	53448	70000	56486	70000	19924
Maintenance and spares	50000	30000	150000	133732	120000	102602	100000	122602
R & D	20000	20000	70000	47552	50000	30050	40000	9982
Training and Travel	50000	40000	5000	2553	2000	1050	1500	656
Miscellaneous Expenses + Symposium + Others	200000	100000	5500	5265	5241	4682	3254	2022
Total	2370000	1916000	310500	250102	297241	207318	224754	161853

10.3.1 Adequacy of budget allocation (10)   Institute Marks : 10.00

Adequacy of Budget:

Financial year	Requested Budget (in Lakhs)	Approved Budget (in Lakhs)	Adequate/ Not Adequate
2022-23	2370000	1960000	Adequate
2021-22	310500	250102	Adequate
2020-21	297241	207318	Adequate
2019-20	224754	161853	Adequate

10.4 Library and Internet (20)
Tot

10.4.1 Quality of learning resources (hard/soft) (10)

Library Detail

15,488 sq. Ft.

Carpet Area of the library | Spread with various sections like; Textbooks Lending Area, Reference Section, Digital Library, Current Periodicals & Archives Section, Photocopier, Staff Reading Section, Audio Visual Section, Round Table Discussion, Personal Reading Area, Librarian Office

Number of seats in reading space Seating Capacity of 320 students & Faculty members

Library Photos:

VTU Consortium:

Visvesvaraya Technological University
SRI. S. G. BALEKUNDRI CENTRAL LIBRARY AND INFORMATION CENTER
Jnana Sangama, Belagavi-590018

VTU-CONSORTIUM

Subscription of E-Resources for the year 2022-23

SL NO	PUBLISHERS	SUBJECT CATEGORY	RESOURCE COVERAGE	NO. OF RESOURCES	CONTACT DETAILS	SUBSCRIPTION PERIOD
1.	Elsevier www.sciencedirect.com	E-Journals: Engineering + CS + EE + ME + EC + CV and allied branches of engineering.	Artificial Intelligence-22 Computer Graphics and Computer-Aided Design-19 Computer Networks and Communications-29 Computer Vision and Pattern Recognition-10 Hardware and Architecture-20 Information Systems-28 Signal Processing-13 Aerospace Engineering-5 Biomedical Engineering-16 Civil and Structural Engineering-35 Computational Mechanics-11 Electrical and Electronic Engineering-33 Mechanical Engineering-38 Ocean Engineering-6 Safety, Risk, Reliability and Quality-13 (Back Issues from 2010)	298 Journals	Mr.Nikhil Bhalerao 74286 99374 n.bhalerao@els evier.com	23-05-2022 to 22-05-2023
2.	IEEE Proceedings Order Plan (POP) https://ieeexplore.ieee.org IEEE Advancing Technology for Humanity	IEEE Proceedings: The core collection of IEEE conference proceedings from approximately 100 of IEEE's most important conferences. Full-text access with a backfile to 2010.	• Aerospace and Defense • Biometrics • Computer Hardware and Software • Cyber Security • Electronics • Internet of Things (IoT) • Medical Devices • Nanotechnology • Optics • Power Engineering • Robotics • Semiconductors • Smart Grid • Telecommunications • Wireless Technology (Back Issues from 2010)	530,000 papers - from 100 core IEEE conference titles in POP	Mr. Manjunath SR 98702 00104 mrudrappa@eb sco.com	23-09-2022 to 22-09-2023

#	Resource	Type	Coverage	Count	Contact	Period
3.	**Springer Nature** https://link.springer.com/ SPRINGER NATURE	E-Journals: Electrical & Electronics Mechanical Civil Computer Science Engineering (Allied Subject) Chemistry and Material Science Mathematics Physics	Electrical & Electronics - 58 Mechanical - 44 Civil - 13 Computer Science - 93 Engineering (Allied Subject) - 39 Chemistry and Material Science - 162 Mathematics - 167 Physics - 104 (Back Issues from 1997)	690 Journals	Mr. Varghese P. Thomas 96869 64063 varghese.thoma s@springernatu re.com Mr. Rajaneesh 99005 55516 rajaneesh@spri nger.com	23-05-2022 to 22-05-2023
4.	**Taylor & Francis** https://www.tandfonline.com/ Taylor & Francis	E-Journals: Engineering + CSE + ME + CV + Architecture and Allied Science	Allied Science-324 Mechanical-35 Textile -8 Engineering & Technology-76 Electrical-17 Computer Science-27 Civil & Structural-31 BioTechnology-17 Architecture-19 (Back Issues from 2010)	585 Journals	Mr. Vinay Srinivas 98860 44775 Vinay.srinivas@ tandfindia.com Mr. Onkar Verma onkar.verma@t andfindia.com Tel: +91-11-43155118	23-05-2022 to 22-05-2023
5.	**Emerald** https://www.emeraldinsight.com/ emerald PUBLISHING	E-Journals: Management	Accounting, Finance & Economics-9 Business, Management & Strategy-18 Education-10 Health & Social Care-5 HR, Learning & Organization Studies-17 Information & Knowledge Management-10 Library Studies-17 Marketing-12 Operations, Logistics & Quality-10 Property Management & Built Environment-5 Public Policy & Environmental Management-6 Tourism & Hospitality Management-1 (Back Issues from 2010)	120 Journals	Mr. S Vinay Kumar 99162 52539 svkumar@emer aldgroup.com	01-10-2022 to 30-09-2023
6.	**ProQuest** https://www.proquest.com/165290 ProQuest	E-Journals: Architecture and all Engineering and its allied branches.	Technology Collection includes the Advanced Technology & Aerospace and Materials Science & Engineering Databases (Back issues from 1962)	Full text: 4900 Journals Indexed: 7800 Abstract	Mr. Lakshmikanth A 98863 39117 Lakshmikanth. Aswathanaraya n@proquest.co m	01-08-2022 to 31-07-2023
7.	**Emerald** https://www.emerald.com/insight/ content/case-studies emerald insight	Emerald Case Studies: Emerging Markets Case Studies	E-Case Collection (1000 Indian). The CASE Journals (Electronic)	1000 E-Case	Mr. S Vinay Kumar 99162 52539 svkumar@emer aldgroup.com	01-06-2022 to 31-05-2023
8.	**Mint Books** https://mintbook.in ///mintbook	E-Books: Mintbook unified learning platform of e-Books	1. Civil engineering - 160 2. Mechanical engineering - 249 3. Electrical engineering - 182 4. Electronics and communication - 226 5. Computer science - 850 6. Information technology -199 7. Biotechnology - 150 8. Management - 1189 9. Allied branches of engineering – 183 10. Others (competitive exams) - 81	3469 eBooks	Mr. Charan B. Naik 8886247670 charan@mintbo ok.com	01-06-2022 to 31-05-2023
9.	**MAPMy Access** https://vtuconsortium.mapmyacc ess.com MAPMy Access	• Cloud server along with Universal Federation search services • Remote Access Solution	All subjects 12 K + Resources and following features: 1. OA resources: Journals + e-Books + e-Theses + Educational videos. 2. 24 X 7 seamless access. 3. Admin control for librarians. 4. Usage report for individual colleges. 5. Secured remote access full text content. 6. Mobile compatibility.	OA resourc es: 10.000+ eBooks & 5700+ eJournal s	Mr. Satish Pandharpurkar 8971638 634 support@vtuco nsortium.com Mr. Somshekhar V Thalange 8600105949 somshekhar@ maplibraryservi ces.com	23-05-2022 to 22-05-2023
10.	**Turnitin** https://www.turnitin.com/ turnitin	Plagiarism Originality Online Check*	End user Licenses: 1. Instructor profile 2. Student's profile	–	Anub Kumar 9811464814 akumar@turniti n.com	03-06-2021 to 02-06-2022
11.	**NetAnalytiks** LANQUILL	LANQUILL (Writing Grammar Learning Tool)	1. Admin control for librarians 2. 24 X 7 seamless access 3. Usage report for individual college can take	–	Mr. Laxminarayan a Ullala 96205 55571 laks@netanalyti ks.com Mr. Sateesh Hegde 94480 91428 sateeshh@neta nalytiks.com	23-05-2022 to 22-05-2023

Note: 1. Above all e-Resources, services extended subject to annual membership payment against license copy of VTU Consortium.
2. *Access given to only 140 PG program Colleges.
3. Previous years' purchased e-Books access is continued as perpetual, in the case of McGraw-Hill & Mintbook e-Books subscribed up to 31.05.2023.

Sl. No	Particulars	Collection
1.	**Collection of titles/Textbooks**	
	Total No. of Books	**21460**
	Total No. of Textbooks	**19756**
	Reference Books	**1704**
	Total No. of title	**3779**
	Rare Book Collection	**32**
2.	**Current Year Periodicals**	
	National Journals	**50**
	International Journals	**16**
	New Papers	**12**
3.	**e-Resources (Online Journals) through VTU Consortium**	
	Elsevier, IEEE, Taylor & Francis, Springer Nature, ProQuest, Mint books, Map Systems (Remote Access Service Map my Access), Net Analytics Technologies, Turnitin Software Online Tool)	
	https://acsce.mapmyaccess.com/ (https://acsce.mapmyaccess.com/)	
	https://www.turnitin.com/t_home.asp?login=1&svr=22&lang=en_us&r=68.7278218305288 (https://www.turnitin.com/t_home.asp?login=1&svr=22&lang=en_us&r=68.72	
4.	**Institutional Membership**	**NDLI Club & DELNET**
5.	**Bound Volume of Print Journals**	**941**
6.	**Non-Book Materials**	
	CD-ROM/DVDs	**657**
	In addition, we have EDUSAT e-Learning Program & NPTEL Lecture notes	https://nptel.ac.in/localchapter/statistics/709
7.	**Computers**	**27**
8.	**Book Bank**	**250**

Records Maintenance in the Library:

RFID Components for Library Smooth and Proper Function

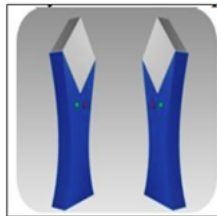| RFID Book Tag | RFID Staff Station | Gate Security System | RFID Self-KIOSK |
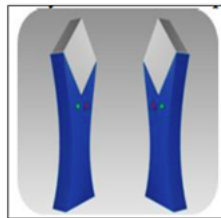
NGL 3.0.0 Version Software Access Steps:
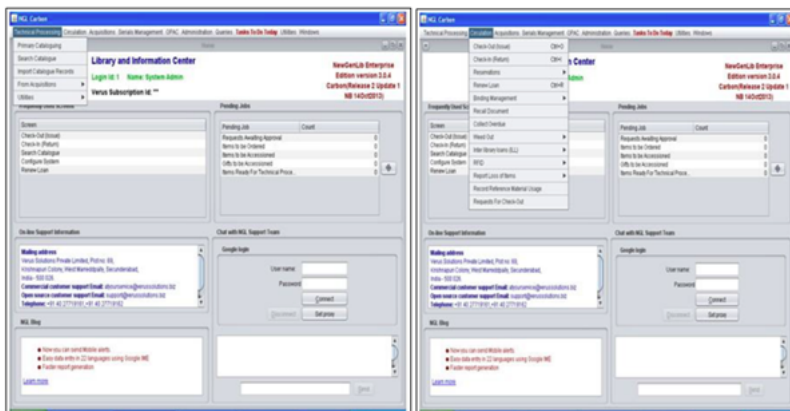

e-Resource (VTU Consortium)
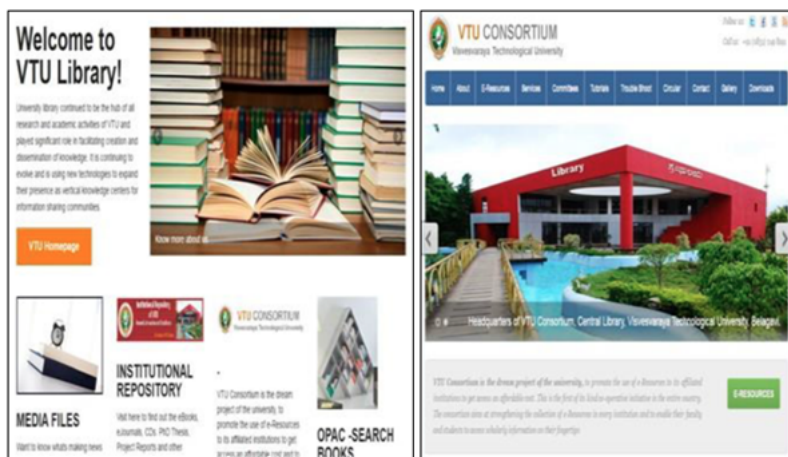
E- Resources

IEEE – IEL Online	www.ieeexplore.ieee.org (http://www.ieeexplore.ieee.org)
Elsevier Science (Science Direct)	www.sciencedirect.com (http://www.sciencedirect.com)
Springer e-Journals	www.link.springer.com (http://www.link.springer.com)
Taylor & Francis Journals	www.tandfonline .com
ProQuest – Engineering/Management	www.search.proquest.com (http://www.search.proquest.com)
K-Nimbus: Digital Library Platform	https://www.knimbus.com/user/auth.do
Remote Access Solution	

Link for E-Resources https://acsce.mapmyaccess.com/ (https://acsce.mapmyaccess.com/)
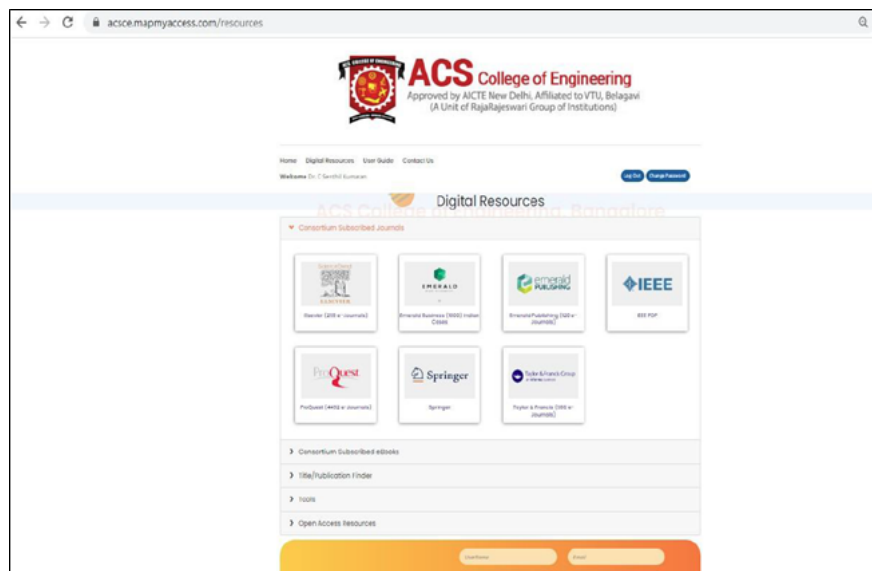
Support to students for self-learning activities:

Accessibility to students Apart from Print Resources the following e-Resources are also available for the benefit of the staff and students. All these resources are very mu the course curriculum.

E- Journals Package:

- Elsevier Science Direct e-Journals
- Springer Nature e-Journals
- Taylor and Francis e-Journals
- K-nimbus (Digital Library Platform and Remote Access Solution)
- Turnitin (Similarity check tool)
- online NPTEL Videos
- Online IIT Bombay Spoken Tutorial Videos
- Online Infosys Spring Board Videos
- Digital Library with a Capacity of 25 Computers linked to E-resources
- https://www.acsce.edu.in/e-learning/

- https://acsce.mapmyaccess.com/

10.4.2 Internet (10)   Institute Marks : 10.00

Name of the Internet provider	Railtel
Available band width	1 Gbps
WiFi availability	20 Access Points
Internet access in labs, classrooms, library and offices of all Departments	LAN Connectivity: LABs, Class Rooms, office of all the departments, Seminar Halls, Conference Hall, Digital Library
Security arrangements	Whole Campus is Enabled with CCTV Surveillance Radius Manager

Annexure I
(A) PROGRAM OUTCOME (POs)

Engineering Graduates will be able to:

1. **Engineering Knowledge :** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem Analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design/development of solutions:** 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, and environmental considerations.
4. **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.
5. **Modern tool usage:** 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.
6. **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.
7. **Environment and sustainability:** 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:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** 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:** 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.
12. **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.

(B) PROGRAM SPECIFIC OUTCOME (PSOs)

PSO1	To Analyze, design and develop solutions by applying foundational concepts of Electronics and Communication Engineering.
PSO2	Design and implement the products using cutting edge technologies in hardware and software, to demonstrate leadership qualities among students, to promote research and development activities for betterment of organization and society.

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 inforce as on date and the institutes hall 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 willbe initiated by the NBA. In case, any false statement/information is observed during pre-visit, visit, postvisit and subsequent to grant of accreditation.

Head of the Institute
Name : Dr. M. S. Murali
Designation : Principal
Signature :

Seal of The Institution :
Principal
A.C.S. College of Engineering
Kambipura, Mysore Road, Kengeri Hobli,
Bangalore - 560 074

Place : Bangalore
Date : 03-04-2023 16:05:06