PES Institute of Technology and Management

Computer Science & Engg.

Part A: Institutional Information

1 Name and Address of the Institution			
PES Institute of Technology and Management, PES Campus, NH-206, Sagar Road, Guddada Arak	kere, Kotegangoor Post, Shiv	amogga-577204	
2 Name and Address of Affiliating University			
Visvesvaraya Technological University			
3 Year of establishment of the Institution:2007			
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	me of Institutions Year of Establishment Programs of Study		Location		
PES Institute of Advanced Management Studies	2008	Commerce, Computer Application, PG Department of Commerce.	NH 206, Sagar Road, Shivamogga - 577204		
PES Pre University College	2009	11th and 12th Standard	NH 206, Sagar Road, Shivamogga – 577204		
PES Public School	2010	CBSE-1st Standard to 10th Standard.	NH 206, Sagar Road, Shivamogga - 577204		
PES Polytechnic	2011	Diploma Courses	NH 206, Sagar Road, Shivamogga - 577204		

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	То	Program for consideration	Program for Duration
Computer Science & Engineering	UG	2007	2007	120	No	120	Applying first time			Yes	4
Computer Science & Engg.	PG	2014	2014	24	Yes	0	Not eligible for accreditation			No	2

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	То	Program for consideration	Program for Duration
Sanctioned Intake for I	_ast Five Year	s for the	Computer So	cience &	Engg.						
Academic Year				Sa	nctioned l	ntake					
2019-20				0							
2018-19				0							
2017-18				24							
2016-17				24							
2015-16				24							
2014-15				24							
Electronics and Communication Engineering	UG	2007	2007	120	No	120	Applying first time			No	4
Digital Electronics	PG	2014	2014	24	Yes	0	Not eligible for accreditation			0	2
Sanctioned Intake for I	_ast Five Year	s for the	Digital Electi	ronics							
Academic Year				Sa	Sanctioned Intake						
2019-20				0	0						
2018-19				0	0						
2017-18					24						
2016-17					24						
2015-16			24								
2014-15	24										

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	То	Program for consideration	Program for Duration
Civil Engineering	UG	2013	2013	60	No	60	Applying first time			0	4
Information Science and Engineering	UG	2007	2007	60	No	60	Applying first time			0	4
Mechanical Engineering	UG	2010	2010	120	No	120	Applying first time			0	4
Master of Business Administration	PG	2008	2008	120	Yes	60	Eligible but not applied			No	2

Sanctioned Intake for Last Five Years for the Master of Business Administration							
Academic Year	Sanctioned Intake						
2019-20	60						
2018-19	60						
2017-18	6						
2016-17	60						
2015-16	60						
2014-15	120						

8 Programs to be considered for Accreditation vide this application:

S No	Level	Discipline	Program
1	Under Graduate	Engineering & Technology	Civil Engg.
2	Under Graduate	Engineering & Technology	Computer Science & Engg.
3	Under Graduate	Engineering & Technology	Electronics & Communication Engg.
4	Under Graduate	Engineering & Technology	Information Science & Engg.
5	Under Graduate	Engineering & Technology	Mechanical Engg.

9 Total number of employees in the institution:

A. Regular* Employees (Faculty and Staff):

Items		9-20	201	8-19	2017-18	
items	MIN	MAX	MIN	MAX	MIN	MAX
Faculty in Engineering (Male)	74	76	79	80	77	78
Faculty in Engineering (Female)	18	18	18	20	21	21
Faculty in Maths, Science & Humanities (Male)	7	7	6	6	7	7
Faculty in Maths, Science & Humanities (FeMale)	7	7	8	8	8	8
Non-teaching staff (Male)	24	27	22	25	21	21
Non-teaching staff (FeMale)	11	13	7	8	7	8

B. Contractual* Employees (Faculty and Staff):

Items		9-20	201	8-19	2017-18	
items	MIN	MAX	MIN	MAX	MIN	MAX
Faculty in Engineering (Male)	1	1	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	2019-20	2018-19	2017-18
Total no. of Boys	1096	1088	1188
Total no. of Girls	930	935	936
Total	2026	2023	2124

Engineering and Technology- PG Shift-1

Items	2019-20	2018-19	2017-18
Total no. of Boys	0	0	2
Total no. of Girls	0	0	1
Total	0	0	3

Engineering and Technology- MBA Shift-1

Items	2019-20	2018-19	2017-18
Total no. of Boys	68	49	48
Total no. of Girls	51	56	64
Total	119	105	112

11 Vision of the Institution:

To be the most preferred institution for engineering & management education, research and entrepreneurship by creating professionally superior and ethically strong global manpower.

12 Mission of the Institution:

To prepare students for professional accomplishments and responsible global citizenship while fostering continuous learning and to provide state-of-the-art education through the committed and highly skilled faculty by partnering and collaborating with industry and R&D institutes.

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

Head of the Institution			
Name Dr. Chaitanya Kumar M V			
Designation	Principal		
Mobile No.	9380741865		
Email ID	principal_pestim@pes.edu		

NBA Coordinator, If Designated

Name	Dr. Jagadeesha S N		
Designation	Professor and HOD, Department of Computer Science & Engineering		
Mobile No.	9916104383		
Email ID	hodcse@pestrust.edu.in		

Critera No.	Criteria	Total Marks	Institute Marks
1	VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES	60	50.00
2	PROGRAM CURRICULUM AND TEACHING - LEARNING PROCESSES	120	95.00
3	COURSE OUTCOMES AND PROGRAM OUTCOMES	120	105.00
4	STUDENTS' PERFORMANCE	150	102.25
5	FACULTY INFORMATION AND CONTRIBUTIONS	200	131.03
6	FACILITIES AND TECHNICAL SUPPORT	80	51.00
7	CONTINUOUS IMPROVEMENT	50	34.00
8	FIRST YEAR ACADEMICS	50	37.38
9	STUDENT SUPPORT SYSTEMS	50	33.00
10	GOVERNANCE, INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES	120	110.00
	Total	1000	748

Part B

1 VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES (60)

Total Marks 50.00

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

Total Marks 4.00

Institute Marks: 4.00

Vision of the institute		To be the most preferred institution for engineering & management education, research and entrepreneurship by creating professionally superior and ethically strong global manpower.			
Mission of the institute	continuous	To prepare students for professional accomplishments and responsible global citizenship while fostering continuous learning and to provide state-of-the-art education through the committed and highly skilled faculty by partnering and collaborating with industry and R&D institutes.			
Vision of the Department		To be a leader in providing education with skilled technical knowledge imbibing professional ethics to the students in the field of Computer Science and Engineering			
	Mission No.	Mission Statements			
Mission of the Department	M1	Imparting quality education to students by ensuring a learning environment through qualified faculty and good infrastructure			
	M2	Empower students to attain strong technical and ethical skills for a successful career in industry, academics, research and entrepreneurship through active engagement with all the stakeholders			

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

Total Marks 4.00

PEO No.	Program Educational Objectives Statements
PEO1	The ability to conceptualize, analyze, design and develop IT Solutions of varying complexities by leveraging advances in computer technology
PEO2	The ability to apply standard practices and strategies in software project development and management using industry-wide bench marked framework to deliver a sustainable quality product
PEO3	The ability to work as a team player in cross-cultural environment adhering to work ethics with a passion for entrepreneurship and a zest for higher studies

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

Institute Marks: 8.00

Total Marks 8.00

- 1. Website: http://pestrust.edu.in/pesitm/computer-science/
- 2. Department Calendar of events
- 3. Department Newsletter.
- 4. Computer wall paper
- 5. Parent feedback forms
- 6. Displayed at the Department Entrance, conference hall, Department Brochure, Corridors, Class rooms, Labs, HOD chamber and notice boards.
- 7. The staff and students are reminded of the Vision and Mission through the displays
- 8. Alumni and employer survey forms
- 9. Handout for students
- 10. Bluebooks

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

Total Marks 22.00

Institute Marks: 22.00

The following steps are followed to establish Vision and Mission of the department.

- Step 1.The Vision & Mission of the Institute is taken as the basis.
- Step 2: Existing mission and goals of the program are considered.
- Step 3: The Department conducts brain-storming sessions with the faculty on the skill-set required by the local and global employers and the draft copy of the Vision and Mission of the department are prepared.
- Step 4: The program coordinator collects the views from Parents, Professional bodies and Industry representatives and incorporate to revise the draft version based on their inputs.

Step 5: The accepted views are analyzed and reviewed by the Program Assessment Committee (PAC) to finalize the vision and mission of the department. If the PAC is not satisfactory on vision and mission then go to step 3

Step 6: The finalized vision and mission are placed in the Department Advisory Board (DAB) for approval. If action of DAB is not satisfactory on vision and mission then go to step 5

Step 7:The approved vision and mission are published and shared with the stake holders.

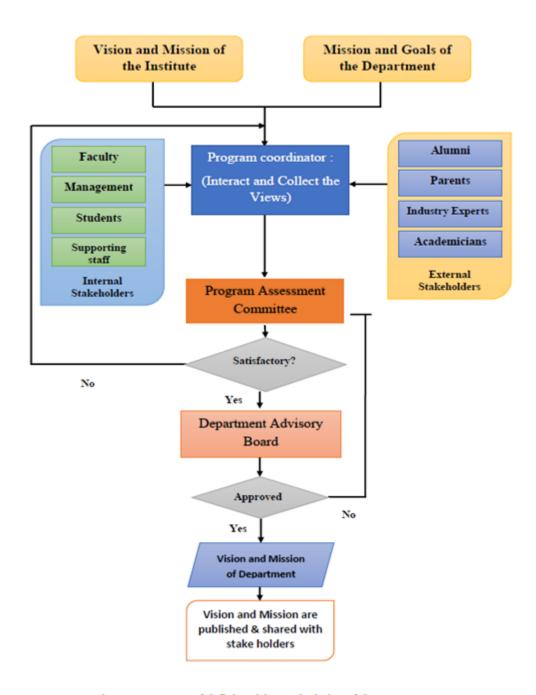


Fig.B.1.4.1 Process of defining vision and mission of the Department

The PEOs are established through the following process steps:

- STEP 1: Vision and Mission of the Institute & Department are taken into consideration to interact with various stake holders, and establish the PEO's
- STEP 2: The Head of the Department, Program Coordinator and other Senior Faculty prepares the draft version of PEOs.
- STEP 3: The draft version is discussed with stakeholders and their views are collected by the Program co-coordinator
- STEP 4: The Program Assessment Committee reviews and analyzes the PEOs and submits its recommendations to the Departmental Advisory Board.
- STEP 5: The Departmental Advisory Board deliberates on the recommendations and freezes the PEOs.
- STEP 6: The approved Program educational objectives (PEOs) are published and shared with stake holders.

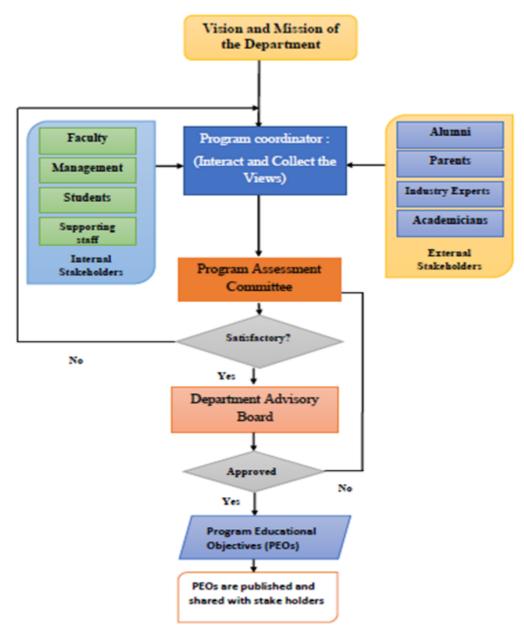


Fig.B.1.4.2 Process of defining PEOs of the Department

Institute Marks: 12.00

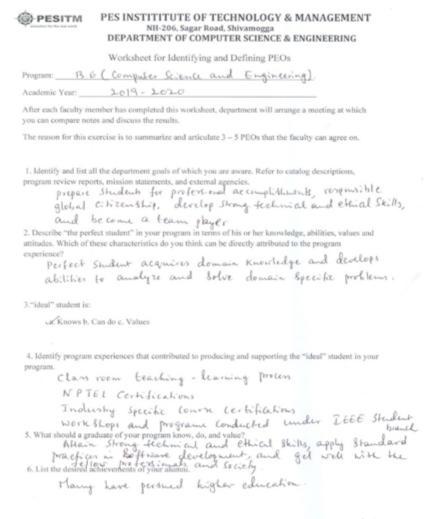


PES INSTITITUTE OF TECHNOLOGY & MANAGEMENT DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

•	Is mission statements brief and memorable?	Yes. It is brief and memorable.
•	Is it distinctive?	Yes
•	Does it clearly state the purpose of the program?	Yes.
•	Does it indicate the primary functions or activities of the program?	All primary functions and activities are indicated.
٠	Does it indicate who the stakeholders are?	Yes
	Does it clearly support the department's,	and the second s
	institution's missions?	Yes.

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Figure 1.5.a Worksheet for reviewing Program Mission



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Figure 1.5.b Worksheet for Identifying and Defining PEO

PESITM PESINSTITITU DEPARTMEN	TTE OF TECHNOLOGY & NOT OF COMPUTER SCIENCE &	MANAGEMENT & ENGINEERING	
Checklist	for Reviewing PEO Statements	s	
Academic Year: 2019 - 2	0		
The purpose of this checklist is to help to	determine if the PEO statements are	appropriate.	
VISION OF THE DEPARTMENT			
	puter science education with skilled iduate students in the field of Compu		
MISSION OF THE DEPARTMENT			
and good infrastructure To empower students to attain st	udents by ensuring a learning environ	a successful career in industry,	
academics, research and entreprer	neurship through active engagement	with all the stakeholders.	
PROGRAM EDUCATIONAL OBJEC	CTIVES (PEO)		
 The ability to conceptualize, and leveraging advances in computer 	alyze, design and develop IT Soluti technology.	ions of varying complexities by	
using industry-wide bench marke	tices and strategies in software proje d framework to deliver a sustainable	quality product.	
 The ability to work as a team pla and a zest for higher studies. 	yer in cross-cultural environment wi	ith a passion for entrepreneurship	
Do the PEOs describe desired performance?	Yes		
Are the PEOs consistent with the mission?	- yes		
If PEOs are achieved, have you reached or moved toward the vision?	yes Yes		
Are the goals aligned with the values?	YES		

Figure 1.5.c Reviewing Checklist for PEO
Table 1.5.a Justification Matrix for Program Mission and PEO

PEO statements/ Mission	M1	Justification	M2	Justification
PEO1:	3	We are providing learning environment	3	Student will gain the required skills through teachers, elearning, Interaction with industry and through professional society
PEO2:	2	Scope for software project development and maintenance through active collaboration of students, qualified faculty and facilities	3	Provide enhanced teaching through NPTEL courses, professional certifications, conducting programs under professional society, by inviting experts from industries and institutes and organizing workshops latest technologies
PEO3	3	Students work on Projects, participating in various activities and training from career guidance cell, conducting sessions on opportunities for higher education and highlighting the advantages	2	Students are encouraged to participate in internships and group curricular activities.

Consistency Matrix for PEO-PO & PEO-PSO
Following table establishes the consistency of PEOs with POs and PSOs in the scale of High (3), Medium (2) and Low (1).

Table 1.5.b Correlation Matrix for PEO-PO & PEO-PSO

PEO3

	PEO1	PEO2	PEO3
PO1	3	-	3
PO2	3	-	-
PO3	3	3	-
PO4	2	3	-
PO5	1	3	-
PO6	-	1	2
PO7	-	2	-
PO8	-	-	3
PO9	-	2	3
PO10	-	-	3
PO11	-	2	-
PO12	2	2	3
PSO1	3	2	1
PSO2	3	3	1
PSO3	3	3	3

PEO Statements	M1	M2
The ability to conceptualize, analyze, design and develop IT Solutions of varying complexities by leveraging advances in computer technology	3 •	3 🔻
The ability to apply standard practices and strategies in software project development and management using industry-wide bench marked framework to deliver a sustainable quality product	2 🕶	3 🔻
The ability to work as a team player in cross-cultural environment adhering to work ethics with a passion for entrepreneurship and a zest for higher studies	3 🕶	2 🔻

2 PROGRAM CURRICULUM AND TEACHING - LEARNING PROCESSES (120)

Total Marks 95.00

2.1 Program Curriculum (20) Total Marks 16.00

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 Annexurel. Also mention the identified curricular gaps, if any Institute Marks: 9.00 (10)

PES Institute of Technology and management Shimoga is affiliated to Visvesvaraya Technological University, Belagavi. The entire program curriculum is designed and provided by UNIVERSITY. Modification of syllabus is not permitted as the institution comes under the university. Apart from the university syllabus, various curricular and extra-curricular activities are carried out at the departmental level for the benefit of students and societal needs. Institution follows the schemes for UG programme as below:

- 2010 scheme
- Choice Based Credit System (CBCS) scheme for the academic year 2015
- Choice Based Credit System (CBCS) scheme for the academic year 2017
- Choice Based Credit System (CBCS) scheme for the academic year 2018

As stated by **NBA**, program outcomes represent the knowledge, skills and attitudes the students should have at the end of a four year engineering program. For each course, Course Outcomes are defined by Course Instructor as per the scheme and syllabus defined by the University to meet POs and PSOs.

List of PO's:

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.

The CSE Department has specified the following Programme Specific Outcomes (PSO).

PSO1	Interpret the fundamental concepts and methodologies of computer systems.
PSO2	Apply the mathematical concepts to crack problems using suitable mathematical analysis, data structures and algorithms.
PSO3	Develop ability to grasp the software development lifecycle and methodologies of software systems. Possess competent skills and knowledge of software design process. Familiarity and practical proficiency with a broad area of programming concepts and provide new ideas and innovations towards research.

Generally Curriculum maintains the balance in the composition of basic science, humanities, professional courses and their distribution in core and elective offerings. If some components to attain CO's/ PO's, are not included in the curriculum provided by the affiliated university then the Institution makes additional efforts to impart such knowledge by covering aspects through "CONTENT BEYOND SYLLABUS". The Department identifies content beyond syllabus by proper "GAP analysis" process shown in figure 2.1.1

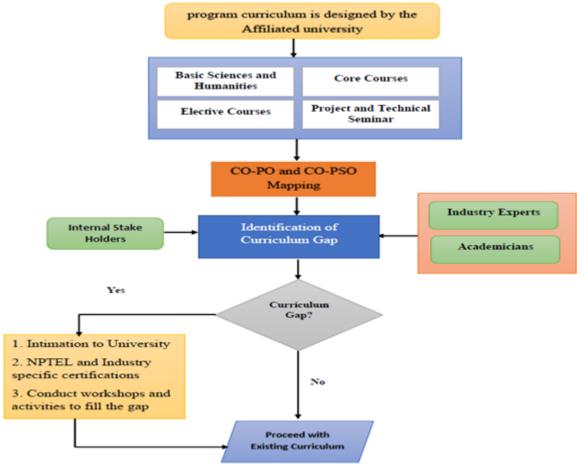


Fig. 2.1.1: Curriculum GAP Identification Process

Curriculum Gap Identification Process:

- 1. For each course, Course Outcomes are defined by Course Instructor as per the scheme and syllabus defined by the University to meet POs and PSOs.
- 2. Consolidated PO and PSO mapping table is prepared.
- 3. The table thus prepared was reviewed by faculty and HOD to determine which component of PO/PSOs were either not met or met. Department may offer additional electives courses prescribed by university, laboratory experiments, and online courses to improve the level.
- 4. Subject experts and HOD will review the syllabus provided by the university and identify the Gaps by taking inputs from internal stake holders, industry expert's alumni and academicians.
- 5. Corrective actions to be taken to bridge the gap are discussed and finalize the CONTENT BEYOND SYLLABUS to be covered

The University Curriculum of the program

Table 2.1.1.a: University Curriculum of Computer Science and Engineering for 2010 Scheme

SI No	Course Code	Course Name	Domain	PO's & PSO's
1.	10MAT11	Engineering Mathematics-I		PO1,PO2,PO3,PO4,PO5,PO6,PO7,PO9,PO12
2.	10MAT21	Engineering Mathematics-II		PO1,PO2,PO3,PO4,PO5,PO6, PO9,PO12
3.	10MAT31	Engineering Mathematics-III		PO1,PO2,PO3,PO4,PO12 PSO1,PSO2
4.	10CS34	Discrete Mathematical Structures	Mathematics	PO1,PO2,PO3,PO4, PO12,PSO1,PSO2,PSO3
5.	10MAT41	Engineering Mathematics-IV		PO1,PO2,PO3,PO4,PO5,PO12
6.	10CS42	Graph Theory and Combinatory		PO1,PO2,PO3,PO4,PO12,PSO1,PSO2,PSO3
7.	10CS661	Operations Research		PO1,PO2,PO3,PO4,PO12
8.	10CS35	Data Structures with C/C++	Professional Core Subjects	PO1,PO2,PO3,PO4,PO5,PO12,PSO1,PSO2,PSO3
9.	10CS32	Electronic Circuits		PO1,PO2,PO3,PO4, PO12,PSO1,PSO2
10.	10CS33	Logic Design		PO1,PO2,PO3,PO4, PO12,PSO1,PSO2
11.	10CS36	Objected Oriented Programming		PO1,PO2,PO3,PO4, PO12,PSO1,PSO2,PSO3
12.	10CS43	Design and Analysis of Algorithms		PO1,PO2,PO3,PO4 PO12,PSO1,PSO2,PSO3
13.	10CS44	Unix and Shell Programming		PO1,PO2,PO3,PO4,PO5,PO7,PO9,PO12,PSO1, PSO3
14.	10CS45	Microprocessors		PO1,PO2,PO3,PO4,PO5,PO12,PSO1,PSO2,PSO3
15.	10CS46	Computer Organization		PO1,PO2,PO3,PO4, PO12,PSO1,PSO2
16.	10CS52	Systems Software		PO1,PO2,PO3,PO4,PO5,PO12,PSO1
17.	10CS53	Operating Systems		PO1,PO2,PO3,PO4, PO12,PSO1,PSO2,PSO3
18.	10CS54	Database Management Systems		PO1,PO2,PO3,PO4,PO5,PO12,PSO1,PSO2,PSO3
19.	10CS55	Computer Networks - I		PO1,PO2,PO3,PO4,PO5,PO6,PO7,PO8,PO10,PO12,PSO1,PSO2,PS0
20.	10CS56	Formal Languages and Automata Theory		PO1,PO2,PO3,PO5,PO12,PSO1,PSO2,PSO3
21.	10AL61	Management and Entrepreneurship		PO1,PO2,PO3,PO8,PO9,PO10,PO11,PO12,PSO1,PSO2,PSO3
22.	10CS62	Unix Systems Programming		PO1,PO2,PO3,PO4,PO12,PSO1,PSO2,PSO3

23.	10IS51	Software Engineering		PO1,PO2,PO3,PO4, PO12,PSO1,PSO2,PSO3
24.	10CS64	Computer Networks - II		PO1,PO2,PO3,PO4,PO5,PO6,PO12,PSO1,PSO2,PSO3
25.	10CS65	Computer Graphics and Visualization		PO1,PO2,PO3,PO4,PO5,PO12,PSO1,PSO2,PSO3
26.	10CS71	Object Oriented Modeling and Design		PO1,PO2,PO3,PO11, PO12,PSO1,PSO2,PSO3
27.	10CS72	Embedded Computing System		PO1,PO2,PO3,PO8, PO12,PSO1,PSO2,PSO3
28.	10CS73	Programming The Web		PO1,PO2,PO3,PO4,PO12,PSO1,PSO2,PSO3
29.	10CS74	Advanced Computer Architecture		PO1,PO2,PO3,PO4,PO8,PO12,PSO1,PSO2,PSO3
30.	10CSL16	Computer Programming Lab		PO1,PO2,PO3,PO4,PO5,PO12,PSO1,PSO2,PSO3
31.	10CSL37	Data Structures Lab with C/C++		PO1,PO2,PO3,PO4,PO5,PO8,PO9,PO10,PO12,PSO1,PSO2,PSO3
32.	10CSL38	Electronic Circuits & Logic Design Lab.		PO1,PO2,PO3,PO4,PO5,PO9,PO10,PO12,PSO1,PSO2,PSO3
33.	10CSL47	Design and Analysis of Algorithms lab		PO1,PO2,PO3,PO4,PO5,PO8,PO9,PO10,PO12,PSO1,PSO2,PSO3
34.	10CSL48	Microprocessors Lab.	Professional Core Lab	PO1,PO2,PO3,PO4,PO5,PO9,PO10,PO12,PSO1,PSO2,PSO3
35.	10CSL57	Database Applications Laboratory		PO1,PO3,PO5,PO9,PO10,PO12,PSO1,PSO2,PSO3
36.	10CSL58	Systems Software and Operating Systems Lab		PO1,PO2,PO3,PO4,PO5,PO9,PO10,PO12,PSO1,PSO2,PSO3
37.	10CSL67	Computer Graphics and Visualization lab		PO1,PO2,PO3,PO4,PO5,PO8,PO9,PO10,PO11,PO12,PSO1,PSO2,PS
38.	10CSL77	Networks Laboratory		PO1,PO2,PO3,PO4,PO5,PO8,PO9,PO10,PO12,PSO1,PSO2,PSO3
39.	10CIV18	Environmental Studies		PO6,PO7,PO9,PO12
40.	10CIP28	Constitution of India & Professional Ethics	Humanity	PO6,PO7,PO8,PO9,PO12
41.	10CHE13	Engineering Chemistry		PO1,PO2,PO3,PO4,PO6,PO7
42.	10PHY23	Engineering Physics	Basic Science	PO1,PO2,PO3,PO4,PO6
43.	10CHEL17	Engineering Chemistry Lab		PO1,PO2,PO3,PO4
44.	10PHYL27	Engineering Physics Lab		PO1,PO2,PO3,PO4,PO5,PO6,PO9,PO10

45.	10CCP13	Computer Concepts & C Programming		PO1,PO2,PO3,PO4,PO5,PO12,POS1,PSO2
46.	10ELN15	Basic Electronics		PO1,PO2,PO3,PO4,PO5,PO10,PSO1,PSO2
47.	10CIV23	Elements of Civil Engg &Engg Mechanics		PO1,PO2,PO4
48.	10EME24	Elements of Mechanical Engg		PO1,PO2,PO6,PO7
49.	10CED14	Computer Aided Engineering Drawing Lab		PO1, PO2, PO3,PO4,PO5,PO9,PO12,PSO1, PSO2
50.	10ELE25	Basic Electrical Engg	Basic Engineering Subjects	PO1,PO2,PO3,PO6,PO12
51.	10WSL26	Workshop Practice		PO1,PO2, PO9
52.	10CS765	Storage Area Networks		PO1,PO2,PO3,PO4,PO6,PO1,PSO2,PSO3
53.	10CS835	Information and Network Security		PO1,PO2,PO3,PO4,PO5,PO6,PO11,PO12,PSO1,SPO2,PSO3
54.	10CS842	Software Testing		PO1,PO2,PO3,PO4,PO8,PO12,PSO1,PSO2,PSO3
55.	10IS81	Software Architectures		PO1,PO2,PO3,PO4,PO11,PO12. PSO1,PSO2,PSO3
56.	10CS63	Compiler Design	Advanced Design	PO1,PO2,PO3,PO4,PO5,PO6,PO12,PSO1,PSO2,PSO3
57.	10CSL78	Web Programming Laboratory		PO3,PO4,PO5,PO10, PO12, PSO1,PSO2,PSO3
58.	10CS753	JAVA and J2EE		PO1,PO2,PO3,PO4,PO5, PO12,PSO2,PSO3
59.	10IS761	C # Programming and .Net		PO1,PO2,PO3, PO5,PO9,PO11,PO12, PSO1,PSO2,PSO3
60.	10CS832	Web 2.0 and Rich Internet Applications	Programming	PO1,PO2,PO3,PO12,PSO1,PSO2,PSO3
61.	10CSL68	Unix System Programming Lab and Compiler Design		PO1,PO2,PO3,PO4,PO5,PO8,PO9,PO10,PO11,PO12, ,PO1,PO2,PO3
62.	10CS73	Programming the Web		PO1,PO2,PO3,PO4,PO12,PO1,PO2,PO3,
63.	10CS85	Project Work	Project & Seminar	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO1: PSO2, PSO3
64.	10CS86	Seminars	1 Toject & Gennida	PO1, PO2, PO5, PO6, PO7, PO8, PO9, PO10, PO12, PSO1, PSO2, P

Table 2.1.1.b CO-PO Mapping

CO-PO Mapping												
Code	PO1	PO2	PO3	PO4	PO5	P06	PO7	PO8	PO9	PO10	PO11	PO12
C101	Yes	Yes	Yes	Yes	Yes	Yes			Yes			Yes

C102	Yes	Yes	Yes	Yes		Yes	Yes					
C103	Yes	Yes	Yes		Yes							Yes
C104	Yes	Yes			Yes							Yes
C105	Yes	Yes	Yes	Yes	Yes					Yes	Yes	Yes
C106	Yes	Yes	Yes	Yes	Yes			Yes	Yes	Yes		Yes
C107	Yes	Yes	Yes	Yes								
C108						Yes	Yes		Yes			Yes
C109	Yes	Yes	Yes	Yes	Yes	Yes			Yes			Yes
C110	Yes	Yes	Yes	Yes	Yes	Yes						
C111	Yes	Yes		Yes								
C112	Yes	Yes				Yes	Yes					
C113	Yes	Yes	Yes			Yes						Yes
C114	Yes	Yes	Yes	Yes	Yes							
C115	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes		
C116	Yes											
C201	Yes	Yes	Yes	Yes								Yes
C202	Yes	Yes	Yes									Yes
C203	Yes	Yes	Yes	Yes			Yes					Yes
C204	Yes	Yes	Yes	Yes								Yes
C205	Yes	Yes	Yes	Yes	Yes							Yes
C206	Yes	Yes	Yes	Yes								Yes
C207	Yes	Yes	Yes	Yes	Yes			Yes	Yes	Yes		Yes
C208	Yes	Yes	Yes	Yes	Yes				Yes	Yes		Yes
C209	Yes	Yes	Yes	Yes								Yes
C210	Yes	Yes	Yes	Yes								Yes
C211	Yes	Yes	Yes	Yes								Yes
C212	Yes	Yes	Yes	Yes	Yes		Yes		Yes			Yes
C213	Yes	Yes	Yes	Yes	Yes							Yes
C214	Yes	Yes	Yes	Yes								Yes
C215	Yes	Yes	Yes	Yes	Yes			Yes	Yes	Yes		Yes
C216	Yes	Yes	Yes	Yes	Yes				Yes	Yes		Yes
C301	Yes	Yes	Yes	Yes	Yes	Yes		Yes		Yes	Yes	
C302	Yes	Yes	Yes	Yes	Yes							Yes
C303	Yes		Yes	Yes								Yes
C304	Yes	Yes	Yes	Yes	Yes							Yes

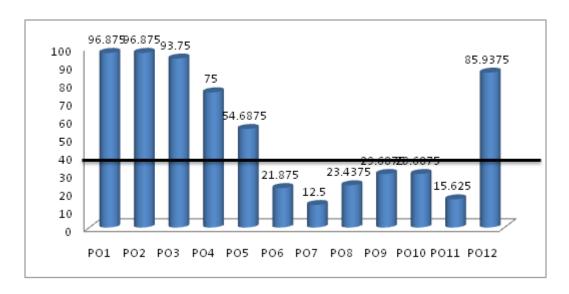
C305	Yes		Yes		Yes							
C306	Yes	Yes	Yes		Yes							Yes
C307	Yes	Yes	Yes		Yes				Yes	Yes		Yes
C308	Yes	Yes	Yes	Yes	Yes				Yes	Yes		Yes
C309	Yes	Yes	Yes					Yes	Yes	Yes	Yes	Yes
C310	Yes	Yes	Yes	Yes								Yes
C311	Yes	Yes	Yes	Yes								Yes
C312	Yes	Yes	Yes	Yes							Yes	Yes
C313	Yes	Yes	Yes	Yes	Yes							Yes
C314	Yes	Yes	Yes	Yes								Yes
C315	Yes	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes
C316	Yes	Yes	Yes		Yes				Yes	Yes		Yes
C401	Yes	Yes	Yes								Yes	Yes
C402	Yes	Yes	Yes					Yes				Yes
C403	Yes	Yes	Yes	Yes								Yes
C404	Yes	Yes	Yes	Yes				Yes				Yes
C405	Yes	Yes	Yes	Yes	Yes							Yes
C406	Yes	Yes	Yes		Yes				Yes		Yes	Yes
C407	Yes	Yes	Yes	Yes		Yes						
C408	Yes	Yes	Yes	Yes	Yes			Yes	Yes	Yes		Yes
C409			Yes	Yes	Yes					Yes		Yes
C410	Yes	Yes	Yes	Yes							Yes	Yes
C411	Yes	Yes	Yes	Yes	Yes							Yes
C412	Yes	Yes	Yes									Yes
C413	Yes	Yes	Yes		Yes	Yes						Yes
C414	Yes	Yes	Yes	Yes				Yes				Yes
C415	Yes											
C416	Yes	Yes	Yes	Yes	Yes			Yes		Yes		Yes
Total Number of Mapping	62	62	60	48	35	14	8	15	19	19	10	55

Table 2.1.1.c CO-PSO Mapping

Department of Computer Science							
CO-PSO Map	CO-PSO Mapping						
	PSO1	PSO2	PSO3				

C101			
C102			
C103	Yes	Yes	
C104			
C105			
C106	Yes	Yes	
C107	103	103	
C108			
C109			
C110			
C111			
C112			
C113			
C114			
C115			
C116	Yes	Yes	Yes
C201	Yes	Yes	
C202	Yes	Yes	
C203	Yes	Yes	Yes
C204	Yes	Yes	Yes
C205	Yes	Yes	Yes
C206	Yes	Yes	Yes
C207	Yes	Yes	Yes
C208	Yes	Yes	Yes
C209	Yes	Yes	
C210	Yes	Yes	Yes
C211	Yes	Yes	Yes
C212	Yes		Yes
C213	Yes	Yes	Yes
C214	Yes	Yes	
C215	Yes	Yes	Yes
C216	Yes	Yes	Yes
C301	Yes	Yes	Yes
C302	Yes		Yes
C303	Yes	Yes	Yes
C304	Yes	Yes	Yes
C305	Yes	Yes	Yes
C306	Yes	Yes	Yes

C307	Yes	Yes	Yes
C308	Yes	Yes	Yes
C309	Yes	Yes	Yes
C310	Yes	Yes	Yes
C311	Yes	Yes	Yes
C312	Yes	Yes	Yes
C313	Yes	Yes	Yes
C314	Yes	Yes	Yes
C315	Yes	Yes	Yes
C316	Yes	Yes	Yes
C401	Yes	Yes	Yes
C402	Yes	Yes	Yes
C403	Yes	Yes	Yes
C404	Yes	Yes	Yes
C405		Yes	Yes
C406	Yes	Yes	Yes
C407	Yes	Yes	Yes
C408	Yes	Yes	Yes
C409	Yes	Yes	Yes
C410	Yes		Yes
C411	Yes	Yes	
C412	Yes	Yes	Yes
C413	Yes	Yes	Yes
C414	Yes	Yes	Yes
C415	Yes	Yes	Yes
C416	Yes	Yes	
Total			
Number of	50	48	43
Mapping			



B.2.1.1.a: Average course Weightage for PO1 to PO12

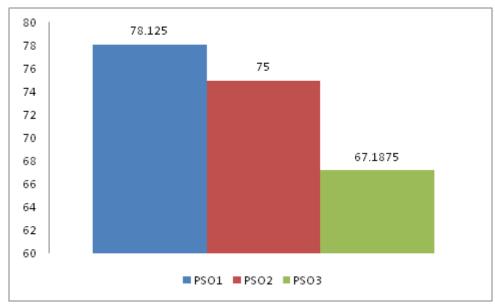


Fig. 2.1.1.b: Average course Weightage for PSO1 to PSO3

As seen from the above tables, average Weightage is computed for all POs and PSOs. If the average value of a particular PO/ PSOs falls below the threshold value it means that gaps exist. To overcome these gaps, students need to be trained and various measures need to be planned as a part of content beyond syllabus.

POs having the percentage Weightage less than 40% are identified as the curriculum gaps. University curriculum weekly maps these POs. It can be seen from Fig B.2.1.1.a. All the PSOs are mapped above the threshold 40%. Hence there is no gap for PSOs shown in the Fig B.2.1.1.b.

Curricular gaps for the attainment of POs are listed below

Table 2.1.1.d List of POs having Gaps

SI. No.	POs	List of POs Gap identified
1.	PO6	Asses security, privacy, quality and cost parameters in developing software systems
2.	P07	Develop the solution based on societal and environmental contexts
3.	PO8	Follow the professional ethics and responsibility
4.	PO9	Work in teams using common tools and environment to achieve project objectives
5.	PO10	Communicate effectively
6.	PO11	Working in project, handling finance and multidisciplinary environment

Table 2.1.1.e Curricular gaps of 2016-17

Subject Name	Subject Code	Semester	GAP	Relevance to PO, PSO
Object oriented concepts with java	15CS45	4	Background of C++	PO1,PSO2
Object oriented concepts with java	15CS45	4	Templates	PO1,PO5,PS02
ME	10AL61	6	Building resources in a Start-Up AND Customer management	PO1,PO3
Data Structure Lab	10CS35	3	Dynamic Data Structures for String Processing	PO5,PO12,PSO3
USP	15CS35	3	Introduction to - LINUX	PO1,PO2,PO3,PO4,PO12
Programming the web	10CS73	7	Hands-on experience on Basic HTML tags	PO1,PO2,PSO1
OR	10CS661	6	Basic of Linear algebra	PO1,PO2
OOMD	10CS71	7	Hands-on experience on developing UML diagrams using GLIFFY tool	PO1,PO3,PO10,PSO1
Database Management Systems	10CS54	5	Cost-based query optimization	PO1,2,1210CS54
Software Engineering	10 S51	5	Software requirements specification for real time system	PO1,PO9,PO12
os	10CS64	6	Solved previous years problems on process scheduling, deadlock, page replacement technique and disk scheduling	PO1,PO2,PO3,PSO2

SYSTEM				
MODELLING and SIMULATION	10CS82	8	Simulation of Dynamic Systems	PO1,PO2,PO3,PO12
СО	10CS46	3	Assignments to different memory Types	PO1,PSO1
Software Engineering	10 S51	5	Familiarization of management tools to manage the project	PO2,PO3,PO5
SA	10IS81	8	Familiarization of UML diagrams using tools	PO1,PO3,PO10,PSO1
System Software	10CS52	5	Student should have the knowledge of the fundamentals of Computers, Microprocessors, Compilers, Assembles Assembly language instruction sets and programming	PO1, PO2, PO12
Embedded Computing System	10CS72	7	Microprocessors and Microcontrollers â€" Hardware Specifications, Memory Interface, I/O Interface, Interrupts, Clocks, Registers, Bit Operations, Addressing modes, Logical and Mathematical Instructions. Basic Knowledge on Embedded C and Assembly Level., -Basic Structure of Computers, Memory organization, Input / Output Organization, Arithmetic, Basic Processing Unit, Multi cores and Coprocessors	PO1, PO2, PO12
Microprocessor	10CS44	4	Number Conversions methods : Binary to Hexadecimal etc	PO1, PO2, PO12
Compiler Design	10CS63	6	Assembly Language instructions, Machine code generation	PO1, PO12
Software Testing	10CS842	8	Knowledge about Automated Testing	PO1
Computer Networks-I	10CS55	5	Knowledge about Anolog Signals	PO1
DataBase Management Systems	10CS54	5	Types of Database Softwares	PO1,PO3
Database Management Systems	10CS54	5	Database Application Development using HTML, PHP and MYSQL	PO1,PO2,PO3

Table 2.1.1.f Curricular gaps of 2017-18

Subject Name Subject Code	Semester	GAP	Relevance to PO, PSO
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Software Testing	10CS842	8	Venn diagram	PO1,PO5
Software Testing	10CS842	8	Knowledge about Automated Testing Tools	PO1,PO3
Unix Shell and Programming	15cs35	3	MS DOS	PO1
Unix Shell Programming	15CS35	3	UNIX OS Variants and Admistrative commands	PO1
Python Paogramming and application	15cs663	6	System Programming (pipes, threads, forks etc.)	PO5,PSO3
puneetha B H	15CS61	6	Applied cryptography	PO1, PSO1
cryptography,networksecuirty and cyber laws		6	enterprise key management	PO1,PO6,PSO1
object oriented concepts with java	15CS45	4	Basics of C++	PO2,PO3,PSO3
object oriented concepts with java	15CS45	4	Templates	PO2,PO3,PSO3
object oriented concepts with java	15CS45	4	working with windows and graphics	PO2,PO3,PSO3
ETM	15CS51	5	Basic Information to start new business	PO1,PO3
OR	15CS653	6	Basic of mathematics need to solve leaner programming problems	PO1
Discrete Mathematics Structures	17cs36	3	Propositional logics	PO1,PSO1
os	15CS64	6	Recent trends in Android Development	PO1,PO7
OOMD	10CS71	7	Hands-on experience on developing UML diagram notations using Gliffy software	PO5,PO12,PSO1,PSO3
Database Management System	15CS53	5	Database Programming and Introduction to Big data	PO1,PO3,PO5,PSO1,PSO3

System Software and Compiler Design	15CS63	6	Introduction to system software development tools	PO1, PO4, PSO1, PSO3
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Table 2.1.1.g Curricular gaps of 2018-19

Subject Name	Subject Code	Semester	GAP	Relevance to PO, PSO
Big data analytics	15CS82	8		PO1, PO2, PO3, PO4, PO5, PO6
Computer networks	15CS52	5	Students need to know the basic concepts of computer networks.	PO1
Management and entrepreneurship for it industry	15CS51	5	Basic info regarding entrepreneurship	PO1,PO12, PSO3
Introduction to software testing	15CS552	5	Testing dbms mini projects	PO1,PO2,PO3,PO12
Stoarge area networks	15CS754	7	Transistion from classic to cloud computing	PO1,PO3 PSO1
Stoarge area networks	15CS754	7	Journey of cloud	P01,P03,PSO1
Storage area networks	15CS754	7	Cyber security and cloud computing	PO1,PO3,PSO1
Cryptography ,Network security and cyber laws	15CS61	6	Enterprise Key management	PO1,PO3,PSO1
Cryptography,network security and cyber laws	15CS61	6	Enterprise key management	PO1,PO2,PSO1
Computer networks	15CS52	5	Osi /tcp model explaination	PO1, PSO1
Computer Graphics and Visualization	15CS62	6	More practical imoplementaion in opengl to understand concepts discussed in theory	PO1, PO2, PSO2, PSO3
Data Mining and Data warehousing	15CS651	6	software required for Data Mining	PO1,PSO1
SS and CD	15CS63	6	Learn about Advance Topic-ANTLR Another Tool for Language Recolonization	PO1,PO2,PSO1,PSO2

Or	15CS653	6	To solve linear programming problems students need basic of mathematics	PO1
Advanced Java and J2EE	15CS553	5	JDBC Connectivity is theoritically explained	PO1,PO2,PO3, PO8,PO9,PSO3
Discrete mathematic structures	17CS36	3	Propositional logics	PO1, P02, PO12, PSO1
Advance Java and J2EE	15CS553	5	Client-server communication	P05,P012,P08,PS03
Computer networks	15CS52	5	Osi and tcp/ip model	PO1,PO12, PSO1
Web programming	15CS71	7	Advance web programming	PO5,PO8,PSO3
Software engineering	17CS45	4	no fundamental concepts explained	PO1,PSO1
Computer organisation	17CS34	3	Hardware structure of computer,basic assembly language,number systems,embedded computing systems	PO1,PSO1
Ade	17CS32	3	Basics of analog electronics	P01,PS01
Os	15CS64	6	Hands-on experience on developing concurrent execution between 2 process	PO1,PO3,PSO1
Database managment system	15CS53	5	Introduction to various dbms software and their features	PO1,PO5,PSO1
Advanced computer architecture	15CS72	7	Basics of risc architecture	PO1, PO2, PO12, PSO1, PSO2
Machine learning	15CS73	7	Supervised learning and Linear regression, statistical decision theory and Bias-variance, Convolutional Neural Networks (cnns)	PO1, PO2, PO3, PO12, PSO1, PSO2
System Simulation and Modelling	10CS82	8	In the Subject System Simulation and Modelling there is no laboratory experiment as part of modern tool usage	PO1,PO2, PO4,PO5

System Modelling and Simulation	10CS82	8	about parallel server queue parameters	PO1,PO2, PO4,
System Software and Compiler	15CS63	6	System software development tools	PO1,PO5,PSO1
System simulation and modelling	10CS82	8	In the subject system simulation and modelling there is no real time case study	PO1,PO2, PO4, PO9
Machine learning	NPTEL VIDEO	7		PO1,PO2,PO3 AND PSO1, PSO2
Storage area network	15CS754	7	Storage devices and its structure	PO1,PO2,PO12,PSO1,PSO2
lot	15CS81	8	Real world iot applications	PO1,PO2,PSO1
Database management systems	15CS54	5	Types of database softwares	PO1
Operating systems	15CS64	6	Unix apis	PO1,PO2,PO5,PO12
Data base management system	15CS54	5	Database application development using html, php and mysql	PO1,PO3,PO5,PO11
Database management systems	15CS54	5	Nosql	PO1
Unix shell programming	17CS35	3	Ms dos	PO1
Unix shell programming	17CS35	3	Unix and linux operating system variants	PO1
Unix shell programming	17CS35	3	Scripting languages	PO1
Unix shell programming	17CS35	3	''	PO1
ЕТМ	10CS51	5	Basic information be come entrepreneur	PO1,PO12,PO3
UID	15CS832	8	Basic of website design	PO1 PO3
Design and Analysis of Algorithm	17CS43	4	P, NP, NP-Hard and NP- complete problems	PO1,PO2,PSO1

2018-19

S.No	Gap	Action Taken	Date- Month- Year	Resource Person with Designation	% of students	Relevance to POs, PSOs
1	P, NP, NP-Hard and NP- complete problems	Introductory video on P, NP, NP-Hard and NP-complete problems from youtube	6/5/2019	Mr. Raghavendra K,Assistant Professor Dept. of CSE, PESITM	94	PO1,PO2,PSO1
2	Learn about Advance Topic-ANTLR Another Tool for Language Recolonization	Tutorial Videos	27/03/19	Enam Biswas	79	PO1,PO2,PSO1,PSO2
3	To Solve linear programming problems students need basic of mathematics	taken extra class on Wednesday afternoon	20/03/2019	Mr.Pradeep K,Assistant Professor Dept. of CSE, PESITM	60	PO1
4	Hand on sessions on Hadoop MapReduce	Conduct workshops on Hadoop and MapReduce programming	22/02/2019	LIKEWIN THOMAS, ASSOCIATE PROFESSOR, DEPT OF CSE, PESITM	80	PO1, PO2, PO3, PO4, PO5, PO6
5	Hands-on experience on developing Concurrent execution between 2 Process	Conducted lab experiment	4/3/2019	Rajesh T H,Asst. Professor, Dept. of CSE, PESITM	90	PO1,PO3,PSO1
6	No Fundamental concepts explained	Extra classes taken and explained the concepts	16/02/2019	Mr. Ranjan V, Asst. Prof, CSE, PESITM	50	po1,pso1
7	Basic of website design	Arranged extra lecture	20/3/2019	Kailash Rudra, Assistant Professor Dept. of CSE, PESITM	65	PO1 PO3

8	Techniques for Visualizing and evaluating the output of learning algorithms and software required for Data Mining	Played NPTEL Video	27/2/2019	Prof.Pabitha Mitra,Department of CSE,IITK	85	PO1,PSO1
9	Basic info regarding entrepreneurship	NPTEL Video	22/08/2018	Prof. Manoj kumar mondal, IIT Khargapur	60	PO1,PO12, PSO3
10	Propositional logics	Played NPTEL video	22/08/2018	Dr. KAMALA KRITHIVASAN, IIT MADRAS	86	PO1, P02, PO12, PSO1
11	Hardware structure of computer,Basic assembly language,Number Systems,Embedded computing Systems	Demo on computer Components, discussion on instruction formats and programs, discussion and interactions on various number systems, discussion on differences between microprocessor and microcontroller	10/10/2018	Nayana.K Dept of CSE,PESITM,Shivamogga	75	PO1,PSO1
12	System software development tools	Introduction to LEX(Lexical Analysis tool) and YACC(Syntax Analysis tool)	9/2/2019	Mr. Raghavenda K,Assistant Professor, Department of CSE, PESITM	85	PO1,PO5,PSO1
13	Supervised learning and Linear regression, statistical decision theory and Bias-variance, Convolutional Neural Networks (CNNs)	NPTEL and Other informative videos	14/09/2018	NPTEL and Other informative videos	82	PO1, PO2, PO3, PO12, PSO1, PSO2
14	Basics of Analog Electronics	Guest Lecture	10/9/2018	Mr.Mahendra S. Naik,Asst. Professor, Dept. of ECE, PESITM	90	PO1,PSO1

15	In the Subject Machine learning there is no statistical decision theory and bias variance	NPTEL	5/9/2018	Prof. Balaraman Ravindran Professor CSE, IIT Madras	95	PO1,PO2,PO3 and PSO1, PSO2
16	UNIX APIs	NPTEL classes	21/03/2018	Prof. Sorav Bansal, IIT Delhi	93	PO1,PO2,PO5,PO12
17	Scripting Languages	Introduced shell and perl scripting briefly	26/10/2018	Thara K L,,Assistant Professor Dept. of CSE, PESITM	90	PO1
18	Database Application development using HTML, PHP and MySQL	Demonstrated how to develop an application using technologies mentioned	7/9/2018	Thara K L,,Assistant Professor Dept. of CSE, PESITM	90	PO1,PO3,PO5,PO11

2017-18

S.No	Gap	Action Taken	Date- Month- Year	Resource Person with Designation	% of students	Relevance to POs, PSOs
1	In the Subject System Simulation and Modelling there is no real time case study	Explained the case study	10/5/2018	Sunil M E Assistant Professor, Department of CSE, PESITM	85	PO1,PO2, PO4, PO9
2	In the Subject System Simulation and Modelling there is no information about parallel server queue parameters	NPTEL video	25/04/2018	Dr. Tom V. Mathew, Professor Dept of CSE, IIT Bombay	92	PO1,PO2, PO4,
3	Testing DBMS Mini Projects	Workshop	11/10/2017	Mr.Kailash Rudra Assistant Professor Dept. of CSE, PESITM	92	PO1,PO2,PO3,PO12

4	Client-server communication	NPTEL Videos	31/10/17	Prof. I. Sengupta, Department of Computer Science Engineering, IIT Kharagpur	82	PO5,PO12,PO8,PSO3
5	In the Subject System Simulation and Modelling there is no laboratory experiment as part of modern tool usage	Conducted lab experiment	12/4/2018	Sunil M E Assistant Professor, Department of CSE, PESITM	80	PO1,PO2, PO4,PO5
6	Venn diagram	Explained Venn diagram and importance	16/02/2018	Thara K L, asst professor, dept cse	90	PO1,PO5
7	Knowledge about Automated Testing Tools	Briefly introduced testing tools like Rational Fuctional Tester and Selenium	20/02/2017	Thara K L, asst professor, dept cse	90	PO1,PO3
8	System Programming (pipes, threads, forks etc.)	Tutorial videos	15/4/2018	TheKurtPrice	70	co5,pso3
9	Basics of C++	class was conducted	31/01/2018	puneetha B Hasst professor, dept cse	90	po2,po3,pso3
10	Database Programming and Introduction to Big data	1) Session on Database Programming using HTML,PHP and MYSQL. 2) Introductory Session on Big Data and Applications	18/09/2018	Mr. Raghavendra K	81	PO1,PO3,PO5,PSO1,PSO3
11	Introduction to system software development tools	Session on development tools and their usage to develop system software	10/3/2018	Mr. Raghavendra K	75	PO1, PO4, PSO1, PSO3
12	Propositional logics	Played NPTEL videos	9/8/2017	Dr. Kamala krithivasan	70	Po1,pso1
13	Student Development Activity	Student Development Activity	05/09/2018	Dept of CSE, in association with Rotary Club	60	PO1, PO9,PO10 PSO2

14	Innovative Projects	Project Exhibition	12/06/2018	Dr.Manu A P, Project Coordinator Dept of CSE , PESITM Shimoga	96	PO6,PO7,PO9,PO10,PO11
15	Architecting software IT solutions for global roll out' An invited Talk by Mr. Manual K, Software Architect, L&T, Europe	Technical Talk	09/04/2018	Mr. Manual K, Software Architect, L&T, Europe division	73	PO6,PO7,PO11 PSO3
16	Blood Donation Camp	Social Activity	28/02/2018	Mr.Puneeth, NSS Coordinator, PESITM, Shimoga	60	PO6,PO7,PO9,PO10,PO12
17	Sadbhavana Diwas	National Day celebration	20/08/2018	Mr.Puneeth, NSS Coordinator, PESITM, Shimoga	65	PO6,PO7,PO9,PO10,PO12
18	Swachh Bharat Abhiyan	Campaign for Social Cause	2/10/2018	Mr.Puneeth, NSS Coordinator, PESITM, Shimoga	80	PO6,PO7,PO9,PO10,PO12
19	Awareness and recent trends in digital india	Awareness Program conducted in around a nearby villge KoHalli.	11/11/2018	Mr.Puneeth, NSS Coordinator, PESITM, Shimoga	50	PO6,PO7,PO9,PO10,PO12

2016-17

S.No	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	% of students	Relevance to POs, PSOs
1	Familiarization of management tools to manage the project	SEMINAR	18/10/2017	RANJAN V, Asst Professor, Dept of CSE,PESITM	70	PO2,PO3,PO5

2	Hands-on experience on developing UML diagrams using GLIFFY tool	Discussion	05/09/2016	Devaraj F V, Asst. PRofessor, CSE	95	PO1,PO3,PO10,PSO1
3	Simulation of Dynamic Systems	NPTEL	22/04/2017	Dr Pushpa Raj Pathak, IIT Roorke	91	PO1,PO2,PO3,PO12
4	Microprocessors and Microcontrollers – Hardware Specifications, Memory Interface, I/O Interface, Interrupts, Clocks, Registers, Bit Operations, Addressing modes, Logical and Mathematical Instructions. Basic Knowledge on Embedded C and Assembly Level., -Basic Structure of Computers, Memory organization, Input / Output Organization, Arithmetic, Basic Processing Unit, Multi cores and Coprocessors	Classes are are arranged by in house faculty member on the concepts	25/07/201626/09/2016	Mr. Shamantha G S, Assistant Professor, Dept. of CS&E, PESITM, Shivamogga	78	PO1, PO2, PO12
5	Number Conversions methods : Binary to Hexadecimal etc	A class is conducted for the same topic solving number of examples on conversions	06/02/2017	Mr. Chethan L S, Asst. Prof., Dept. of CSE, PESITM, Shivamogga	87	PO1, PO2, PO12
6	Assembly Language instructions, Machine code generation	A class was conducted on various examples	05/06/2017	Mr. Raghavendra K, Asst. Prof. Dept. of CSE, PESITM, Shivamogga	83	PO1, PO12

7	Cost-based query optimization	Conducted a class to complete the topic for query optimization	26/10/2016	RANJAN V, Asst Professor, Dept of CSE	50	PO1,2,1210CS54
8	Software requirements specification for real time system	Discussion	07/09/2016	Ashwini S P, Dept of CSE	70	PO1,PO9,PO12
9	Hand's-on experience on Basic HTML tags	Explained in Lab	12/09/2016	Devaraj F V,Asst. Professor,Dept of CSE,PESITM	100	PO1,PO2,PSO1
10	Dynamic Data Structures for String Processing	Dynamic Programming Algorithms & Data Structures P GreeksforGreeks Tutorial	17/08/16	Sephiri.	67	PO5,PO12,PSO3
11	Student should have the knowledge of the fundamentals of Computers, Microprocessors, Compilers, Assembles Assembly language instruction sets and programming	An introductory classes on each of the topics was given	10/8/2016	Mrs. Nayana K, Assistant Professor, Dept. of CS&E	81	PO1, PO2, PO12
12	Cryptographic Key Exchange Protocols	Technical Talk	14/08/2016	Dr.G.K.Patra, Principal Scientist, CSIR, Bangalore	85	PO6,PO7,PO11 PSO3
13	Data Structures, Testing and Automation	Technical Talk	13/08/2016	Mr.Vidwath Evive Health & Mr.Lalith Infosys	90	PO6,PO7,PO11 PSO2

14	Software Process and Storage Area Networks	Technical Talk	10/08/2016	Mr.Manual Kanthraj, Solution Architect, L&T Infotech, Sweden	92	PO6,PO7,PO11,PO12 PSO3
15	Technical Skill Test	IT Quiz and Puzzles Event	07/05/2016	Google Developers Group, Shivamogga Chapter	75	PO1, PO9,PO10 PSO2
16	Industry Expectations by Engineering Graduates	Technical Talk	16/03/2016	Mr. Suresh Durgappa, Vice President, IonIdea	95	PO6,PO7,PO11 PSO3
17	Project Showcase	Project Exhibition	15/02/2016	Mr.Raghvendra K Project Coordinator Dept of CSE, PESITM, Shimoga	100	PO6,PO7,PO9,PO10,PO11 PSO3
18	Engineering Subjects and Related Career Opportunities' Talk by Prabath Hegde from Citirx Systems	Technical Talk	18/02/2017	Mr.Prabhath Hegde, Technical Lead, Cirtrix Systems, Bangalore	97	PO6,PO7,PO11 PSO3
19	Hackathon Kick off and Open source Analytics session	Hackathon	28/01/2017	Evive Health	60	PO1, PO9,PO10 PSO2

2.2 Teaching - Learning Processes (100)

Total Marks 79.00

Institute Marks: 20.00

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

Teaching learning Process followed is as shown in Fig. 2.2.1

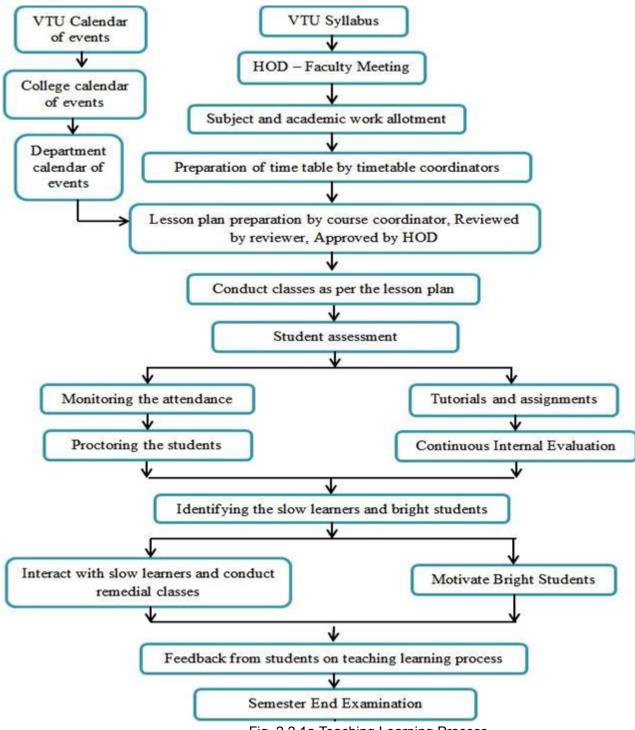


Fig. 2.2.1a Teaching Learning Process

- The academic planning begins with university calendar which depicts the semester beginning, last working day, tentative schedule of practical and theory examination.
- Based on the University calendar of events, college and department calendar of events will be prepared. College calendar of events consists of the activities planned for the semester which includes internal test dates, total number of working days and holidays.
- The college calendar of events is prepared and circulated among the faculties and

Displayed on the notice board.

- Subject allotment process is done during semester vacation .The Subject option form is circulated among the faculty to give their preferences for the subsequent semester course. In the department meeting, allotment of courses is done by the HOD considering experience and preferences given by the faculty members.
- Faculty has to prepare lesson plan as per department calendar of events and maintain the course file
- Faculty can adopt various Teaching & Learning methodologies.
- Continuous Internal Evaluation of students is done through 3 internal tests, assignments, quiz, and seminars to enhance the academic performance. Continuous assessments are also done in laboratory.
- The department will identify the bright students and slow learners. Department

Motivates the slow learners to attend additional classes and help them to overcome the difficulties. Encouragement is given to the bright students to attend more workshops and technical talks.

- Feedback from students is collected in each semester.
- Final marks of students are considered based on both continuous internal evaluation and semester end examination.

A Adherence to Calendar of events

Department will maintain 3 Calendar of events to plan activities of each semester.

University Calendar

University calendar depicts the semester beginning, last working day, tentative schedule of practical and theory examination which need to be strictly followed by affiliated institutions without modification

Fig. 2.2.1b University Calendar of event

Institute Calendar

Institute prepares Calendar of events consists of the activities planned for the semester which includes internal test dates, co curricular activities, total number of working days and holidays. It is circulated among faculty and students before the beginning of semester.

Academic Calendar of VTU, Belagavi for EVEN Semester of 2019-2020 (Jan 2020 - July 2020)

	II Sem B, E, / B. Tech, / B. Arch	IV & VI Sem B. E. /B. Tech. IV, VI&VIII Sem B. Arch.	VIII Sem B.K./B.Tech & X Sem B. Arch	IV Sem MCA	VI Sem MCA	IV Sem MBA	IV Sem M. Tech.	IV Sem M. Arch.	II Sem M. Tech.	II Sem MCA	II Sem MIIA	II Sem M. Arch.
Cummencement of EVEN Senterior	10.42.2634	10.02.2020	10.07.2030	27.01.2020	27.81.2929	10.02.2020	27.0(1,2020	27.01.2020	65.03.2030	85.03.2020	14.02.2020	14.03.2008
Last Working day of EVEN Semester	01.06,2020	61.06.2626	01/06.2020	28.05.2020	29.05,2000	41.06.2020	20.05.2020	26.05.2020	72.06.2020	22.06.1026	05.06.2020	0506,2020
Practical Examination	03.06.2020 To 13.06.2020	93.86.2020 To 13.86.2020		26.05.3029 To 30.85.2029					25.06.2020 To	25.86.2028 To		
Theory Examinations	15.66.1020 To 04.07.2020	15.06.2020 To 20.07.2020	03.06.2020 To 11.06.2020	03.95.2029 To 18.95.2020		03.06.2620 Te 28.06.2820	03.36.2620 To 10.06.2820		30.06.2020 61.07.2020 To	39.86.2828 91.97.2920 To	88.06.2020 To	09.06.2020 To
Viva Voce			15.06.2020 To 29.86.2020			-			11.07,2020	11.07.2020	20.66.2820	10.06,2020
Summer Project / Professional training					22.65.2628 To 30.85.2628 (Submission of report to VTU)	01.04.2020 To 15.04.2020 (Submission of report to VTU)	12.06.2020 To 25.06.2020 (Sub-mission of report to VTU)		83-97.2820 Te 31.07.2820		23.06.2020 To 21.07.2020	41.87.2626 To 25.68.2626
Commencement of ODD Sementer	17.07.2019	27.67.2626	27.07.2020	27,97,2020			-		03.08,2020	27.07.3620	27.67.2626	28.08.2020

NOTE

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

REGISTRAR

0	PESITM PES Institute of Technology & Management NH 206, Sagar Road, Shivamogga - 577 204								
						C		ENTS FOR EVEN SEM BE &	
-	OLUM I		Date 2	_	40		General Halidays	Academic Activities BE	Acadomic Activities MBA
F	SUN		_	9	16	23		10-02-2020 Commencement of BE cla	40.03.2020.0
	MON		3	10	17	24			14-02-2020: Cammon co mont af Il som MBA
·	TUE		4	11	18	25			14-02-2020: Commonco mont of Ilsom MBA
١.	WED		5	12	19	26		17-20th 4 days Soft-Skill Training for	
L	THUR		6	13	20	27		IV & VI Sem BE	
۱.	FRI		7	14	21	28	21rt Maharhivarathri	22nd Alumni	Get-together
<u> </u>	SAT	1	8	15	22	29			
ļ	SUN	1	8	15	22	29			
'	MON	2	9	16	23	30		19, 20, 21 - First - IA for BEstudents	19-24 - First - IA for MBA Students
	TUE	3	10	17	24	31		24th Dispatch of First IA Roport	27th Dirpatch of First IA Report
۱.	WED	4	11	18	25		25th Chandramana	28 th Parents-Teacher Meet	
	THUR	5	12	19	26				
'	FRI	6	13	20	27				
	SAT	7	14	21	28				
\neg	SUN		5	12	19	26			
۱ ۱	MON		6	13	20	27	6th Mahaveer Jayanth	20, 21, 22 - Socand - IA far BEstudonts	20-24-Second-IA for MBA Students
٠ [TUE		7	14	21	28	14th Ambedkar Jayant	25th Dirpatch of Second IA Report	27th Dirpatch of Second IA Report
:	WED	1	8	15	22	29		25 th Parents-Teacher Meet	
1	THUR	2	9	16	23	30			
1	FRI	3	10	17	24		10th Good Friday		
1	SAT	4	11	18	25				
\neg	SUN	31	3	10	17	24			
1	MON		4	11	18	25	25th Ramazan	26, 27, 28 - Third - IA for BEstudents	26-30 - Third-IA for MBA Students
ı	TUE		5	12	19	26			
. 1	WED		6	13	20	27			
۱ ۱	THUR		7	14	21	28		09th Cal	llogo Day
ı	FRI	1	8	15	22	29	1st May Day	16th Project Exhibition for VIII sem BE	
ı	SAT	2	9	16	23	30		23rd Grad	uation Day
┪	SUN	_	7	14	21	28			
ł	MON	1	8	15	22	29		Int Dispatch of Third IA Report	2nd Dispatch of Third IA Report
.	TUE	2	9	16	23	30		Irt Lart working day	tol Look working day for IV or a MDA
' I	WED	3	10	17	24	31			SIb Last working dag for Horo HDA
	THUR	4	11	18	25	٧,			
:	FRI	5	12	19	26				
ł	SAT	6	13	20	27				
\dashv						rki-	g Days 80	I	I .
								U regulations, candidates have	
"								o regulations, candidates nave lacement activities/project work	
								, 15.06.20-20.07.20 Theory Ex	
\dashv							tical Examinations Semister 27.07.20		4MIN4CION & 15.00.20-20.00.20
_	COME	cac	cm¢	= = =	· · · · ·	טט	oemister 21.01.20	TOT DE & MDA	
				1		1	', ' <u>,</u> ',,		
	Fig. 2.2.1c Institute Calendar of event								

Department Calendar

Department prepares Calendar of events based on College Calendar which

Contains conduction of events like organizing guest lectures, conferences, industrial visits, workshops along with co curricular activities. It is circulated among faculty and students before the beginning of semester.

NH 206, Sagar Road, Shivamogga - 577 204 Department of CSE_CALENDAR OF EVENTS FOR EVEN SEM BE_2019-20									
Mon Dates General Holidays Academic Activities BE									
	SUN		2	9	16	23	General nondays	Academic Activities DE	
.	MON		3	10	17	24		10-02-2020 Commencement of BE classes	
	TUE		4	11	18	25		10th-19th, 10 days SIP Phase-2 for Lyear BE students	
	WED		5	12	19	26		17-20th 4 days Soft-Skill Training for IV & VI Sem BE	
	THUR		6	13	20	27		, ,	
	FRI		7	14	21	28	21st Mahashiyarathri	12,26 Departmental Forum/IEEE Activities and 15,16 & 22,23 Workrop 22nd Alumni Get-together	
	SAT	1	8	15	22	29	E 150 IYIGIIGSIIIYGI GCIII I	23 National Conference on Engineering Developments	
-	SUN	1	8	15	22	23		23 Ivacional Conference on Engineering Developments	
	MON	2	9	16	23	30		19, 20, 21 - First - IA for BE students	
	TUE	3	10	17	24	31		24th Dispatch of First IA Report	
	WED	4	11	18	25	- 51	25th Chandramana	28 th Parents-Teacher Meet	
;	THUR	5	12	19	26		Each Challeraliana	30 Mentees meeting / Departmental meeting Identifing weak and	
í	FRI	6	13	20	27	\vdash		30 Mencees meeting i Departmental meeting identifying weak and	
•	SAT	7	14	21	28			4,11 Departmental Forum/IEEE Activities	
-	SUN	<u>'</u>	5	12	19	26		4,11 Departmental ForumITELE Activides	
۸ ا	MON	\vdash	6	13	20	27	6th Mahaveer Jayanthi	20, 21, 22 - Second - IA for BE students	
- 1	TUE	\vdash	7	14	21	28	14th Ambedkar Jayanti		
	WED	1	8	15	22	29	1401 Allibeakar bayancı	25th Dispatch of Second IA Report 25th Parents-Teacher Meet	
• [THUR	2	9	16	23	30		Mentees meeting / Departmental meeting Identifing weak and strong st	
	FRI	3	10	17	24	30	10th Good Friday	Frences meeting i Departmental meeting faciliting fream and strong st	
-	SAT	4	11	18	25		Total Good Friday	1,8 & 15 Departmental Forum/IEEE Activities	
_	SUN	31	3	10	17	24		1,0 & 15 Departmental Forum IEEE Activities	
	MON	-01	4	11	18	25	25th Ramazan	26, 27, 28 - Third - IA for BE students	
	TUE		5	12	19	26	25.117131132311	30th Mentees meeting / Departmental meeting	
ï	WED		6	13	20	27		6 & 13 Departmental Forum/IEEE Activities	
7	THUR		7	14	21	28		03thCollege Day	
	FRI	1	8	15	22	29	1st May Day	16th Project Exhibition for VIII sem BE	
	SAT	2	9	16	23	30		23rd Graduation Day	
\dashv	SUN	-	7	14	21	28		Coro anadadion Day	
	MON	1	8	15	22	29		1st Dispatch of Third IA Report	
	TUE	2	9	16	23	30		1st Last working day	
J	WED	3	10	17	24	31		To Care Indining day	
V	THUR	4	11	18	25				
Ε	FRI	5	12	19	26	\vdash			
	SAT	6	13	20	27	\vdash			
-		_				kin.a	Days 80		
	Atte		-Der	91 '	- 01	9	D493 00		
				The	e e d		a recorned for also	ement activities/project work for VIII Sem BE.	
-									
03.06.20-13.06.20 Practical Examinations, 15.06.20-20.07.20 Theory Examination & 15.06. Description									

Fig. 2.2.1d Department Calendar of event

B. Subject Allotment Process

- Faculties are intimated prior to the subject allotment meeting to enter their subject preferences online. Details contain subject, Semester and number of times previously handled.
- Based on their qualifications, specialization and experience, subjects are allotted to the staff by the HOD in the meeting as per List of Subjects to be handled for the semester.
- Once finalized faculty members are informed to prepare the lesson plan and schedule for the allotted subjects.
- Laboratories are allotted based on preferences entered to balance the workload.

C. Time table Process

Time table coordinator prepares the time table for upcoming semester based on subject allotment decided in faculty meeting during vacation. The following conditions need to be considered for preparation of timetable.

- Collect timeslots of HOD and Principal
- In consultation with first year time-table coordinator, time-table is prepared to ensure no overlapping between time slots/ lab slots of faculty.
- Make sure that elective subject classes are arranged at common time slot.
- Laboratory faculty allotment is according to the preference given and no faculty can have subject in between laboratory hours.
- At the end make sure that workload allotment is done as per designation of faculty.
- Allot appropriate time slots for Project work/ seminar/NPTEL tutorials/remedial classes and for other co-curricular activities.
- Provide a common slot for departmental activities and additional slot for lateral entry students.
- Take approval from HOD and Principal and circulate among faculty and students.
- Discrepancies in the time-table are addressed in constellation with HOD
- The changes will be brought to the notice of HOD and Principal for final approval and display the same over notice board.

D. Course File

A course file is prepared by the concerned faculty. The course file includes the following documents:

- Calendar of events: It includes university, college and department calendar of events.
- Time table: Time table includes the clear schedule of the subjects and labs allotted to the faculty.
- Syllabus copy attested by HOD: After the subject allotment, attested syllabus copy and time table will be issued to the concerned faculties.
- Previous university question papers: The faculty members will maintain the photocopy of the previous year question papers in their course file.
- Lesson plan: Lesson plan is prepared for each lecture hour in the teaching plan by the course coordinator before the commencement of the semester and it is reviewed by the reviewer and approved by the HOD. The lesson plan includes pre-requisites for the course objectives, and course outcomes.
- Question Bank: Question banks are prepared in line with the university question papers.
- Tutorial: Tutorial contains module wise questions which will be discussed before the Internal Assessment.
- **Internal question papers with scheme:** Test question papers with scheme prepared by the course coordinator, reviewed by the reviewer and approved by HOD.

COURSE FILE

Name of Program : BE

Department : Computer Science & Engineering

Batch : 2017-2021

Academic Year : 2018-19

Semester & Section : 5^m 'A'

Title of The Subject : Automata Theory and Computability

Subject Code : 17CS54

Course Code : C304

Number of Students : 52

Course Instructor : Mr. Sunil M E

Assistant Professor, Dept of CSE, PESITM, Shivamogga - 577204 Ph. No- 9538343636 Email -suni@pestrust.edu.in

Course File: PESITMCS-CIOID

Fig. 2.2.1e Course file front page

Table. 2.2.1 Course file content

SI. NO	ITEMS	STATUS / REMARKS						
COURSE MANAGEMENT								
1	Vision, Mission, PEO and PSOs							
2	University , College and Department COE							
3	Syllabus and Scheme							
3	Class time table & Individual time table							
4	Student List							
5	Semester Plan							
6	Course Assessment Report							
7	EOC Survey (Students' feedback/ Exit survey)							
COURSE C	URRICULUM							
1	Course Objectives & CO-PO and CO-PSO Mapping							

2	Course plan & Course schedule	
3	Tutorials Sheets	
COUR	SE TEACHING AND LEARNING	
1	Teaching Notes/PPTS	
2	Teaching activities (e.g : PBL /MOOCs/Project/ Lab)	
3		
COUR	SE ASSESSMENT	
1	Samples of Test/Assignments/Homework/Quizzes	
2	Samples of Marking Scheme / Rubrics	
3	Students Progress Assesment	
4	Content Beyond the Syllabus	
5	End Exam Question Papers and Scheme	
6	Any other relevant Correspondence	

E. Course Delivery Methods

The class room lectures are delivered by the faculty through various educational tools such as

- Chalk and talk
- Power point presentation (PPT).
- Demonstration of Experiments
- Assignments
- Quiz
- Tutorials
- Seminars

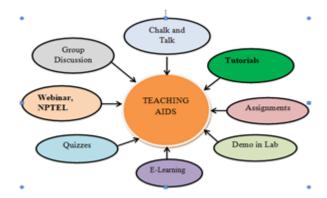


Fig. 2.2.1f Teaching Methods

Table. 2.2.1a Teaching Methods

	<u> </u>
<u>Lectures</u>	Classroom lectures are conducted using basic and conventional method Of disseminating information to the students as per the curriculum. Students are encouraged to think and analyze the engineering problems
<u>PowerPoint</u>	Ideas and concepts taught during lectures are reinforced in the minds of
<u>Presentation</u>	Students with the aid of presentations and videos.
<u>Tutorial</u>	Tutorials help the students in analyzing and solving the engineering Problems on the basis of the theory dealt during lectures. The tutorial Sessions makes the concept clear to the students.
<u>Assignments</u>	Assignments make students self-reliant in solution of solving problems through understanding of theory through practice
<u>Laboratory</u> <u>Experiments</u>	Exposes the students on experimental and practical aspects of theory Studied in classrooms. Lab-experiments help students in verifying the Theory concepts by interpretation of results.
<u>Seminars</u>	Students are made to present a seminar during their academic year. In this, the students are supposed to present a talk on particular topic by referring to various books, Journals of National and International Repute.

Faculty of Computer science department developed the course in pedagogical framework

National Mission Project on Education through ICT

Developing suitable pedagogical methods for various classes, intellectual calibers and research in e-learning

Home Institutes Programs Courses Help

PES Institute of Technology and Management, Shivamogga->Computer Science and Engineering->All Courses

Filter Courses by Institute: -----: All Institutes:----- Search

Course Name	Institute	Discipline	Principal Developer Name	Delete Course	Report Page
AUTOMATA THEORY AND COMPUTABILITY (17CS54	PES Institute of Technology and Manag	Computer Science and Engineering	Mr. Sunil M E	<u>Delete</u>	Report
C PROGRAMMING FOR PROBLEM SOLVING	PES Institute of Technology and Manag	Computer Science and Engineering	ASHWINI S P	<u>Delete</u>	Report
Machine Learning	PES Institute of Technology and Manag	Computer Science and Engineering	Mr. Sunil M E	<u>Delete</u>	Report
Microcontroller and Embedded Systems	PES Institute of Technology and Manag	Computer Science and Engineering	Mr. Sunilkumar H R	<u>Delete</u>	Report
Object Oriented Concepts	PES Institute of Technology and Manag	Computer Science and Engineering	Thara K L	<u>Delete</u>	Report
SOFTWARE ENGINEERING	PES Institute of Technology and Manag	Computer Science and Engineering	Sunil M E	<u>Delete</u>	Report
WEB TECHNOLOGY AND ITS APPLICATIONS	PES Institute of Technology and Manag	Computer Science and Engineering	Sunil M E	<u>Delete</u>	Report

F. Methodologies to support weak and bright students

Slow Learners

Identification Criteria	Actions taken
Students scoring less than 60% of marks in Internal Assessment	1. Student mentor follows their Progress regularly advising students about attending classes, making up classes missed, and getting additional help 2. Informing parents to counsel their wards. 3. Assignments consisting of 3 to 5 problems are given in daily basis (ATCI and DMS) 4. Conduction of remedial classes

Diploma students who entered with less basics of mathematics	Conduction of remedial classes
Stildente was tall in competer avame	Conduction of extra classes to those who failed in previous semester subjects.

PESITM PES Institute of Technology and Management education for the real world

NH-206, Sagar Road, Shivamogga-577204

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Poor Performers - 11A - Action Taken Report

Students Batch: 2018 - 22

Scheme: 2018

Subject: Computer Organization

Semester: 3 Semester "B" Section

Subject Code: 18CS34

Academic Year: 2019-20

Maximum Marks: 50

Criteria: Students scored <= 30 Marks

Following actions have been taken for the improvement of Poor Performers of 11A:

1. Assignment questions are given to improve the subject knowledge of 1IA Syllabus

Sl.	USN	NAME	Marks	Student Signature
1	4PM18CS062	Pramod D	17.0	
2	4PM18CS063	Praveen Kumar S	15.0	2
3	4PM18CS069	Raghavendra Neeralagi	22.0	Rogers
4	4PM18CS072	Reetesh V	9.0	Redesh
5	4PM18CS073	Rohan R	8.0	Polisan
6	4PM18CS075	Roshan Fardeen I	21.0	Enthol
7	4PM18CS080	Sahana S V	28.0	Sahara .S.V
8	4PM18CS081	Sanakousar Patil	18.0	Batil
9	4PM18CS082	Sanjana	17.0	2
10	4PM18CS083	Sanjay P	30.0	Sangar P.
11	4PM18CS084	Sannutha Bhat A	18.0	-0
12	4PM18CS085	Savina Gowda	28.0	Cocools
	4PM18CS087	Shamaa M	14.0	Shamen
13	4PM18CS088	Shravya G M	29.0	· R /:
14	4PM18CS095		27.0	Snowith
15	4PM18CS098		24.0	Sneha N. 1+
16			22.0	
17	4PM18CS100			Southyallshet
18	4PM18CS103	Srinidhi S	25.0	Bullwide . S.

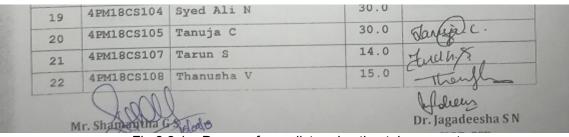
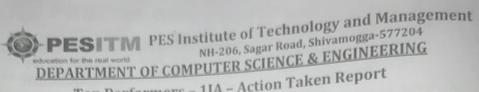


Fig 2.2.1g Poor performerlist and action taken report

Bright Students

Bright Students					
Identification Criteria	Actions taken				
Students awarded with First Class with Distinction (FCD) in their Semester exams.	 FCD functions are conducted to felicitate those students and Mementos are also distributed to motivate them to continue their excellence in academics. To take up mini projects & encourage to participate in inter college national or international fest. Encourage to attend NPTEL courses, Conferences, workshops, internships and publish papers Encourage them to get certification by industry specific courses 				
Top three students of each class	Book Coupons worth of Rs. 750 will be given				



Top Performers - 1IA - Action Taken Report

Students Batch: 2018 - 22

Subject: Computer Organization

Subject Code: 18CS34

Scheme: 2018

Semester: 3 Semester "B" Section

Academic Year: 2019-20

Criteria: Students Scored >= 44 Marks

Following actions have been taken for the encouragement of Top Performers of 1IA:

1. General Topics related to Computers have been given to above students to gain

2. Students have given 10 minute seminar in class room on topics given to them.

3. Students have submitted reports on the topics given to them.

Sl.No	USN	NAME	Marks	Student Signature
1	4PM18CS060	NIYAZ AHMAD MIR	46.0	Crise3
2	4PM18CS065	PRIYADARSHINI H M	48.0	Porise
3	4PM18CS070	RAMYA R	48.0	Dernie
4	4PM18CS079	SAHANA S R	48.0	Shana S.R
5	4PM18CS089	SHRAVYA UDUPA A	44.0	Shronya
6	4PM18CS096	SNEHA B	50.0	Sneva.
7	4PM18CS101	SOWMYA L	50.0	Sowmyan
8	4PM18CS102	SPOORTHI V HIREMATH	50.0	3000 Al
9	4PM18CS106	TANUJA K UDUPA	45.0	-600
10	4PM18CS112	UJJWAL KUMAR	48.0	1)1152
11	4PM18CS113	VAISHNAVI	48.0	ashmuar .
12	4PM18CS116	VIDYASHREE K SHET	50.0	Jeshow

Mr. Shamantha G S Course Instructor

Dr. Jagadeesha S N HOD CSE

Fig.2.1.2h Top performer action taken report

Table. 2.2.1b Bright students NPTEL list

SI No	Name	Subject Name	Result
1.	Ashwarya S V	Joy of Computing Using Python	Elite
2.	Ashwarya S V		Elite
3.	Ashwarya S V	Introduction to Automata, Languages and Computing	Elite
4.	Meghana M	Joy of Computing Using Python	Elite
5.	Prdeep U R	Joy of Computing Using Python	Elite
6.	Prdeep U R	Data Mining	Successfully Completed
7.	Ashwarya S V	Introduction to Programming in C	Successfully Completed
8.	Ajay Shankar B P	Privacy and Security in Online Social Media	Successfully Completed
9.	Harshitha B B	Joy of Computing Using Python	Elite
10.	Yashhas S C	Joy of Computing Using Python	Elite
11.	V Ganesh	Joy of Computing Using Python	Elite

Table. 2.2.1c Student Online courses

Anirudh Ranganath	Data Science	Coursera
Hithesh Kumar	Machine Learning	Coursera
Anirudh Ranganath	Data Science Methodology	Coursera
Hithesh Kumar	Intermediate Python for Data Science	DataCamp
Hithesh Kumar	Intro to SQL for Data Science	DataCamp
Kusum	C++	SoloLearn
Meghana Bhat	C++	SoloLearn
Ajay Kumar	Importing Data in Python (part2)	DataCamp
Nagma Kouser	C++	SoloLearn

G. Conduction of Laboratory

- Lab In charges of respective labs will prepare the manuals, material requirements, conduction of experiments and cycle of experiments before commencement of semester.
- The Laboratories are conducted in session of 3 periods, in each session the faculty explains the procedure, theory, calculations and applications of the experiment.
- The students will write the necessary details in the observation book, and then conduct the experiment, tabulate the readings, calculate and evaluate the results.

- The results are documented in the record book by the students, later which will be evaluated by concerned faculty.
- The experiments are evaluated by the faculties according to lab rubrics.

Criteria	Rubrics for Internal Assessment of Laboratory							
Criteria	0	1	2	3	4			
For Experime	nts (10M)							
Write Up (2M)	Observation and records are incomplete	and records	Observations and records are through in detail					
Viva (2M)	Not able to answer the questions	least 50% of	Able to answer all the questions appropriately					
Conduction (4M)	Lacks the appropriate knowledge of lab	the knowledge of	Demonstrate good knowledge of lab procedure	sound knowledge of	Demonstrate very good knowledge of lab procedure			
Conclusion and interpretation (2M)	Not able to conclude and interpret the results	interpret the	Able to interpret and conclude the results					
For Mini Proj	ect (10M)							
Demo (4)	No information and poor		Demonstrate with moderate understanding	clearly and showcase	Demonstrate the project clearly and showcase full understanding			
Report (4)	Not Submitted	Reports are not organized properly	Reports are organized	, ,	Report is complete in all respects			
Viva (2)	Not able to answer the questions	least 50% of	Able to answer all the questions appropriately					

H. Continuous Assessment in laboratory

Continuous assessment system is also implemented for assessment of laboratory work. The evaluation is done on the basis of submission of laboratory observations, records, conduction, viva and punctuality of the student. Internal test is conducted at the end of the semester and evaluated as per Laboratory Rubrics.

Criteria	Rubrics for Continuous Internal Evaluation (CIE) in Laboratory						
Criteria	0	1	2	3	4		
Write Up (2M)		and records	Observations and records are through in detail				
Viva (2M)	answer the	at least 50% of the questions	Able to answer all the questions appropriately				
Conduction (4M)	appropriate knowledge of	the knowledge	good knowledge of	sound knowledge of	Demonstrate very good knowledge of lab procedure		
Conclusion and interpretation (2M)	conclude and	Able to interpret the results	Able to interpret and conclude the results				

I. Student feedback on Teaching learning process and action taken

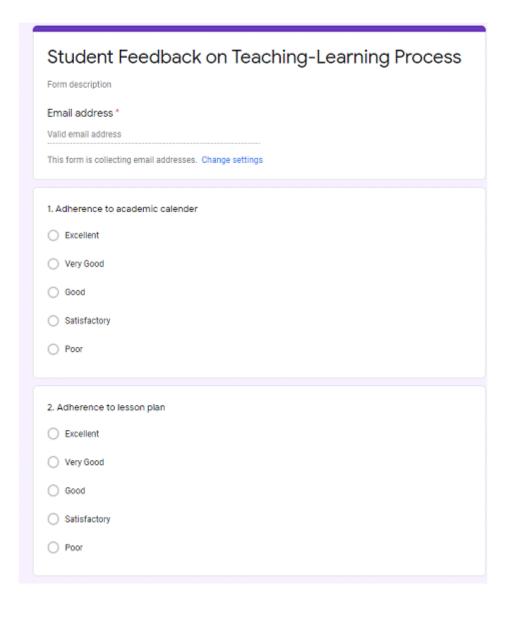
- Feedback at course level: At the middle of the semester, all the students are required to fill a feedback-form apprising the faculty using a scale of 1 to 5
- Action Taken: Target has been to set to 75%
- If the feedback of any faculty in any course is less than 75%, the concerned faculty will be called and counseled to address the shortfall in feedback.

SI. No	Feedback Parameters
P1	Has the teacher covered entire syllabus as prescribed by the university/college/board?
P2	Has the teacher covered relevant topics beyond syllabus?
P3	Effectiveness of teaching in terms of technical content/ Course content?
P4	Effectiveness of teaching in terms of Communication Skills?
P5	Effectiveness of teaching in terms of use of technical aids?
P6	Pace on which contents were covered?
P7	Motivation and inspiration for students to learn?
P8	Support for the development of student skills Practical demonstration/ Hands on Training?
P9	Clarity of Expectation of students?
P10	Willingness to offer help and advice students?
P11	Feedback provided on student Progress?

7 th SEMESTER 'A' SE	ECTION												
Faculty Name	Course Name	P1	P2	Р3	P4	P5	P6	P7	P8	P9	P10	P11	Overall
Mr. Ranjan V	Web technologies and its Applications	90.0	89.58	89.58	89.17	89.17	88.33	88.75	90.0	90.0	89.17	89.58	89.39
Dr. Jagadeesha S N	Advanced computer architecture	89.17	87.92	87.92	88.33	88.33	87.08	86.67	88.33	88.33	87.5	87.5	87.92
Mr. Chethan L S	Machine Learning	90.42	90.42	91.25	91.67	91.25	89.17	90.0	91.25	90.83	90.83	90.42	90.68
Mrs. Pratibha S	Cloud computing and its applications	90.48	90.0	89.52	91.43	91.9	89.52	89.05	90.48	90.0	91.43	90.0	90.35
Dr. Sunitha B	Unix System Programming	86.55	88.28	87.93	89.31	88.62	87.93	88.62	87.93	88.62	88.28	88.62	88.24
Mrs. Nayana K	Storage Area Networks	90.0	90.0	90.42	90.0	90.83	89.17	90.0	90.83	90.42	90.42	90.0	90.19
Mr. Ranjan V	Web technology laboratory with mini project	88.33	87.92	88.33	89.17	88.33	88.75	87.92	89.58	89.17	89.17	88.75	88.67
Mr. Chethan L S	Machine Learning laboratory	90.83	90.42	91.67	91.25	91.25	89.58	90.42	91.25	91.67	91.25	90.42	90.91
Overall Performance													89.54

[•] Feebback at department level: feedback from the student is taken at the end of each semester to assess the TLP adopted in the department

Feedback at department level: feedback from the student is taken at the end of each semester to
assess the TLP adopted in the department



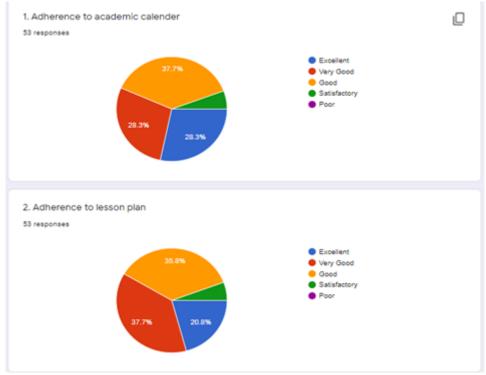


Fig.2.1.2i Student feedback analysis

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

Conduction of IA is divided into following sub-processes

- Preparation of IA time table
- Student seat allotment
- Room invigilation by teaching faculties
- Evaluation of Blue books & Display of IA marks
- Formation of Question Paper Review Committee (QPRC)
- Quality of IA question paper and Scheme of evaluation

1. Preparation of IA Time Table

- IA Coordinators will collect the preferences from students by visiting into each class
- IA Coordinators will prepare the IA Time table according to the majority of student preferences of the courses against the date and time of IA schedule.
- IA Time table will be displayed in department notice board at least one week prior to the commencement of IA.

Institute Marks: 17.00

2. Student seat allotment

- Students of 1st& 4th year are made to sit alternatively in a desk
- Students of 2nd& 3rd year are made to sit alternatively in a desk
- · Student seat allotment is displayed at least two days prior to the commencement of IA

3. Room invigilation by teaching faculties

- Teaching faculties are allocated equally for the room invigilation duties.
- Room invigilators will collect Question papers, Blue books and Attendance forms from IA Coordinators 15 min prior to the commencement of IA and move to respective allocated rooms.
- Students are seated in respective seats 10min prior to the commencement of IA
- After completion of IA duration, room invigilators will collect blue books from students and handover to IA Coordinators.

4. Evaluation of Blue books & Display of IA marks

- Course instructors will complete the evaluation of blue books within five working days of completion of IA.
- Evaluation of blue books will be based on approved scheme of evaluation.
- IA question paper is discussed in class room and Evaluated blue books are distributed to students in class room and IA marks are noted down in Attendance register.
- Consolidated IA marks will be displayed in department notice board within five days of completion of IA.

5. Formation of Question Paper Review Committee (QPRC)

- This committee consists of HOD as the chairman, senior faculties and Course experts will be the member of committee.
- QPRC committee will be formed for each course of the program.
- QPRC committee will review the IA question papers and Scheme of evaluation of IA question paper and approves after recommendation were implemented.
- QPRC committee Approved IA question papers and schemes of evaluation are the authenticated documents.

6. Quality of IA question paper and Scheme of evaluation

- Course instructors will frame the IA question papers by giving equal importance to the syllabus covered.
- IA Question papers will be framed according to Revised Blooms Taxonomy and mapped to relevant Cos
- To ensure the quality of IA, QPRC will review, give recommendations and after those recommendations were implemented, approve the IA question paper and Scheme of evaluation.
- Format of the IA Question paper has been standardized at college level.
- QPRC approved IA question papers and Scheme of evaluations will be handed over to IA Coordinators at least two days prior to the commencement of IA.
- To maintain transparency in evaluation of blue books, IA Coordinators will display QPRC approved Scheme of evaluations in department notice boards after the completion of IA.

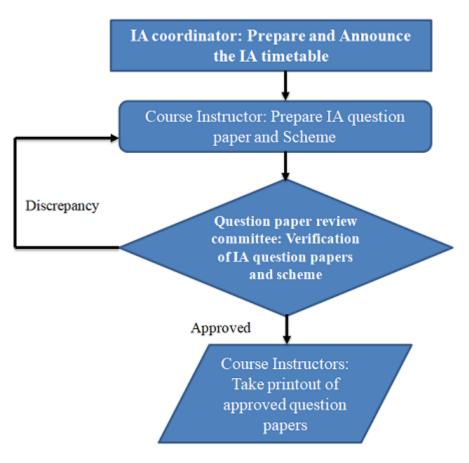


Fig B.2.2.2a Process of question paper setting

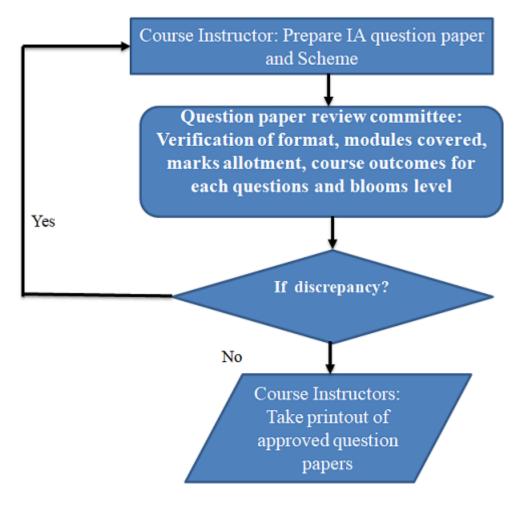
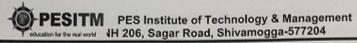


Fig B.2.2.2b Process of verifying question paper quality



Department of Computer Science and Engineering I Internal Assessment

Ser	nester: 3rd	1	Max. Marks: 30M			
	Subject Name: Computer Organization Subject Code: 15CS3					
	te: 11/09/201		Time: 08:30 - 09:45		-	-
Co	urse Instruct	tors: Mr. Sunilkumar H R, l	Mrs. Nayana K		-	
		Co	ourse outcomes			
CO	1: The basic	structure of computers & made	chine instructions and programs, Ad	dressing	Modes,	
Ass	embly Langu	age, Stacks, Queues and Sub	routines.			
No	te: Answer T	wo Full Questions choosing	one question from each part			
			Part - A			
Q. No		Questio	n	Marks	CO Level	BTI
1a	With a neat of	liagram explain basic operationa	d concepts	8	CO1	L2
1b	What is byte appropriate e	7		L4		
			OR	· constant		L4
2a	Ultra SPARG hence ordere as new comp	C –IIi processor. A company l d testing of new computer with uter). Following observations w	SPARC10 workstation with 300MHz has to purchase 500 new computers, SPEC2000 (run on reference as well ere made. Runtime in new computer	5	C01	
	Programs	Runtime on reference (minutes)	(minutes)			
	a.	50	5			
	b.	75	4			
	C.	60	6			
	computers on	ly if the overall SPEC rating is	ace the order for purchasing new at least 12.00. After the said test, will ase of new computers?			
2b	the system manager place order for the purchase of new computers? What are addressing modes? Explain the same with examples					L2
		reasing modes, supram				
		tessing incutes the particular to the particular	Part - B			
3a	Explain SHIF	T and ROTATE operations with	Part - B	10	CO1	L2
	Assume two locations calle	T and ROTATE operations with unpacked BCD numbers are ed LOC, LOC+1; using asseml em into packed BCD number.	Part - B	10	COI	L2
3b	Assume two locations calle to convert th PACKED. Us	T and ROTATE operations with unpacked BCD numbers are ed LOC, LOC+1; using assemt em into packed BCD number, se suitable comments.	Part - B stored in two successive memory bly language codes , write a program And store the result in a location OR		CO1	
	Assume two locations calle to convert th PACKED. Us Write an As	T and ROTATE operations with unpacked BCD numbers are ed LOC, LOC+1; using assemblem into packed BCD numbers esuitable comments. ssembly Level Language Prosectives to add a list of N number and the sectives to add a list of N numbers.	Part - B stored in two successive memory bly language codes , write a program And store the result in a location		C01	

Fig.2.2.2.c. question paper





PES Institute of Technology & Management NH-206, Sagar Road, Shivamogga-577204

Department of Computer Science and Engineering

Ser	mester: 3 rd	I Internal As	Marks: 30M	AND DESCRIPTION OF THE PERSON		
	oject Name: Computer Organization	THE RESERVE OF THE PERSON NAMED IN COLUMN 2 IN COLUMN	ct Code: 17CS34			
	te: 11-09-2018	THE RESERVE OF THE PERSON NAMED IN	: 08:30 AM - 09:45 AM			
_	urse Instructors: Mr. Sunilkumar H					
-	arot more detors, par commentant in	IC, IVII o. Ivajana i				
		Part - A	4			
Q. No	Question					
la	Basic operational concepts: Neat diagram on processor registers alon MAR PC IR	Morey MOR Ro Rt Ro Rt Rol Ropolare	Control Process	8		
	Explanation on individual registers	nections between the pro-				
	Explanation on individual registers Explanation on basic operational concept	2 marks s with example	essorand the memory. 4 marks			
	Explanation on individual registers Explanation on basic operational concept Define byte addressability	2 marks		7		
	Explanation on individual registers Explanation on basic operational concept	s with example1 mark		7		
	Explanation on individual registers Explanation on basic operational concept Define byte addressability Wood	s with example1 mark	4 marks	7		
	Explanation on individual registers Explanation on basic operational concept Define byte addressability Wood address Byte add	2 marks s with example 1 mark	4 marks Byte address	7		
	Explanation on individual registers Explanation on basic operational concept Define byte addressability Wood o o t t t t t t t t t t t	2 marks s with example 1 mark	4 marks Byte address 3 2 3 0	7		
1	Explanation on individual registers Explanation on basic operational concept Define byte addressability Wood o o t t t t t t t t t t t	2 marks s with example 1 mark	4 marks Byte address 3 2 3 0	7		
	Explanation on individual registers Explanation on basic operational concept Define byte addressability Wood o o t t t t t t t t t t t	2 marks s with example 1 mark	4 marks Byte address 3 2 3 0	7		
	Explanation on individual registers Explanation on basic operational concept Define byte addressability Wood o o t t t t t t t t t t t	2 marks s with example 1 mark	4 marks Byte address 3 2 3 0	7		
	Explanation on individual registers Explanation on basic operational concept Define byte addressability Wood address 0 0 1 4 5	2 marks s with example 1 mark	### Byte address 3 2 3 0 7 6 5 4	7		
	Explanation on individual registers Explanation on basic operational concept Define byte addressability Wood address 0 0 1 4 5	2 marks s with example 1 mark	4 marks Byte address 3 2 3 0	7		
,	Explanation on individual registers Explanation on basic operational concept Define byte addressability Wood address Byte add O 1 1 4 5 5 2*-4 2*-4 2*-3 2	2 marks s with example 1 mark ross 2 3 0 6 7 4	### Byte address 3 2 1 0 7 6 5 4	7		
	Explanation on individual registers Explanation on basic operational concept Define byte addressability Weed address	2 marks s with example1 mark ress 2 3 0 6 7 4	Byte address 3 2 3 0 7 6 5 4	7		
1	Explanation on individual registers Explanation on basic operational concept Define byte addressability Wood address Byte add O 1 1 4 5 5 2*-4 2*-4 2*-3 2	2 marks s with example 1 mark ross 2 3 0 6 7 4	Byte address 3 2 3 0 7 6 5 4	7		
	Explanation on individual registers Explanation on basic operational concept Define byte addressability Wood address Byte add 0 0 1 4 4 5 1 4 5 1 4 5 1 4 5 1 4 5 1 4 5 1 4 5 1 4 5 1 5 1	2 marks s with example1 mark ress 2 3 0 6 7 4 *-2 2*-1 2*-4 seignment3 mark	Byte address 3 2 3 0 7 6 5 4			
	Explanation on individual registers Explanation on basic operational concept Define byte addressability Weed addressability	2 marks s with example1 mark 2 3 0 6 7 4 2 2*-1 2*-4 ssignment3 mark3 mark1 mark	Byte address 3 2 3 0 7 6 5 4	7		
	Explanation on individual registers Explanation on basic operational concept Define byte addressability Weed addressability	2 marks s with example1 mark 2 a 6 7 4 2 2 ^e -1 2 ^e -4 ssignment3 mark	Byte address 3 2 3 0 7 6 5 4			
1 1	Explanation on individual registers Explanation on basic operational concept Define byte addressability Weed addressability	2 marks s with example1 mark 2 3 0 6 7 4 2 2*-1 2*-4 ssignment3 mark3 mark1 mark	Byte address 3 2 3 0 7 6 5 4			
	Explanation on individual registers Explanation on basic operational concept Define byte addressability Weed address 0 0 4 4 5 4 5 4 5 4 5 5 6 6 6 6 6 6 6 6 6 6	2 marks s with example1 mark 3 mark3 mark3 mark3 mark1 mark	Byte address S			
	Explanation on individual registers Explanation on basic operational concept Define byte addressability Weed address 0 0 1 4 4 5 4 5 4 5 4 5 5 6 6 6 6 6 6 6 6 6 6	2 marks s with example1 mark 3 mark3 mark3 mark3 mark1 mark3 mark3 mark3 mark	## Byte address 3			
	Explanation on individual registers Explanation on basic operational concept Define byte addressability Wood address Byte add 0 0 1 4 5 2*-4 2*-4 2*-3 2 (a) Big-endian a Little endian concept, diagram, example Big endian concept, diagram, example Addressing Modes definition Table 2.1 General Name Immediate Register Absolute (Direct)	s with example	### Byte address 3			
	Explanation on individual registers Explanation on basic operational concept Define byte addressability Weed address Byte add 0 0 1 4 5 1 4 5 1 4 5 1 4 5 1 4 5 1 4 5 1 4 5 1 4 5 1 4 5 1 4 5 1 5 1	2 marks s with example1 mark 1 mark 2 3 0 6 7 4 3 mark3 mark3 mark1 mark	Byte address 3			
1	Explanation on individual registers Explanation on basic operational concept Define byte addressability Wood address Byte add 0 0 1 4 5 2*-4 2*-4 2*-3 2 (a) Big-endian a Little endian concept, diagram, example Big endian concept, diagram, example Addressing Modes definition Table 2.1 General Name Immediate Register Absolute (Direct)	s with example	Byte address Byte address 3 2 3 0 7 6 5 4			

X(Ri,Rj) $\mathrm{EA} = [\mathrm{R}i] + [\mathrm{R}j] + \mathrm{X}$ and offset Relative X(PC) EA = [PC] + XAutoincremen (Ri)+ EA = [Ri]: Increment Ri -(R/) Decrement Ri; EA = [Ri]

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Quiz Answers 3rd Semester - One mark Each (Multiple Choice / One-word Answer / Fill in the blanks)

Version - A

- (Dennis Ritchie) 1. Inventor of C language_
- 2. Who invented computer? (Charles Babbage)
- 3. Expand SPEC (System Performance Evaluation Corporation)
- 4. What is mnemonic? (opcodes used in assembly level language / Short form of English words)
- 5. If R1=2000, what would be the contents of R1 after execution of (R1)+? (2001/2002/2004)
- 6. If R5=2000, what would be the contents of R5 after execution of -(R5)?(1996/1998/1999)
- 7. A nibble is a size of ___ bits (4-bits)
- 8. 21436587 write in little endian concept (87654321)
- 9. 21436587 write in big endian concept (21436587)
- 10. Expand NPTEL (National Programme on Technology Enhanced Learning)

Version - B

- 1. If R5=2000, what would be the contents of R5 after execution of -(R5)? (1996/1998/1999)
- 2. A nibble is a size of bits (4-bits)
- 3. 21436587 write in little endian concept (87654321)
- 4. 21436587 write in big endian concept (21436587)
- 5. Expand NPTEL (National Programme on Technology Enhanced Learning)
- 6. If R1=2000, what would be the contents of R1 after execution of (R1)+? (2001/2002/2004)
- 7. What is mnemonic? (opcodes used in assembly level language / Short form of English words)
- 8. Expand SPEC (System Performance Evaluation Corporation)
- 9. Who invented computer? (Charles Babbage)
- 10. Inventor of C language (Dennis Ritchie)

Subject Handling Faculties:	^
-\$P	Mayous &
Mr. Sunilkumar H R	Mrs. Nayana K
Reviewing Faculties:	
B15	dl
Mr. Raghavendra K	Mr. Chethan L S
	Heleny
	Dr. Jagadeesha S N

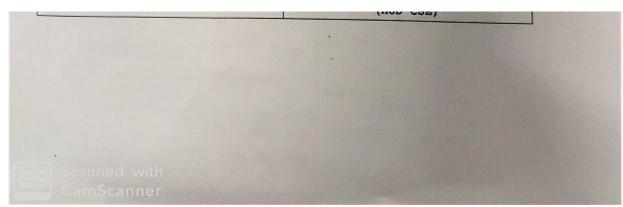


Fig.2.2.2.d. Scheme of evaluation



PES Institute of Technology and Management

NH-206, Sagar Road, Shivamogga-577204 Department Of Computer Science & Engineering

Assignments				
Students Batch: 2017 - 21	Scheme: 2017			
Subject: Automata Theory and Computability	Semester: 5 Semester "B" Section			
Subject Code: 17CS54	Academic Year: 2019-20			
Last Date for Submission: 12 /11 /2019	Cos: CO5,CO6			

Assignment Question:

- Q1.Let x and y are 2 positive integer Obtain a turing machine to perform binary addition.
- Q2.Obtain a turing machine to compute the function monus or proper subtraction which is defined by m-n=Max(m-n,0)(if m>n,get m-n else get 0)
- Q3.Design a turing machine that perform the following function q0|-qf ww for any w belongs to{1}*
- Q4.Design a turing machine to perform the following function: 0^m10^n and output must be 0^(m+n)
- Q5.Design a turing machine to accept a language which has number of b's is equal to twice the number of a's

Sl. No	USN	NAME	Marks	Student Signature
1.	4PM16CS022	BHOOMIKA N KUMAR	and the	
2.	4PM16CS051	NAVYA SHREE R	cit.(12 1.11)	
3.	4PM17CS053	POOJA.B	5	For a . B
. 4.	4PM17CS054	POOJA.K.H	5	Tool .
5.	4PM17CS055	PRAGATHI SINGH	5	P
6.	4PM17CS056	PRECILLA LOPIS	H	Presella
7.	4PM17CS057	PREETHI S GOWDA	5	Presto
8.	4PM17CS058	PRIYANKA S	5	himale
9.	4DM17CC050	DAVĖSH MP	5	Retark Mys

Fig.2.2.2e. assignment

10. 11.	4PM17CS060	RAKSHA RAO B		
	4PM17CS061	RAKSHITHA .B.R	4	C 1 agus t
12.	4PM17CS063	S L PRATHAP	4	5.1.P.SW.
13.	4PM17CS064	SABHIRAJ SINGH	3	83
14.	4PM17CS065	SAHANA KS	5	Salsan
15.	4PM17CS066	SAHANA R S	5	Sahana R.S
16.	4PM17CS068	SAYEDA UMME ASMA	54 30000000	(200)
	2.1			y deen

2.2.3 Quality of student projects (25)

A. Identification of Project group/Project domains

- Project Coordinator & Faculty educate students with different domains/areas.
- · HOD sends circular for identifying the domains in Computer science and engineering
- Students are allowed to form team with not more than 4 members.
- Students are invited to choose/bring out a problem for the execution of the project.
- Guides are allotted based on students choice and guide expertise

B. Continuous Monitoring:

- A Project Review Committee is formed under the chairmanship of HOD.
- All student's group need to submit the synopsis to the internal guide .
- The Project Guides/teachers gives suggestions towards the improvements of the synopsis.
- Based on these inputs, students commence their project work. If the students are doing project at external agency, then they need to consult with inter
- Three times in a year, the project students give presentation on the project in front of the project review committee(PRC) as per the university regulatic
- The project review committee give suggestions to students from time to time that they need to incorporate before the submission of final report
- The review committee finalizes the Internal marks of the project for each Student
- The guide helps the students to publish their work in national/international conference and journal.
- The best project of the department is often awarded prize and/or certificates

First seminar:

- After2nd Internals of 7th semester.
- Each individual in each team will propose their part of work.

- Here each individual will explain the tools and algorithm he/ she will use for executing the proposed work.
- They will prepare and submit a report of 20 pages report. (strictly 20 pages)
- The proposed work should be part of their team project that they will propose as a team in 8th semester.

PHASE 1 Seminar

- After 3rd internal of 7th semester
- Each individual will present the working model and its result.
- They will submit 20 pages report along with.

• First team seminar of 8th semester

- Around 3rd to 4th week of commencement of 8th semester.
- Here they will propose the team project
- Contribution of each individual will be clearly mentioned.
- They will submit a report of 20 pages.

Fifth Seminar:

- After first internal of 8th semester.
- The tools and algorithms will be explained.
- No report needed but a description of 2 to 3 pages signed by the guide must be submitted.
- This submitted report will be pinned with the proposal seminar.

· Sixth Seminar:

- After second internal and Before 3rd Internal
- · Working model demo will be shown.
- Final report should be submitted.

· Final Seminar Phase II

- This is scheduled after 3rd internals of 8th semester
- Working model demo will be shown.
- Final report should be submitted before 3rd internal. 3 copies will be collected: 1 for guide and 2 for evaluators

C., Project Evaluation:

Internal evaluation: PRC will evaluate the projects based on the rubrics is shown in table 2.2.3.a Table 2.2.3.a Project evaluation rubrics

Expectation	Exceeded (Professional Work or Work that Surpassed Student Expectations)	Achieved (High Quality work)	Met (Acceptable Quality Work)	Attempted (Low/Poor Qua Work)
Goals	 Student addressed all areas of project proposal thoroughly, specifically meeting stated goals. All standards mentioned in proposal, well addressed in project. Project purpose made very clear. Student exceeded goals of project 	 Student mostly addressed areas of project proposal, specifically meeting stated goals. Standards mentioned in proposal addressed. 	 Student somewhat addressed most areas of project proposal. Student addressed some parts of standards mentioned in proposal. 	 Project is loosely relate project proposal. Standards mentioned i proposal not addressed not well addressed.
Research Originality and complexity of project	 All resources are properly documented with both citations and bibliography. There is a variety of sources. The most recent and valuable sources used. 	 Student documented most sources with citations and bibliography. Bibliography showed variety of sources. 	 Bibliography of all sources. Quality of sources is acceptable. Only internet sources are used. 	 Student documented a sources used The quality of sources addressed.
Quality of Project Significance of project (to field of study, community, etc.)	 Professional quality product shows originality, creativity, and in-depth study. Product is delivered to specific purpose in the real world. 	Student adapted ideas from others for the purpose.	 Student followed someone else's idea for the product. Product is intended for a specific purpose. 	No demonstration of awareness of purpose.
Process and Improvement Quality of content (background, methodology, findings, etc.)	 All parts of the project process are completed. Student asked and answered outstanding questions. Student shows detailed understanding of information, demonstrates significant thoughtfulness (especially in the reflection), and uses information at a high level. 	 All parts of project process are completed. Student asked and answered strong questions. Most appropriate information is present and understood. 	 Some parts of the project process are completed. Student asked and answered questions. Student recognized some needs for improvement and made some of them 	 A few parts of the proje process are completed Student asked and answered some questine Little new information is gathered but no thoughtfulness shown.

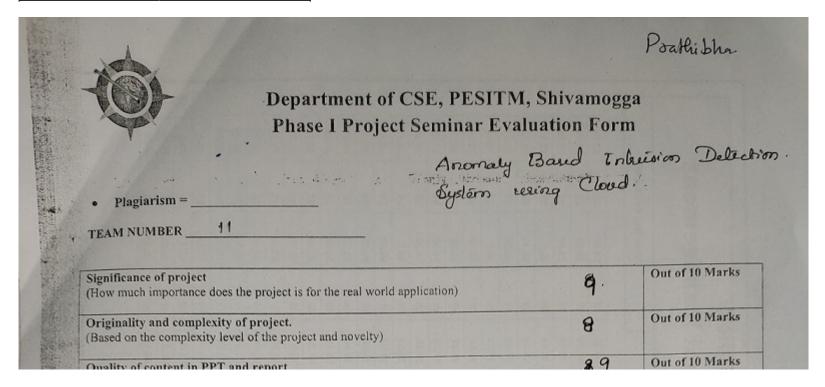
Project
Management
(Managing the
time for meeting
the deadlines)

Delay in Submission

- Student always on track to meet all deadlines.
- Student effectively communicated project progress with advisor
- Student stayed on track most of the time, met most deadlines.
- Student finished project within one week of finalization deadline
- Student stayed on track some of the time and met some deadlines.
- Student gave time to most parts of the project process.
- Student is infrequently track with time but met deadline.
- Learning and time are poorly documented.

Evaluation Criteria	Marks Allotted	Exceeded	Achieved	Met	Attempted
Goals	10	10	7-9	3-7	1-3
Research	10	10	7-9	3-7	1-3
Quality of Project	10	10	7-9	3-7	1-3
Process and Improvement	10	10	7-9	3-7	1-3
Project Management	10	10	7-9	3-7	1-3

Rubrics	50M
Report	30M
Guide	20



Each following field is out of 10 Marks

Student Names→	Divya J .	Devika S	Pooja R	Suhma S.M	
Contribution towards the project	9	9	9	9	
Clarity about the project	88	8	8	8	
Communication and presentation	8	8	8	8	
Contribution in coding	8	8	8	8	
Contribution in Literature survey	9	9	9	9	
For Guide only Students interaction and attendance	10	10	10	10	
For Guide only Students approach to the problem given to them. (If any assignment is assigned, how promptly they will solve it)	10	10	10	10	
Total	62	62	Ga	6a	

		CONTRACTOR OF THE PARTY OF THE		
Comments/ Suggestion:				
Comments Suggestion.				

Evaluator N	ame:	Peatible 8.
Signature	;	Peatibres
Date	:	



Fig 2.2.3.a Project evaluation form

evaluation:

- The Final Project is evaluated by Internal and External examiners as appointed by the university.
- Evaluation of Project is conducted as per university regulations.

Table 2.2.3.b Project list for the year 2019-20

	USN	Team	Title	Guide Name	Relevance to POs and PSOs
1	4PM16CS074 4PM16CS056 4PM16CS073 4PM16CS061	1 Sachin V Uranakar 2 Pradeep U R 3 SACHIN S KULKARNI 4 Prasanna Ashok Naik	Sentiment analysis in kannada document	Sunil M E	PO1,PO2,PO3,PO4,PO5,PO9,PO10,PO11,PSO1,PSC
2	4PM16CS005 4PM16CS040 4PM16CS052 4PM16CS034	 Ajay M Kumar Hitesh Kumar G Balegar NayanaGanapatiNaik Gowrish S Patel 	Author identification in kannada using ML	Sunil M E	PO1,PO2,PO3,PO4,PO5,PO9,PO10,PO11,PSO1,PSO
3	4PM16CS044 4PM16CS092 4PM16CS085 4PM16CS038	1 Keerthana C K 2 Srushti S Pai 3 SmitalshwarKodiya 4 HifziaNoorain	Implicating any machine learning techniques	Prathibha S	PO1,PO2,PO3,PO4,PO5,PO9,PO10,PO11,PSO1,PSC
4	4PM16CS416 4PM16CS011 4PM16CS028	2 VEERESHAS 3 ANIL B H 4 DEEPAK D RAO	Anomaly detection in Standard datasets	Nayana K	PO1,PO2,PO3,PO4,PO5,PO9,PO10,PO11,PSO1,PSC
5	4PM16CS059 4PM16CS089 4PM15CS035	Team 28 1 PRAKRUTHI B K 2 SOWJANYA SAHUKAR S A	Implementation of machine learning technique to generate learning technique to generate database		PO1,PO2,PO3,PO4,PO5,PO9,PO10,PO11,PSO1,PS(
H	1	T40	ı	1	

6	4PM16CS031 4PM16CS004 4PM16CS002 4PM16CS030	1 Sanjanadesai 2 Aishwarya V Saunshi	Clustering of IOT data in cloud environment	Raghavendra K	PO1,PO2,PO3,PO4,PO5,PO9,PO10,PO11,PSO1,PSC	
	4PM16CS070 4PM16CS010	1 Roshan Kumar Pradhan		Devraj F V		
7	4PM16CS012	2 Allitalliappariaik	Chat bats using Al		PO1,PO2,PO3,PO4,PO5,PO9,PO10,PO11,PSO1,PSC	
	4PM16CS042					
	4PM15CS073	Team 26 1. SHASHANK S				
8	4PM15CS072	2 SHANTANU BARTHWAL	Bit price prediction	Sunitha B S	PO1,PO2,PO3,PO4,PO5,PO9,PO10,PO11,PSO1,PSO	
	4PM16CS041	JAGTAR SINGH BAWA				
	4PM16CS103	Team 2	Load Prediction	Sunitha B S		
9	4PM16CS108	1 Varun N Bhat 2 Yashas S C			PO1,PO2,PO3,PO4,PO5,PO9,PO10,PO11,PSO1,PSO	
	4PM16CS083	3 Shrisha G Adiga 4 Tarun M	dataset using Data science			
	4PM16CS100					
ı	4PM16CS029	Team 23	Emotion			
1	4PM16CS065	2 Nakshitia o	recognition in video	Likewin	PO1,PO2,PO3,PO4,PO5,PO9,PO10,PO11,PSO1,PSC	
	4PM16CS015	3 Arpana K Hegde 4 SIDDHARTHA RAO V S	identifying the attendance of	Thomas		
-	4PM16CS084	Toam 19	the classroom			
	4PM16CS064 4PM16CS072	1 Rahul A Esakkanavar	Build a EHR-			
1	4PM16CS060 4PM16CS105	2 Oddilli IV O	based healthcare system	Likewin Thomas	PO1,PO2,PO3,PO4,PO5,PO9,PO10,PO11,PSO1,PSC	
1	² 4PM16CS024 4PM16CS026	1 Rindhu Δ S	Application of Artificial Intelligence to	Puneeth	PO1,PO2,PO3,PO4,PO5,PO9,PO10,PO11,PSO1,PSC	

	predict trail outcome	

		i e e e e e e e e e e e e e e e e e e e	1		
	USN	Area	Title	Guide Name	Relevance to POs and PSOs
r	4PM16CS033	Team 4	Automation using IOT		
	4PM16CS016	1 Divyabharati 2 ArpitaAnnayyaPoojari			
13	4PM16CS036	3 Harshitha B B		Chethan L S	PO1,PO2,PO3,PO4,PO5,PO9,PO10,PO11,PSO1,PSO2,F
	4PM16CS047	4 Meghana M			
	4PM16CS017	Team 6			
	4PM16CS032	1 Atheesh K S 2 Dhanush R		Shamanth G	DO4 DO0 DO0 DO4 DO5 DO0 DO40 DO44 DO04 DO06 D
14	4PM16CS057				PO1,PO2,PO3,PO4,PO5,PO9,PO10,PO11,PSO1,PSO2,F
	4PM16CS071	4 S Ramya			
	4PM16CS008	Feam 13	Automation in Agriculture	Ranjan V	PO1,PO2,PO3,PO4,PO5,PO9,PO10,PO11,PSO1,PSO2,F
	4PM16CS050	1 Akshatha H L 2 Mouna M C			
15	4PM16CS076	3 Sannidhi S			
	4PM16CS099	4 SyedaNoorainAfshan			
	4PM16CS090	Team 9		Pradeep K	
1,	4PM16CS063	1 SpoortiAdmani 2 Priyanka R Naval	Home		DO4 DO2 DO2 DO4 DO5 DO2 DO40 DO44 DO04 DO
16	4PM16CS094	3 Suman 4 Brijesh Kumar Sahani	Automation		PO1,PO2,PO3,PO4,PO5,PO9,PO10,PO11,PSO1,PSO2,F
	4PM16CS109	4 biljesii kuillai Sallalii			
	4PM16CS006	Team 7			
17	4PM16CS009	1 Ajay Shankar B P 2 Akshatha L S	Automation	Pradeep K	PO1,PO2,PO3,PO4,PO5,PO9,PO10,PO11,PSO1,PSO2,F
'	4PM16CS020	3 Bhavana M V 4 Harshitha B U	in Security	Praueep K	FO1,FO2,FO3,FO4,FO5,FO9,FO10,FO11,FSO1,FSO2,F
	4PM16CS037				
	4PM16CS079	4 One man Night	Application		
12	4PM16CS081	2 Shilpashree U Kulkarni	of swarm Intelligence	Raghavendra	PO1,PO2,PO3,PO4,PO5,PO9,PO10,PO11,PSO1,PSO2,F
``	4PM15CS065	3 RumanaTabassum K M	Algorithms	K	
	4PM15CS023	4 Chaaya R	in IOT		

2.2.4 Initiative related to industry interaction (15)

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

Institute Marks: 11.00

Outcomes of Initiatives Related to Industry Interaction

• The interaction develops student's awareness on job functions in the industries, attitude to adapt industrial environment, proper practical and relevant knowledge, skills and competencies etc.

Workshops/Seminars/Expert talks/Trainings conducted by Industry Experts

Year 2019-2020

SI No	Name of the Company	Resource Person with designation	Title of workshop/Seminar/Talk./ Training	Date	Relevance to POs and PSOs
1	Ncania .	Mr. Manual, Sr. Architect	A technical talk on Engineering Architecture	20/11/2019	PO 1,2,12
2	Technology,	Fngineer		24/10/2019	·
3	IEEE MSS	Dr. Niranjan U C	An awareness program about IEEE	14/11/2019	PO 9,10
4	NULIKIA	Mr Rajath Duggal	Technical Talk		PO 1,2,3,4,5,6,7,9,10,11, 12

Year 2018-19

SI No	Name of the Company	Resource Person with designation	Title of workshop/Seminar/Talk./ Training	Date	Relevance to POs and PSOs
1	ІВМ	Mr. C. V. Joshi, Consultant, IBM (National award winner from President of India, Dr. APJ Abdul Kalam for professional excellence and social service)	Internet of Things	05.09.2018	PO1,2,3,4,5 PSO 1,2,3

2	Softtec Pvt Ltd,			14.03.2019	PO,1,2,3,12, PSO2,3
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Year 2017—18

SI No	Name of the Company	Resource Person with designation	Title of workshop/Seminar/Talk./ Training	Date	Relevance to POs and PSOs
1	Evive Health	1)Mr. Vidwath,Shimoga 2)Mr. Shamanth, Shimoga 3)Mr. Shashank Shimoga and 4)Mr. Vijayendra, Shimoga	Evive Health Hackathon Kick off and Open source Analytics	28/01/2017	PO1,2,5 PSO1,2
2	L&T, Europe division	Mr. Manual K, Software Architect,	Technical Talk on Architecting software IT solutions for global roll out	09-04-2018	PO1,PO10,PO11

2.2.5 Initiative related to industry internship/summer training (15)

B. Initiatives: Internships

The students are encouraged to take internship program during their semester break. Faculty members give their guidelines, suggestions and scope and cor recommendation letters and other necessary supports.

Implementation Details of Internships

- The College/Department/placement cell will strongly encourage students to undergo Internship during vacation.
- The student shall make a midterm presentation of the activities undertaken during the internship to a comprising Internship guide, a senior faculty from
- The student has to submit internship report to the Department.

Internship Evaluatic

Expectation	Needs Improvement 1	Meets Expect
Quality of Work	Work was of poor quality with numerous errors	With a few minor exceptions, ad most work requirements; most v made occasional errors
Description and presentation of Internship Activities Description of projects completed or contributed to Describe computer applications used Describe data compiled, materials reviewed and work produced Describe how students activities related to the org mission and how the agency benefited from the projects/outputs	Lacking required components or has little or nothing to do with topic.	Presentation and Summary incluwith little detail.
Quality of Report	Reports are not organized properly	Reports are organized

Evaluation Criteria	Marks Allotted		Meets Expectation	Good	Excellent
Quality of Work	3*5=15	1	2	3	
Description and presentation of Internship Activities	3*5=15	1	2	3	
Quality of Report	4*5=20	1	2	3	4
Total	50		•	•	-

Outcomes of Internships

- Acquiring practical training and valuable experience in their prospective career area, adding strength to their resume, and thus improving their job pros
- Getting the "inside track" on full-time employment opportunities with the same company, in which the student interned, through established professional
- Students submit the internship report which will be evaluated internally and externally by the examiners as per university guidelines.

Summary of Internship 2018-19

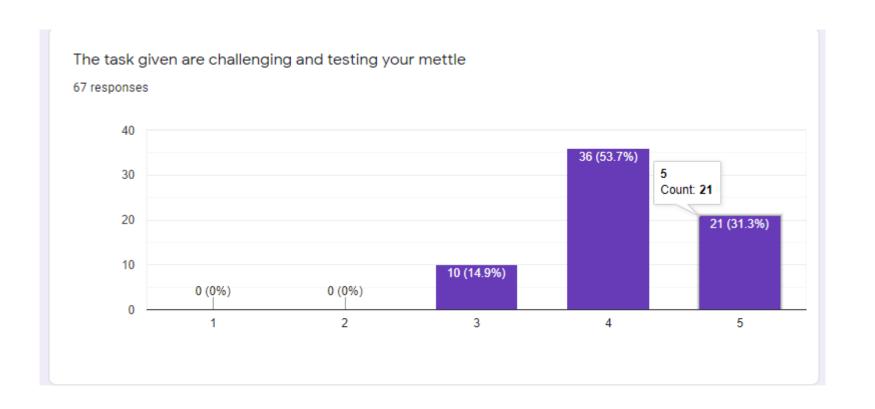
SL. NO	Name	USN	Name Of The Company	Domain(area) worked on
1.	Atheesh K S	4PM16CS017	Loginware Pvt.Ltd.	loT
2.	Prithvi Rao H R	4PM16CS062	Loginware Softech	Machine learning,IoT, cloud computing
3.	Sourab Vernekar	4PM16CS087	Advanced Rail Controls Pvt Ltd	loT
4.	Smita	4PM16CS085	Tech Fortune Technologies	Python and machine learning
5.	Rakshitha C	4PM16CS065	Lumic Info Solutions	Machine learning
6.	Venkatesh Prasad Hk	4PM16CS105	Vicasin Institute Of Solution	Machine learning using python
7.	Usha S V	4PM16CS101	Orovia	C#
8.	Aishwarya S V	4PM16CS003	Tech Fortune Technologies	Machine learning
9.	Neha Shanbhag	4PM16CS053	Tech Fortune Technologies	Machine learning
10.	Apoorva G	4PM16CS014	Tech Fortune Technologies	Machine learning
11.	Srushti S Pai	4PM16CS092	Techfortune Academy	Machine learning

SL. NO	Name	USN	Name Of The Company	Domain(area) worked on	
12.	Harsha Sg	4PM16CS110	Thynryt Innovation	Machine learning	
13.	Rahul A Esakkanavar	4PM16CS064	Orovia Software Private Limited	Mit app inventor, c sharp, SQL	
14.	Sachin K C	4PM16CS072	Orovia Software Pvt	Mit app inventer, c#, SQL	
15.	Bindu A S	4PM16CS024	Inops It Solutions Pvt Ltd Bengaluru	Full stack development	
16.	Aishwarya V Saunshi	4PM16CS004	Inops Pvt Ltd	Full stack development	
17.	Deepak D Rao	4PM16CS028	Thynkryt Innovations	Machine learning	
18.	Anoop Pattanashetty	4PM16CS013	Thynkryt	Machine learning	
19.	Nayana Ganapati Naik	4PM16CS052	Tech Fortune Technologies	Machine learning	
20.	Dhanush R	4PM16CS032	Loginware Softecc Pvt Ltd	loT	
21.	Sachin Kulkarni	4PM16CS073	Loginware Softec Pvt Ltd	Internet of things and cloud	
22.	Bhavana M V	4PM16CS020	Loginware Softech Pvt Ltd	Internet of things	
23.	Sumana K S	4PM16CS095	Loginware Softtec Pvt. Ltd.	loT and cloud	
24.	Spurthi S	4PM16CS091	Loginware Softtech Pvt. Ltd	loT and cloud	
25.	Rakshitha N	4PM16CS066	Loginware Softtec Pvt. Ltd	loT and cloud	
26.	Varuna H S	4PM16CS104	Loginwaresofttec	loT and cloud	
27.	Deepashree.N	4PM16CS030	Innostem Edunce Edlabs Private Limited	Machine learning	
28.	Pradeep U R	4PM16CS056	Tech Fortune Technologies	Data science	Dscriptive s
29.	Chaaya R	4PM15CS023	Tech Fortune Technologies	Machine learning	
30.	Seema Naik	4PM16CS079	Techfortune Technologies	Machine learning	
31.	Swathi.N	4PM16CS098	Loginware Sofftech Private Limited	Banglore	
32.	Meghana N Hegde	4PM16CS048	Loginware Softtec Pvt. Ltd., Bangalore.	loT, machine learning	
33.	Chilukuri Hemapriya	4PM16CS026	Loginware Softtec Pvt Ltd	loT	

SL. NO	Name	USN	Name Of The Company	Domain(area) worked on	
34.	Madhu K S	4PM16CS045	Tech Fortune Technologies	Data science	Pı
35.	Vinay R	4PM16CS106	Thnkryt	Machine learning	
36.	Sahana S H	4PM16CS075	Loginware Softtec Private Limited	ML and IoT	
37.	Ajay Shankar	4PM16CS006	Loginware Softenic Ltd	loT	
38.	Gowrishspatel	4PM16CS034	Tech Fortune Technologies	Data science	P
39.	Shreya T A	4PM16CS082	Tech Fortune Technologies	Machine learning	
40.	Suman	4PM16CS094	Tech Fortune Technologies	Machine learning using r language	
41.	Spoorti Admani	4PM16CS090	Tech-Fortune Technologies Banglore	Machine learning	P
42.	Priyanka R Navale	4PM16CS063	Tech Fortune Technologies	Machine learning	
43.	Ritika Bhadra	4PM16CS069	Inventeron Technologies And Business Solutions	Data science	
44.	Hifzia Noorain	4PM16CS038	Inops Pvt Ltd	Full stack development	
45.	Desai Sanjana Shivakumar	4PM16CS031	Inops Pvt Ltd	Full stack development	
46.	Divya Bharati	4PM16CS033	Inventeron Technologies And Business Solutions Llp	Machine learning and artificial intelligence	
47.	Anil B H	4PM16CS011	Tynkryt Innovation	Machine learning	
48.	Shrisha Adiga	4PM16CS083	Betsol	Data management and ui/ux developer	
49.	Arpana K Hegde	4PM16CS015	Lumic Info Solutions Davangere	Machine learning and image processing.	
50.	Deepak P	4PM16CS029	Lumic Info Solutions	Machine learning	
51.	Sushma E	4PM16CS096	Loginware	Cloud computing, IoT	
52.	V Ganesh	4PM16CS102	Thynkryt Innovations	Machine learning	
53.	Mouna M C	4PM16CS050	Tech Fortune Technologies	Machine learning	
54.	Akshatha H L	4PM16CS008	Techfortune Technologies	Machine learning	
55.	Pramod D P	4PM16CS060	Orovia Private Limited	Windows application	

SL. NO	Name	USN	Name Of The Company	Domain(area) worked on
56.	Krishna	4PM15CS035	Thynkryt	Machine learning
57.	Shilpashree U Kulkarni	4PM16CS081	Tech Fortune Technologies , Bangalore	Machine learning
58.	Hitesh Kumar G Balegar	4PM16CS040	Techfortune Technologies	Machine learning
59.	Harshitha B B	4PM16CS036	Inventeron Technologies And Business Solutions	Machine learning
60.	Arpita A Poojari	4PM16CS016	Inventron Technologies And Business Solutions Llp	Machine learning and artificial intelligence
61.	Akshatha Ls	4PM16CS009	Loginware Softec Ltd	loT
62.	Sourabh B N	4PM16CS088	Thynk Ryt	Machine learning
63.	Prasanna Ashok Naik	4PM16CS061	Advanced Rail Controls	IoT based on dot net
64.	Prakruthi B K	4PM16CS059	Loginware	Machine learning and IoT
65.	Rakshitha N	4PM16CS067	Inostem	Machine learning
66.	Pooja R	4PM16CS055	Loginware	loT
67.	Soujanya S	4PM16CS086	Innostem Edunce Edlabs Private Limited	Machine learning
68.	Harshitha B U	4PM16CS037	Loginware Softec Ltd	loT

Industrial Training feedback



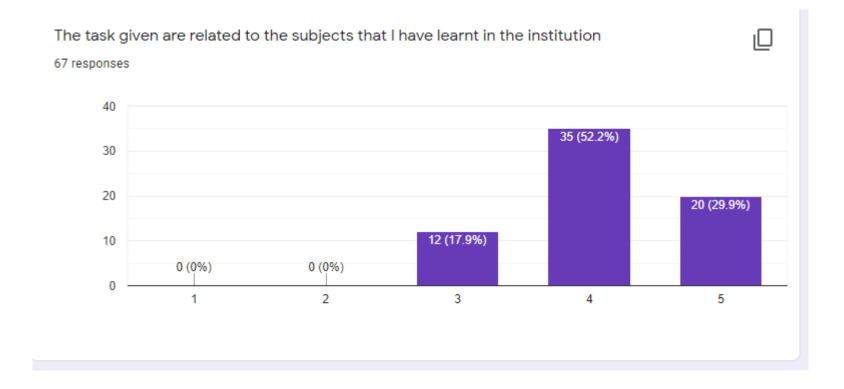


Fig 2.2.5 Feedback on Industrial training

3 COURSE OUTCOMES AND PROGRAM OUTCOMES (120)

Total Marks 105.00

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 16.00

:

PSO1	Ability to interpret the fundamental concepts and methodologies of computer systems.
PSO2	Apply the mathematical concepts to crack problems using suitable mathematical analysis, data structures and algorithms
PSO3	Develop ability to grasp the software development life-cycle and methodologies of software systems. Possess competent skills and knowledge of software design process. Familiarity and practical proficiency with a broad area of programming concepts and provide new ideas and innovations towards research.

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: 4.00

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

Course Name :	C2 04	Course Year :	2016-2017

Items		2019-20	
C2	04.1	Identify the basic principles of organization, operation and performance of a general purpose computer	
C2	04.2	Develop the input output organization of computer	
C2	04.3	Distinguish the memory subsystems and its hierarchy	
C2	04.4	Design of arithmetic unit of a computer	
C2	04.5	Examine the processor implementation by hardwired and micro programmed controller	

Course Name :	C2 13	Course Year :	2016-2017

Items		2019-20	
C2	13.1	Explain Object-Oriented Concepts in C++	
C2	13.2	Explain the Object-Oriented Concepts using Java and develop simple java programs	
C2	13.3	3.3 Apply the Fundamental features of java ,object classes ,interfaces, exceptions and libraries of object collections for solving problem	

C2	13.4	Build multi-threaded programs and event handling mechanisms.
C2	13.5	Develop event driven graphical user interface using applets and swings.

Course Name :	C3 03	Course Year :	2017-2018

Items	2019-20	
C3 03.1	Explain database and DBMS Concepts	
C3 03.2	Apply concepts of RDBMS to design database	
C3 03.3	Use Structured Query Language (SQL) in database creation and manipulation	
C3 03.4	Apply the concepts of normalization in database design	
C3 03.5	Explain various concepts of transaction processing system	

Course Name : C3 10 Course Year : 2017-2018

Items	2019-20
C3 10.1	Analyze strategies, techniques, Principles and mathematical background of cryptography and its need to various applications.
C3 10.2	Illustrate the Design, development and working of simple cryptography algorithms and its applications
C3 10.3	Identify technological solutions to security: digital certificates , types of authentications and Cyber security at different layers
C3 10.4	Explain vulnerabilities in basic networking protocols such as IP , TCP, UDP &ICMP and their solutions: firewalls, intrusion detection ,prevention types and web security
C3 10.5	Explain the IT objectives, scope, regulations, duties and penalties for cyber offenses.

Course Name :	C4 03	Course Year :	2018-2019

Items	2019-20	
C4 03.1	C4 03.1 Explain the basic concepts & technologies of Machine Learning highlighting its interdisciplinary nature	
C4 03.2	Analyze key algorithms & theory that form the core of Machine Learning	
C4 03.3	Compare the learning performance that vary with number of training examples	
C4 03.4	Demonstrate most appropriate algorithms for various types of learning tasks	
C4 03.5	Differentiate Machine learning applications	

Course Name :	C4 12	Course Year :	2018-2019
---------------	-------	---------------	-----------

Items	2019-20
C4 12.1	Explain the simulation model and its advantages and disadvantages.
C4 12.2	Discuss the world view for any given situation to calculate performance using event scheduling/time advance algorithm.
C4 12.3	Illustrate the steady state behavior of queue and measure long run performance for a given system.
C4 12.4	Analyze random number generators and discuss the procedure involved in input modeling with data and without data
C4 12.5	Analyze the solution for given input model by verification and validation and perform output analysis and performance estimations for terminating simulations

Institute Marks: 4.00

1 . course name : C204

Course	PO1		PO2		PO3		PO4		PO5		PO6		PO7		PO8		PO9		PO10		PO11		PO12	
C204.1	-	~	-	~	-	~	1	~	-	~	-	~	-	~	- '	~	-	~	-	~	-	~	2	~
C204.2	2	~	2	~	2	~	1	~	-	~	-	~	-	~	- '	~	-	~	-	~	-	~	1	~
C204.3	2	~	2	~	2	~	-	~	-	~	-	~	-	~	- '	~	-	~	-	~	-	~	2	~
C204.4	2	~	2	~	2	~	2	~	-	~	-	~	-	~		~	-	~	-	~	-	~	2	~
C204.5	2	~	2	~	2	~	-	~	-	~	-	~	-	~		~	-	~	-	~	-	~	2	~
Average	2.20		1.60		1.60		0.80		0.00		0.00		0.00		0.00		0.00		0.00		0.00		1.80	

2 . course name : C213

Course	PO1		PO2		PO3		PO4		PO5		PO6		PO7		PO8		PO9		PO10		PO11		PO12	
C213.1	-	~	-	~	-	~	-	~	-	~	-	~	-	~	- '	~	-	~	-	~	-	~	2	~
C213.2	-	~	-	~	2	~	-	~	1	~	-	~	-	~	- '	~	-	~	-	~	-	~	2	~
C213.3	2	~	2	~	3	~	-	~	2	~	-	~	-	~	- '	~	-	~	-	~	-	~	-	~
C213.4	2	~	2	~	3	~	-	~	2	~	-	~	-	~	- '	~	-	~	-	~	-	~	-	~
C213.5	2	~	2	~	3	~	-	~	3	~	-	~	-	~	- •	~	-	~	-	~	-	~	-	~
Average	2.20		1.20		2.20		0.00		1.60		0.00		0.00		0.00		0.00		0.00		0.00		0.80	

3 . course name : C303

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12

C303.1	-	~	-	~	-	~	-	~	-	~	-	~	-	~	-	~	-	~	-	~	-	~	3	~
C303.2	2	~	2	~	3	~	-	~	-	~	-	~	-	~	-	~	-	~	-	~	-	~	3	~
C303.3	-	~	-	~	3	~	-	~	3	~	-	~	-	~	-	~	-	~	-	~	-	~	2	~
C303.4	3	~	3	~	3	~	-	~	-	~	-	~	-	~	-	~	-	~	-	~	-	~	3	~
C303.5	1	~	1	~	1	~	-	~	-	~	-	~	-	~	-	~	-	~	-	~	-	~	1	~
Average	2.20		1.20		2.00		0.00		0.60		0.00		0.00		0.00		0.00		0.00		0.00		2.40	

4 . course name : C310

Course	PO1		PO2		PO3		PO4		PO5		PO6		P07		PO8		PO9		PO10		PO11		PO12	
C310.1	3	~	3	~	-	~	-	~	-	~	-	~	-	~	- '	~	-	~	-	~	-	~	-	~
C310.2	2	~	2	~	2	~	-	~	-	~	-	~	-	~	- •	~	-	~	-	~	-	~	-	~
C310.3	2	~	2	~	3	~	-	~	-	~	-	~	-	~	- •	~	-	~	-	~	-	~	1	~
C310.4	-	~	-	~	-	~	2	~	-	~	-	~	-	~	2	~	-	~	-	~	-	~	-	~
C310.5	1	~	1	~	-	~	-	~	-	~	-	~	-	~	2	~	-	~	-	~	-	~	2	~
Average	2.80		1.60		1.00		0.40		0.00		0.00		0.00		0.80		0.00		0.00		0.00		0.60	

5 . course name : C403

Course	PO1		PO2		PO3		PO4		PO5		PO6		PO7		PO8		PO9		PO10		PO11		PO12	
C403.1	2	~	2	~	2	~	-	~	-	~	-	~	-	~	- '	~	-	~	-	~	-	~	1	~
C403.2	2	~	2	~	3	~	-	~	-	~	1	~	-	~	- '	~	-	~	-	~	-	~	-	~
C403.3	2	~	2	~	-	~	3	~	-	~	-	~	-	~		~	-	~	-	~	-	~	-	~

C403.4	-	~	-	~	3	~	2	~	2	~	-	~	-	~	-	~	1	~	-	~	-	~	2	~
C403.5	2	~	2	~	-	~	-	~	-	~	-	~	-	~	-	~	-	~	-	~	-	~	-	~
Average	2.00		1.60		1.60		1.00		0.40		0.20		0.00		0.00		0.20		0.00		0.00		0.60	

6 . course name : C412

Course	PO1		PO2		PO3		PO4		PO5		PO6		PO7		PO8		PO9		PO10		PO11		PO12	
C412.1	3	~	3	~	-	~	1	~	2	~	-	~	-	~	- `	~	-	~	-	~	-	~	1	~
C412.2	3	~	3	~	1	~	2	~	-	~	-	~	-	~	- `	~	-	~	-	~	-	~	1	~
C412.3	2	~	2	~	-	~	2	~	-	~	-	~	-	~	- `	~	-	~	-	~	-	~	-	~
C412.4	3	~	3	~	-	~	3	~	-	~	-	~	-	~	- `	~	-	~	-	~	-	~	2	~
C412.5	-	~	-	~	-	~	3	~	-	~	-	~	-	~	- `	~	-	~	-	~	-	~	1	~
Average	2.00		2.20		0.20		2.20		0.40		0.00		0.00		0.00		0.00		0.00		0.00		1.00	

1. Course Name: C204

Course	PSO1		PSO2)	PSO:	3
C204.1	3	~	1	~	-	~
C204.2	3	~	1	~	-	~
C204.3	3	~	1	~	-	~
C204.4	2	~	3	~	-	~
C204.5	2	~	2	~	-	~
Average	2.00		1.60		0.00	

2 . Course Name : C213

Course	PSO1		PSO2	2	PSO3	3
C213.1	2	~	-	~	-	~
C213.2	2	~	1	~	-	~
C213.3	2	~	2	~	1	~
C213.4	1	~	2	~	2	~
C213.5	1	~	2	~	3	~
Average	1.60		1.40		1.20	

3 . Course Name : C303

Course	PSO1		PSO2	2	PSO	3
C303.1	3	~	-	~	-	~
C303.2	2	~	-	~	1	~
C303.3	1	~	-	~	2	~
C303.4	1	~	3	~	2	~
C303.5	3	~	-	~	-	~
Average	2.00		0.60		1.00	

4 . Course Name : C310

Course	PSO	1	PSO	2	PSC)3
C310.1	2	~	3	~	-	~
C310.2	2	~	2	~	-	~

Average	1.80		1.60		0.00	
C310.5	1	~	-	~	-	~
C310.4	2	~	2	~	-	~
C310.3	2	~	1	~	-	~

5 . Course Name : C403

Course	PSO1		PSO2		PSO	3
C403.1	1	~	3	~	-	~
C403.2	-	~	2	~	-	~
C403.3	-	~	-	~	-	~
C403.4	-	~	-	~	3	~
C403.5	-	~	-	~	1	~
Average	0.20		1.00		0.80	

6 . Course Name : C412

Course	PSO1		PSO2	2	PSO3	3
C412.1	-	~	3	~	-	~
C412.2	-	~	2	~	2	~
C412.3	-	~	-	~	3	~
C412.4	3	~	2	~	-	~
C412.5	-	~	2	~	-	~
Average	0.60		1.80		1.00	

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

Institute Marks: 8.00

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C101	2.80	2.20	1.80	1.80	1.4	0.4	PO7	PO8	0.20	PO10	PO11	2.8
C102	3	1.6	1.2	0.6	PO5	2.6	2.0	PO8	PO9	PO10	PO11	PO12
C103	2.5	1.5	1.75	PO4	1.75	PO6	PO7	PO8	PO9	PO10	PO11	1.25
C104	1.75	1.75	PO3	PO4	2.0	PO6	PO7	PO8	PO9	PO10	PO11	1
C105	2.80	2.2	1.4	0.6	1	PO6	PO7	PO8	PO9	1	1.2	2
C106	3	3	3	2	2	PO6	PO7	1.5	2	2	PO11	2
C107	3	2.5	1.5	1	PO5	PO6	P07	PO8	PO9	PO10	PO11	PO12
C108	PO1	PO2	PO3	PO4	PO5	2.5	3	PO8	2	PO10	PO11	3
C109	2.8	2.2	1.8	1.8	1.4	0.8	PO7	PO8	0.2	PO10	PO11	2.8
C110	3	2	1	1	1.8	1.8	PO7	PO8	PO9	PO10	PO11	PO12
C111	2.5	2.75	PO3	0.5	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C112	1.4	0.2	PO3	PO4	PO5	0.8	0.8	PO8	PO9	PO10	PO11	PO12
C113	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C114	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C115	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C201	1.75	1.75	1.50	1.25	PO5	PO6	P07	PO8	PO9	PO10	PO11	1
C202	3	1.6	1	PO4	PO5	PO6	P07	PO8	PO9	PO10	PO11	0.4
C203	2.6	2	1.60	0.6	PO5	PO6	0.4	PO8	PO9	PO10	PO11	0.4
C204	2	2.4	2	1.8	PO5	PO6	PO7	PO8	PO9	PO10	PO11	0.4

C205	3	2	2	1	0.4	PO6	PO7	PO8	PO9	PO10	PO11	3
C206	2.5	1.33	1.67	0.83	PO5	PO6	PO7	PO8	PO9	PO10	PO11	1
C207	3	2	2	2	3	PO6	PO7	3	3	3	PO11	3
C208	3	3	3	PO4	2.2	PO6	P07	PO8	2	3	PO11	1
C209	1.6	1.6	1.2	1.6	PO5	PO6	P07	PO8	PO9	PO10	PO11	1
C210	2.6	2.40	1.80	0.20	PO5	PO6	P07	PO8	PO9	PO10	PO11	1.4
C211	3	3	3	2.5	PO5	PO6	P07	PO8	PO9	PO10	PO11	1.0
C212	0.60	0.6	0.6	1.8	1	PO6	0.6	PO8	0.40	PO10	PO11	0.6
C213	2	1.6	1.6	0.8	2	PO6	P07	PO8	PO9	PO10	PO11	2
C214	2	1.6	1.6	0.8	PO5	PO6	P07	PO8	PO9	PO10	PO11	1.8
C215	3	3	3	3	1	PO6	P07	1	3	3	PO11	1
C216	3	2.5	2.5	3	3	PO6	PO7	PO8	2	2	PO11	2
C301	1.6	1.8	1.4	0.6	0.6	1.8	PO7	0.4	PO9	1.2	1.2	PO12
C302	2.6	1.4	1.4	0.6	0.6	PO6	PO7	PO8	PO9	PO10	PO11	2
C303	2	2.6	2.2	0.8	PO5	PO6	PO7	PO8	PO9	PO10	PO11	2
C304	2.6	1.2	1.6	0.4	0.6	PO6	PO7	PO8	PO9	PO10	PO11	2.4
C305	2	2.8	2.2	2.8	0.8	0.6	0.4	0.8	PO9	1	PO11	0.2
C306	2.8	2.8	1.8	PO4	1.2	PO6	PO7	PO8	PO9	PO10	PO11	0.4
C307	2.2	2.2	2.2	PO4	3	PO6	P07	PO8	3	1.2	PO11	1.67
C308	3	3	2	3	2.2	PO6	P07	PO8	3	1.2	PO11	1.4
C309	2	0.6	0.4	PO4	PO5	PO6	P07	1.6	1.6	1.8	1.2	1.8
C310	3	2	1.8	2.8	PO5	PO6	P07	PO8	PO9	PO10	PO11	2.6

C311	1.8	1.8	1.6	1.6	PO5	PO6	P07	PO8	PO9	PO10	PO11	2.4
C312	1.4	1.2	0.6	0.6	PO5	PO6	P07	PO8	PO9	PO10	0.6	0.6
C313	3	2.7	2.7	2.5	0.5	PO6	P07	PO8	PO9	PO10	PO11	1.5
C314	2	2.8	1.6	2.2	PO5	PO6	P07	PO8	PO9	PO10	PO11	1.2
C315	3	3	3	3	3	PO6	P07	3	3	3	3	3
C316	3	1.5	1.8	PO4	1.2	PO6	P07	PO8	1	1.8	PO11	1
C401	2.8	2	2	PO4	PO5	PO6	P07	PO8	PO9	PO10	0.4	1.4
C402	3	2	0.4	PO4	PO5	PO6	P07	0.2	PO9	PO10	PO11	0.8
C403	2.4	2.2	1.2	0.4	PO5	PO6	P07	PO8	PO9	PO10	PO11	1.2
C404	2.6	2.6	1	0.4	PO5	PO6	P07	0.6	PO9	PO10	PO11	0.6
C405	3	1.8	2	0.8	0.8	PO6	P07	PO8	PO9	PO10	PO11	0.6
C406	2.5	1.5	0.75	PO4	1.25	PO6	P07	PO8	0.5	PO10	0.5	0.5
C407	2.6	1.8	0.2	1.2	PO5	1.4	P07	PO8	PO9	PO10	PO11	PO12
C408	3	1.8	2.2	1.75	3	PO6	P07	2	1.8	1.6	PO11	1
C409	PO1	PO2	3	3	3	PO6	P07	PO8	PO9	3	PO11	3
C410	3	2	2	2	PO5	PO6	P07	PO8	PO9	PO10	1	1
C411	1.6	2.2	0.6	2.2	0.2	PO6	P07	PO8	PO9	PO10	PO11	1.4
C412	2.6	1.2	1.2	PO4	PO5	PO6	P07	PO8	PO9	PO10	PO11	1.6
C413	2.4	1.2	0.6	PO4	0.8	1.2	PO7	PO8	PO9	PO10	PO11	1.2
C414	3	2.2	1.2	1.8	PO5	PO6	PO7	0.4	PO9	PO10	PO11	1.8
C415	3	3	2.5	2.3	3	3	1.6	2.67	3	3	1.5	2.5
C416	3	3	3	2	3	PO6	P07	2.33	PO9	3	PO11	2

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

Course	PSO1	PSO2	PSO3
C101	PSO1	PSO2	PSO3
C102	PSO1	PSO2	PSO3
C103	1.75	1.5	PSO3
C104	PSO1	PSO2	PSO3
C105	PSO1	PSO2	PSO3
C106	3	2	PSO3
C107	PSO1	PSO2	PSO3
C108	PSO1	PSO2	PSO3
C109	PSO1	PSO2	PSO3
C110	PSO1	PSO2	PSO3
C111	PSO1	PSO2	PSO3
C112	PSO1	PSO2	PSO3
C113	PSO1	PSO2	PSO3
C114	PSO1	PSO2	PSO3
C115	PSO1	PSO2	PSO3
C116	PSO1	PSO2	PSO3
C201	1	2	PSO3
C202	3	1	PSO3
C203	2	1	0.8
C204	2	2.2	0.4

C205	3	2	1
C206	1.83	1.50	2.17
C207	3	3	2
C208	3	2	1
C209	1	2	PSO3
C210	1.4	1.8	0.8
C211	2	3	2.17
C212	1.60	PSO2	0.6
C213	3	1.60	0.40
C214	2.60	1.60	PSO3
C215	1	3	2
C216	2.75	2.50	2
C301	1.40	0.8	1.40
C302	1.80	PSO2	0.40
C303	2.60	1.60	2.40
C304	2	0.4	1
C305	2	1.40	1.40
C306	2.2	0.8	0.6
C307	1.4	2	1.5
C308	1	1	1
C309	1.40	1.2	1
C310	2	0.6	1.4

	1		
C311	0.4	0.80	1
C312	0.4	1.2	0.6
C313	2	2.25	2.25
C314	0.2	2.4	0.6
C315	3	3	3
C316	3	1	1
C401	2	0.8	0.8
C402	2	0.4	0.4
C403	2.4	2.4	2.4
C404	2	1.6	2
C405	PSO1	1.20	2
C406	1.25	1	1.50
C407	1.80	0.40	1
C408	2	2	2.67
C409	3	3	3
C410	1	PSO2	3
C411	2.40	1.80	PSO3
C412	1.40	1.20	0.8
C413	0.8	1.20	1.40
C414	2	1.40	1.60
C415	3	3	1.80
C416	2	1.75	PSO3

3.2.1 Describe the assessment processes used to gather the data upon which the evaluation of Course Outcome is based

Institute Marks: 8.00

Visvesvarya Technological University provides the curriculum, scheme and syllabus of all courses. Course outcome (COs) are define for all courses based on the course contents. The COs needs to be assessed and evaluated based on the semester end exam results and internal assessment test to check attainment of COs.

Attainment is determined using relevant assessment methods. The data needed to measure the course attainment are gathered from the following process as shown in the Figure Fig. 3.2.1

Direct assessment process:

(10)

- 1. **Internal Assessment (IA):** Assessment for all theory courses are done by conducting three IA tests and Assignments/Quiz in each semester. For Laboratory courses, Continuous Internal Evaluation (CIE) and one Lab IA will be conducted at the end of semester.
- 2. Semester End Exam (SEE): Assessment for all courses is done by SEE conducted by University.

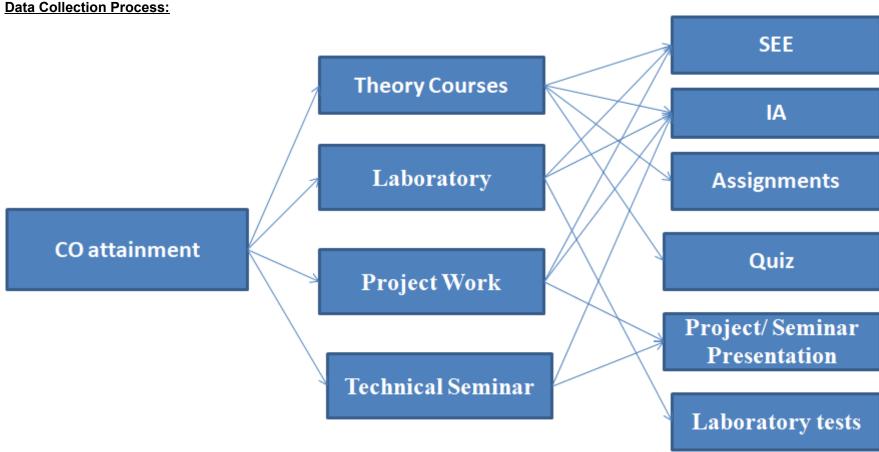


Fig. 3.2.1: Data Collection Process for CO attainment

COs Attainment Targets at Course Level

it Course Leve	<u>'1</u>			
Course Evaluation	Scheme	Batch	Marks Distribution	Target Fixed in Percentage
	2010 Scheme	2013 - 2017	25 Marks	Based on 2012 Batch results
CIA	2010 Scheme	2014 - 2018	25 Marks	5% increase to 2013 Batch Target
	2015 Scheme	2015 - 2019	20 Marks	New Targets decided for 2015 Batch
	2015 Scheme	2016 - 2020	20 Marks	5% increase to 2015 Batch Target
	2017 Scheme	2017 - 2021	40 Marks	5% increase to 2016 Batch Target
	2018 Scheme	2018 - 2022	40 Marks	5% increase to 2017 Batch Target
			_	
	2010 Scheme	2013 - 2017	100 Marks	Based on 2012 Batch results
	2010 Scheme	2014 - 2018	100 Marks	5% increase to 2013 Batch Target
SEE	2015 Scheme	2015 - 2019	80 Marks	New Targets decided for 2015 Batch
	2015 Scheme	2016 - 2020	80 Marks	5% increase to 2015 Batch Target
	2017 Scheme	2017 - 2021	60 Marks	5% increase to 2016 Batch Target
	2018 Scheme	2018 - 2022	60 Marks	5% increase to 2017 Batch Target

(CIA- Continuous Internal Assessment, SEE – Semester End Exam)

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

Calculating Attainment at each Level of Assessment for Course

Weight distribution for attainment is as shown in table 3.2.2.a

Table 3.2.2.a: Weightage for attainment

Scheme		CIA	SEE	
Ocheme	IA	Component*		
2010	50	-	50	
2015	40	10	50	
2017	40	10	50	
2018	40	10	50	

^{*} It includes quiz/seminar/assignment



Institute Marks: 38.00

Process of Calculation of CO Attainments

For every Course, there are number of outcomes to be achieved at the end of the course. This outcome is usually a combination of main course content and may cover more than one topic. All course outcomes shall have linkage to programme outcomes in such a way that the strongest relation has the weight 3 and the weakest relation is 1. The relation is put into a table given below:

Step 1: Develop CO - PO - PSO mapping at each Course Level and Program Level

	PO1	PO2		PO12	PSO1	PSO2	PSO3
CO1	3			1	2		2
CO2	3	2		1	2	2	2
CO3	3	2		1	2	2	2
CO4	2	1			2	2	2
CO5	2				2	2	2
Average Weight factor	2.60	1.00	***	0.60	2.00	1.60	2.00

Average Weight Factor of Programme Outcome POi (WPO) is given as

$$WPO_j = \frac{\sum_{CO=1}^{n} CO \forall PO_j}{n}$$

Where: n is the number of COs defined for the given course, CO1 to COn

j is the Programme Outcomes from 1 to 12

Similar calculations is done for three PSOs (WPSO)

$$WPSO_k = \frac{\sum_{CO=1}^{n} CO \forall PSO_k}{n}$$

Where: k is the number of PSOs defined. Ranges from 1 to 3

Step 2: COs Attainment Targets at Course Level

Course Evaluation	Scheme	Batch	Marks Distribution	Target Fixed in Percentage		
CIA	2010 Scheme	2013 - 2017	25 Marks	Based on 2012 Batch results		
	2010 Scheme	2014 - 2018	25 Marks	5% increase to 2013 Batch Target		
	2015 Scheme	2015 - 2019	20 Marks (15 Marks – IA 05 Marks - Component)	New Targets decided for 2015 Batch		
	2015 Scheme	2016 - 2020	20 Marks (15 Marks – IA 05 Marks - Component)	5% increase to 2015 Batch Target		

Dept. of CSE, PESITM, Shivamogga



PES Institute of Technology & Management Department of Computer Science & Engineering Process of Calculation of CO Attainments

2017 Scheme	2017 - 2021	40 Marks (30 Marks – IA 10 Marks - Component)	5% increase Batch Target	to	2016
2019		40 Marks	5% increase	to	2017

	Scheme	2018 - 2022	(30 Marks – IA 10 Marks - Component)	Batch Target
7				
SEE	2010 Scheme	2013 - 2017	100 Marks (University Exam)	Based on 2012 Batch results
	2010 Scheme	2014 - 2018	100 Marks (University Exam)	5% increase to 2013 Batch Target
	2015 Scheme	2015 - 2019	80 Marks (University Exam)	New Targets decided for 2015 Batch
	2015 Scheme	2016 - 2020	80 Marks (University Exam)	5% increase to 2015 Batch Target
	2017 Scheme	2017 - 2021	60 Marks (University Exam)	5% increase to 2016 Batch Target
	2018 Scheme	2018 - 2022	60 Marks (University Exam)	5% increase to 2017 Batch Target

(CIA- Continuous Internal Assessment, SEE - Semester End Exam)

Step 3: Calculating Attainment at each Level of Assessment for Course

CO is said to be attained by a student if student gets greater than target. Separate targets will be decided for CIA, SEE and component marks. To calculate CO attainment, weightage for CIA, SEE and components are also decided. If CIA target is 60% (Component Target is equal to CIA target as component marks and CIA marks are added to form IA marks) and SEE target is 50% and CIA, SEE and Component weightage are 40%, 50% and 10% respectively, then

Attainment of
$$CO_{n,CIA} = \frac{\text{No. of students scored} > \text{Target}_{CIA} \text{ for } CO_n}{\text{No. of students attempted questions mapped to } CO_n}$$

Attainment of CO_{n,Component}

 $= \frac{\text{No. of students scored} > \text{Target}_{CIA} \text{ for CO}_{n}}{\text{No. of students attempted questions mapped to CO}_{n}}$

Attainment of $CO_{n,SEE} = \frac{\text{No. of students scored} > \text{Target}_{SEE}}{\text{No. of students attended SEE}}$

(Since University results of SEE does not contain question wise split marks, individual CO attainment cannot be calculated for SEE. Instead marks scored by student in SEE is considered).

Dept. of CSE, PESITM, Shivamogga



PES Institute of Technology & Management Department of Computer Science & Engineering Process of Calculation of CO Attainments

For 2010 Scheme, weightage for final CO attainment is 50% for CIA and 50% for SEE. For 2015, 2017 & 2018 Scheme, weightage for component is given as follows:

Final Attainment of CO_n

= Attainment of CO_{n,CIA} * 40% + Attainment of CO_{n,SEE} * 50%

+ Attainment of CO_{n,Component} * 10%

Similar calculations have to be done for remaining COs.

Marks weightage for IA & SEE and target for IA & SEE are decided by the programme.

Dept. of CSE, PESITM, Shivamogga

Table 3.2.2.b Target set for 2013 batch

		10010 0.2.1	2.b larger ser for 20 to bar	.011
	IA & SE	E Targets to calculate	attainments for 2013 Ba	atch
Course Code	- Max. 100	3 - 17 (Scheme 2010 0 Marks for theory & 0 for Lab & Seminar)	Average SEE Marks of 2012 Batch Exams	Target set for IA & SEE in Percentage
C101	10MAT11	M1	50	60 & 55
C102	10PHY12	Physics	54	60 & 55
C103	10CIV13	E-Civil	62	60 & 55
C104	10EME14	E-Mech	52	50 & 50

C105	10ELE15	Basic Electrical	53	60 & 55
C106	10WSL16	Workshop	38	50 & 50
C107	10PHYL17	Phy Lab	35	50 & 50
C108	10CPH18	CIPEHR	22	50 & 50
C109	10MAT21	M2	41	60 & 55
C110	10CHE12	Chemistry	54	60 & 55
C111	10PCD13	PCD	44	60 & 55
C112	10CED14	CAED	61	60 & 55
C113	10ELN15	Basic Electronics	51	60 & 55
C114	10CPL16	CPL	37	50 & 50
C115	10CHEL17	Che Lab	41	50 & 50
C116	10CIV18	Environmental Studies	30	50 & 50
C201	10MAT31	M3	48	60 & 50
C202	10CS32	EC	44	60 & 50
C203	10CS33	LD	37	60 & 50
C204	10CS34	DMS	41	60 & 50
C205	10CS35	DSC	47	60 & 50
C206	10CS36	OOP	52	60 & 55
C207	10CSL37	DS Lab	34	50 & 50
C208	10CSL38	ECLD Lab	35	50 & 50
C209	10MAT41	M4	45	60 & 50
C210	10CS42	GTC	46	60 & 50
C211	10CS43	DAA	45	50 & 40
C212	10CS44	USP	55	60 & 55
C213	10CS45	MP	33	60 & 40
C214	10CS46	CO	40	60 & 40
C215	10CSL47	DAA Lab	26	50 & 50
C216	10CSL48	MP Lab	28	50 & 50
C301	10IS51	SE	52	60 & 50
C302	10CS52	SS	51	60 & 50
C303	10CS53	OS	41	60 & 45
C304	10CS54	DBMS	50	60 & 50
C305	10CS55	CN1	41	60 & 45
C306	10CS56	FLAT	39	60 & 40

C307	10CSL57	DBMS Lab	41	50 & 50
C308	10CSL58	SSOS Lab	38	50 & 50
C309	10AL61	ME	47	60 & 50
C310	10CS62	USP	44	60 & 50
C311	10CS63	CD	51	60 & 55
C312	10CS64	CN2	52	60 & 55
C313	10CS65	CGV	57	60 & 60
C314	10CS661	OR	65	60 & 65
C315	10CSL67	CGV Lab	41	50 & 50
C316	10CSL68	USPCD Lab	40	50 & 50
C401	10CS71	OOMD	52	60 & 55
C402	10CS72	ECS	46	60 & 50
C403	10CS73	PW	53	60 & 55
C404	10CS74	ACA	45	60 & 45
C405	10CS753	JAVAJ2EE	58	60 & 60
C406	10CS761	C#	55	60 & 55
C407	10CS765	SAN	41	60 & 50
C408	10CSL77	CN LAB	43	50 & 50
C409	10CSL78	WP LAB	41	50 & 50
C410	10IS81	SA	48	60 & 50
C411	10CS82	SMS	57	60 & 60
C412	10CS832	WEB 2.0	Not Available	60 & 50
C413	10CS835	INS	47	60 & 50
C414	10CS842	ST	57	60 & 60
C415	10CS85	Project	90	75 & 75
C416	10CS86	Seminar	42	75



PES Institute Of Technology & Management NH-206, Sagar Road, Shivamogga

Department Of Computer Science & Engineering

COs, CO - PO & CO - PSO relations and Attainments of Courses of 2013 batch

Scheme:	2010	Academic Year: 2016-17	Batch:	2013 - 2017	
Course Name:	Advanced Computer Architec	ture	Course Code:	C404 - 10CS74	

Course Outcomes (COs):

	After studying this course, a student will be able to
C404.1	Analyse the fundamentals of computer design, performance measurement, Pipelines and Pipeline Hazards
C404.2	Explain various instruction level parallelism concepts, implementation and exploitation of pipelining architecture with case studies
C404.3	Describe thread level parallelism and its performance in different memory architecture.
C404.4	Analyse the performance and optimisation of different hierarchy of memory.
C404.5	Describe the hardware and software support for instruction level and loop level parallelism.

CO - PO and CO - PSO Mappings:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C404.1	3	3	-	-	-	-	-	-	- "	-	-	1	2	-	2
C404.2	3	3	2	1	-	-	-	1	-	-	-	1	2	2	2
C404.3	3	3	2	1	- 4	-	-	1	-	-	-	1	2	2	2
C404.4	2	2	1	-	-	-	- 1	1	-	-	-		2	2	2
C404.5	2	2	-	-	-	-	-	-	-		-		2	2	2
	2.60	2.60	1.00	0.40				0.60				0.60	2.00	1.60	2.00

IA & SEE Targets in Percentage:

Previous Batch (2012 Batch) SEE average marks	45 for 100
Target set for IA in percentage	60
Target set for SEE in percentage	45



PES Institute Of Technology & Management

NH-206, Sagar Road, Shivamogga Department Of Computer Science & Engineering

COs, CO - PO & CO - PSO relations and Attainments of Courses of 2013 batch

CO Attainment Levels in Percentage:

Level 1	40	
Level 2	50	
Level 3	60	

CO Attainments:

		Per	centage of Attainme	nts against the	defined Targets	
COs	IA Attainments	Attainment Level	SEE Attainments	Attainment Level	Final Attainments	Attainment Level
C404.1	72.53	3			64.76	3
	73.63	3			65.31	3
C404.2		3	56.00	2	66.95	3
C404.3	76.92	3	56.99	4	59.81	2
C404.4	62.64	3				3
C404.5	78.02	3			67.50	

DO & DEO Attainments:

PO & PSO	Attaini	ments:				1 200	DO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	ı
	PO1	PO2	PO3	PO4	PO5	PO6	PO7		10)	1010	1011	0.40	1.30	1.04	1.30	ı
				0.27				0.39		200			-	2.01	2.02	н
Direct	1.70	1.70	0.65					2.02				2.05	2.02		-	ŧ.
	2.02	2.02	2.02	2.04								0.73	1.44	1.23	1.44	Ш
Indirect				0.62				0.72				-				
Final	1.76	1.76	0.92	0.02											_	

Table 3.2.2.c COs, CO - PO & CO - PSO relations and Attainments of Courses of 2013 batch

	Target & Attainment of COs in Percentage											Final CO Attainment in Percentage						
Course		- 1			of COs		GIOGIIL	ag e	SEE	(Weightage 50% for IA & 50% for SEE)								
Code	IA Target							SEE	CO	,								
Oode	iA larget	CO1	CO2	CO3	CO4	CO5	CO6	Target	Attainment	CO1	CO2	CO3	CO4	CO5	CO6			
C101	60	56.14	56.14	75.44	57.02	43.86	-	55	7.02	31.58	31.58	41.23	32.02	25.44	-			
C102	60	70.18	61.4	72.81	64.91	72.81	-	55	6.19	38.19	33.8	39.5	35.55	39.5	-			
C103	60	68.42	52.63	61.4	76.32	-	-	55	20.35	44.39	36.49	40.88	48.33	-	-			
C104	50	100	100	100	100	-	-	50	43.86	71.93	71.93	71.93	71.93	-	-			
C105	60	55.26	58.77	72.81	35.09	21.93	-	55	5.36	30.31	32.07	39.09	20.23	13.64	-			
C106	50	100	100	100	100	100	-	50	76.32	88.16	88.16	88.16	88.16	88.16	-			
C107	50	100	100	-	-	-	-	50	97.37	98.69	98.69	-	-	-	-			
C108	50	100	100	100	100	100	-	50	81.58	90.79	90.79	90.79	90.79	90.79	-			
C109	60	60.53	52.63	50	67.54	74.56	-	55	35.96	48.25	44.3	42.98	51.75	55.26	-			
C110	60	57.02	44.74	67.54	64.91	67.54	-	55	16.67	36.84	30.71	42.11	40.79	42.11	-			
C111	60	58.77	56.14	60.53	85.09	-	-	55	60.53	59.65	58.34	60.53	72.81	-	-			
C112	60	51.75	45.61	57.89	75.44	76.32	-	55	56.14	53.95	50.88	57.02	65.79	66.23	-			
C113	60	69.3	68.42	61.4	81.58	-	-	55	28.95	49.12	48.69	45.17	55.27	-	-			
C114	50	100	100	-	-	-	-	50	98.23	99.12	99.12	-	-	-	-			
C115	50	99.12	99.12	99.12	99.12	99.12	-	50	92.04	95.58	95.58	95.58	95.58	95.58	-			
C116	50	99.12	99.12	99.12	99.12	99.12	-	50	35.96	67.54	67.54	67.54	67.54	67.54	-			
C201	60	63.33	81.67	60.83	44.17	-	-	50	50.83	57.08	66.25	55.83	47.5	-	-			
C202	60	55	50	47.5	44.17	64.17	-	50	62.75	58.88	56.38	55.12	53.46	63.46	-			
C203	60	40	48.33	50.83	56.67	57.5	-	50	25	32.5	36.66	37.91	40.84	41.25	-			
C204	60	52.5	38.33	75	60	54.17	-	50	34.17	43.34	36.25	54.59	47.09	44.17	-			
C205	60	43.44	15.57	41.8	52.46	44.26	-	50	30.33	38.2	21.47	37.21	43.61	38.69	-			
C206	60	46.67	55	58.33	53.33	62.5	60	45	57.5	52.09	56.25	57.91	55.41	60	58.75			
C207	50	98.36	98.36	-	-	-	-	50	61.48	79.92	79.92	-	-	-	-			
C208	50	100	100	100	100	100	_	50	63.03	81.94	81.94	81.94	81.94	81.94	-			
C209	60	46.22	49.58	54.62	56.3	42.02	-	50	45.38	45.8	47.48	50	50.84	43.7	-			
C210	60	57.5	36.67	70	65.83	52.5	_	50	13.45	35.48	25.06	41.73	39.64	32.98	-			
C211	50	65.55	57.14	65.55	73.95	15.97	46.22	45	33.61	52.77	47.73	52.77	57.81	23.03	41.18			
C212	60	68.07	44.54	47.9	49.58	52.94	-	55	18.49	48.24	34.12	36.14	37.14	39.16	-			
C213	60	44.54	55.46	49.58	42.86	46.22	_	40	10.92	27.73	33.19	30.25	26.89	28.57	-			
C214	60	41.32	19.83	37.19	40.5	1.65	-	40	34.71	38.68	25.78	36.2	38.18	14.87	-			
C215	50	100	100	100	-	-	-	50	73.11	86.56	86.56	86.56	-	-	-			
C216	50	96.69	96.69	96.69	96.69	-	-	50	58.68	77.69	77.69	77.69	77.69	-	-			
C301	60	39.81	38.89	37.96	48.15	25	-	50	22.22	28.79	28.33	27.87	32.96	21.39	-			
C302	60	58.33	50	75.93	74.07	71.3	-	50	31.54	41.78	37.62	50.58	49.65	48.27	-			
C303	60	55.21	54.17	56.25	41.67	66.67	-	45	87.01	71.11	70.59	71.63	64.34	76.84	-			
C304	60	50.93	47.22	39.81	35.19	55.56	-	50	80.56	57.69	55.83	52.13	49.82	60	-			
C305	60	36.46	43.75	96.88	59.38	58.33	-	45	55.21	45.84	49.48	76.05	57.3	56.77	-			
C306	60	68.75	56.25	75	64.58	77.08		40	84.38	75	67.5	78.75	72.5	80	-			

		Т	arget &	Attainm	ent of C	COs in F	Percenta	age		Final CO Attainment in Percentage						
Course			Attair	nments	of COs	in IA			SEE	(V	leightage	e 50% fo	r IA & 50	% for SE	E)	
Code	IA Target	CO1	CO2	CO3	CO4	CO5	CO6	SEE Target	CO Attainment	CO1	CO2	CO3	CO4	CO5	CO6	
C307	50	100	100	100	100	100	-	50	98.15	99.08	99.08	99.08	99.08	99.08	-	
C308	50	100	100	100	100	100	-	50	95.37	97.69	97.69	97.69	97.69	97.69	-	
C309	60	79	66	76	72	46	-	50	66	72.5	66	71	69	56	-	
C310	60	79	63	76	74	52	-	50	66	72.5	64.5	71	70	59	-	
C311	60	53.7	40.74	44.44	56.48	66.67	-	55	44.55	50.04	42.26	44.48	51.71	57.82	-	
C312	60	74.39	75.61	68.29	35.37	35.37	-	55	18.29	46.34	46.95	43.29	26.83	26.83	-	
C313	60	65.74	51.85	38.89	25	-	-	60	17.27	46.35	38.02	30.24	21.91	-	-	
C314	60	53.13	50	77.08	60.42	61.46	-	50	54.17	53.65	52.09	65.62	57.3	57.81	-	
C315	50	100	100	100	100	100	_	50	95.37	97.69	97.69	97.69	97.69	97.69	-	
C316	50	99.07	99.07	99.07	99.07	99.07	-	50	96.3	97.69	97.69	97.69	97.69	97.69	-	
C401	60	68.13	54.95	53.85	68.13	64.84	-	55	27.96	52.06	44.15	43.49	52.06	50.09	-	
C402	60	68.63	55.88	74.51	65.69	68.63	_	50	61.76	65.88	58.23	69.41	64.12	65.88	-	
C403	60	75	70.83	81.25	65.63	72.92	-	55	52.08	65.83	63.33	69.58	60.21	64.58	-	
C404	60	72.53	73.63	76.92	62.64	78.02	-	45	56.99	64.76	65.31	66.95	59.81	67.5	-	
C405	60	68.63	82.35	70.59	89.22	97.06	-	50	53.92	55.88	62.74	56.86	66.18	70.1	-	
C406	60	53.66	65.85	43.9	48.78	-	-	55	43.9	49.76	57.07	43.9	46.83	-	-	
C407	60	73.77	91.8	91.8	95.08	72.13	_	50	63.93	62.46	71.47	71.47	73.11	61.64	-	
C408	50	100	100	100	100	100	-	50	96.81	98.41	98.41	98.41	98.41	98.41	-	
C409	50	100	100	100	100	100	-	50	100	100	100	100	100	100	-	
C410	60	46.08	53.92	50.98	58.82	26.47	-	50	49.04	47.26	51.97	50.2	54.91	35.5	-	
C411	60	74.73	73.63	76.92	58.24	59.34	-	60	41.76	61.54	60.88	62.86	51.65	52.31	-	
C412	60	72.73	50	54.55	63.64	59.09	-	50	36.36	54.55	43.18	45.45	50	47.73	-	
C413	60	74.07	71.6	62.96	58.02	30.86	-	50	48.36	56.38	55.14	50.82	48.35	34.77	-	
C414	60	61.76	86.27	80.39	95.1	96.08	-	60	42.16	47.74	60	57.06	64.41	64.9	-	
C415	75	93.14	93.14	93.14	93.14	93.14	-	75	97.06	95.1	95.1	95.1	95.1	95.1	-	
C416	75	100	100	100	100		-	-	-	100	100	100	100	-	-	

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

Total Marks 43.00

Institute Marks: 8.00

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)

Program attainment process as shown in the fig 3.3.1

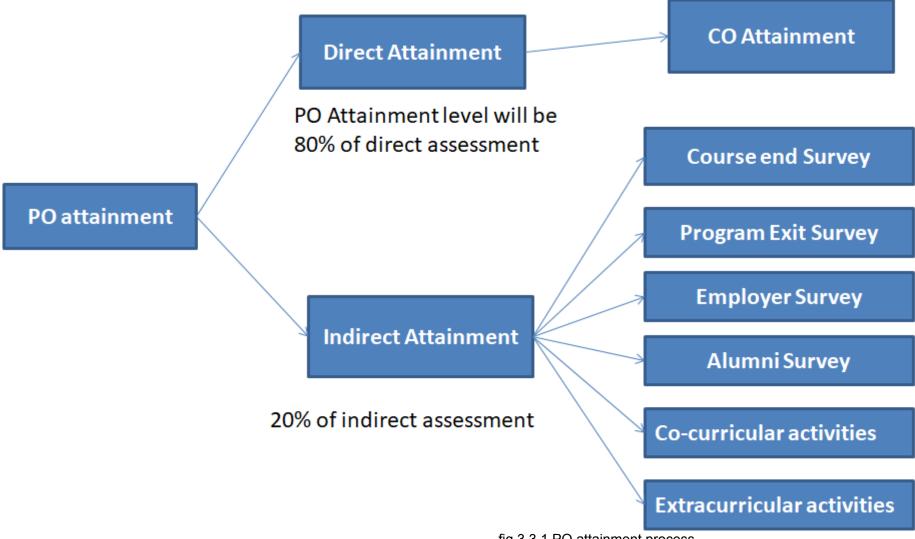
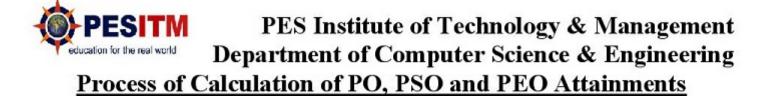


fig 3.3.1 PO attainment process

Calculating the Final PO attainment Levels at Course Level:



The Program Outcomes (POs)/Program Specific Outcomes (PSOs) are the qualities that must be imbibed in the graduates by the time of completion of their program. At the end of each program, the PO/PSO assessment is done from the CO attainment of all curriculum components. The PSOs are framed based on the guidelines of learning outcomes.

Step 1: Calculating Semester-wise Attainments

1. Calculating the Final PO attainment Levels at Course Level:

After calculating weights and fraction of students attained at each level of assessment for a particular course, semester-wise PO attainment will be calculated by using the following formulas.

Direct Assessment:

Direct attainment of a PO/PSO is calculated using final attainment of COs.

Direct Assessment of PO_i

$$= \frac{A_{CO_1} * R_{CO_1PO_j} + A_{CO_2} * R_{CO_2PO_j} + \dots + A_{CO_n} * R_{CO_nPO_j}}{n}$$

Where: A_{COn} – Final Attainment of CO_n

R_{COnPOj} - Relation between COn and PO_j

i – Varies between 1 to 12

n - number of COs defined for the course

Similar calculations will be done for all POs and PSOs

Indirect Assessment:

Indirect attainment of a PO/PSO is calculated using feedback taken by the students at the end of semester for the course. Feedback by the students are in the scale of 1 to 3 against each CO defined for the course. Strong acceptance is indicated by 3, medium by 2 and weak by 1.

 $Attainment\ weight\ for\ CO_n = \frac{Sum\ of\ feedback}{Total\ number\ of\ student\ participation\ in\ feedback *\ 3}$

Similar calculations are done for all COs of a course.

Indirect Assessment of PO_j

$$=\frac{AW_{CO_1}*\ R_{CO1POj}+\ AW_{CO_2}*\ R_{CO2POj}+\cdots+\ AW_{CO_n}*\ R_{COnPOj}}{n}$$

Where: AWCOn - Attainment Weight of COn

R_{COnPOj} – Relation between COn and PO_j

j – Varies between 1 to 12

n – number of COs defined for the course

Similar calculations will be done for all POs and PSOs

Dept. of CSE, PESITM, Shivamogga



PES Institute of Technology & Management Department of Computer Science & Engineering

Process of Calculation of PO, PSO and PEO Attainments

Final Assessment of POs:

Weightage for Direct Assessment of PO/PSO is decided to be 80% and Indirect Assessment of PO/PSO is 20%.

Final Assessment of POi

= Direct Assessment of PO. * 80% + Indirect Assessment of PO. * 20%

- Directioned mineral of toj . 00 /0 | maneet modeloment of toj . 20 /0

Similar calculations will be done for all POs and PSOs.

2. Calculating the Final PO attainment Levels at Semester Level:

Final Assessment of all POs and PSOs at semester level is calculated using PO/PSO attainments of all courses of a semester

Semester Attainment of
$$PO_j = \frac{\sum FA_{POj} \text{ of all courses of a semester}}{\text{Number of courses in that semester}}$$

Where: FA_{POj} – Final Attainment of POj

Similar calculations are done for all POs and PSOs.

3. Calculating the Final PO attainment Levels at Batch Level:

Final Assessment of all PO/PSO at batch level is calculated using PO/PSO attainments of all courses of all semesters using similar step explained above.

Dept. of CSE, PESITM, Shivamogga



PES Institute of Technology & Management Department of Computer Science & Engineering

Process of Calculation of PO, PSO and PEO Attainments

Step 2: Calculating PEO Attainments:

PEO1:

The ability to conceptualize, analyze, design and develop IT Solutions of varying complexities by leveraging advances in computer technology

PEO2:	The ability to apply standard practices and strategies in software project development and management using industry-wide bench marked framework to deliver a sustainable quality product
PEO3:	The ability to work as a team player in cross-cultural environment adhering to ethics with a passion for entrepreneurship and a zest for higher studies

Correlation of PEO and PO/PSO:

	PEO1	PEO2	PEO3
PO1	3	-	3
PO2	3	-	-
PO3	3	3	-
PO4	2	3	-
PO5	1	3	-
PO6	-	1	2
PO7		2	-
PO8	-	-	3
PO9	-	2	3
PO10	-	-	3
PO11	-	2	-
PO12	2	2	3
PSO1	3	2	1
PSO2	3	3	1
PSO3	3	3	3

Attainment of PEO_j

$= \frac{\sum (PO \ Attainment * \ Mapping \ of \ PO) + \sum (PSO \ Attainment * \ Mapping \ of \ PSO)}{Number \ of \ Correlation \ exist \ for \ PEO_J}$

Institute Marks: 35.00

Similar calculations for other PEOs

Dept. of CSE, PESITM, Shivamogga

3.3.2 Provide results of evaluation of PO&PSO (40)

PO Attainment

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C101	0.91	0.72	0.60	0.57	0.45	0.13	PO7	PO8	0.06	PO10	PO11	0.91
C102	1.12	0.60	0.45	0.22	PO5	0.98	0.75	PO8	PO9	PO10	PO11	PO12
C103	1.08	0.63	0.77	PO4	0.74	PO6	PO7	PO8	PO9	PO10	PO11	0.52
C104	1.26	1.26	PO3	PO4	1.44	PO6	PO7	PO8	PO9	PO10	PO11	0.72
C105	0.76	0.55	0.41	0.24	0.25	PO6	PO7	PO8	PO9	0.29	0.38	0.55
C106	2.64	2.64	2.64	1.76	1.76	PO6	PO7	1.32	1.76	1.76	PO11	1.76
C106	PO1	PO2	PO3	PO4	PO5	2.27	2.27	PO8	1.82	PO10	PO11	2.72
C107	0.96	2.47	1.48	0.99	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C109	1.37	1.06	0.85	0.88	0.69	0.37	PO7	PO8	0.10	PO10	PO11	0.37
C110	1.16	0.78	0.41	0.39	0.72	0.70	PO7	PO8	PO9	PO10	PO11	PO12
C111	1.59	1.74	PO3	0.34	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C112	0.83	0.10	PO3	PO4	PO5	0.5	0.46	PO8	PO9	PO10	PO11	PO12

C113	1.01	1.12	0.38	PO4	PO5	0.34	PO7	PO8	PO9	PO10	PO11	0.23
C114	1.98	1.98	1.24	0.99	1.78	PO6	P07	PO8	PO9	PO10	PO11	PO12
C115	2.68	2.63	1.91	PO4	1.91	2.68	PO7	2.67	1.72	1.91	PO11	PO12
C116	PO1	PO2	PO3	PO4	PO5	2.03	1.35	2.03	1.35	PO10	PO11	2.03
C201	1.00	1	0.83	0.72	PO5	PO6	P07	PO8	PO9	PO10	PO11	0.57
C202	1.73	0.93	0.57	PO4	PO5	PO6	P07	PO8	PO9	PO10	PO11	0.24
C203	0.99	0.76	0.61	0.23	PO5	PO6	0.15	PO8	PO9	PO10	PO11	0.15
C204	0.91	1.09	0.92	0.82	PO5	PO6	P07	PO8	PO9	PO10	PO11	0.19
C205	1.08	0.72	0.72	0.36	0.16	PO6	P07	PO8	PO9	PO10	PO11	1.08
C206	1.03	0.57	0.71	0.34	PO5	PO6	P07	PO8	PO9	PO10	PO11	0.40
C207	2.40	1.60	1.6	1.6	2.4	PO6	P07	2.4	2.4	2.4	PO11	2.4
C208	2.46	2.46	2.46	2.46	1.80	PO6	P07	PO8	1.64	2.46	PO11	0.82
C209	0.76	0.76	0.57	0.76	PO5	PO6	P07	PO8	PO9	PO10	PO11	0.48
C210	0.91	0.83	0.63	0.05	PO5	PO6	P07	PO8	PO9	PO10	0.50	PO12
C211	1.59	1.59	1.59	1.36	PO5	PO6	P07	PO8	PO9	PO10	PO11	0.53
C212	0.29	0.29	0.21	0.68	0.38	PO6	0.22	PO8	0.15	PO10	PO11	0.24
C213	0.59	0.48	0.48	0.24	0.59	PO6	P07	PO8	PO9	PO10	PO11	0.59
C214	0.62	0.46	0.46	0.28	PO5	PO6	P07	PO8	PO9	PO10	PO11	0.57
C215	2.60	2.60	2.60	2.6	0.87	PO6	P07	0.84	2.6	2.6	PO11	0.87
C216	2.33	1.94	1.94	2.33	2.33	PO6	PO7	PO8	1.55	1.55	PO11	1.55
C301	0.42	0.50	0.40	0.17	0.13	0.50	P07	0.12	PO9	0.37	0.30	PO12
C302	1.17	0.64	0.66	0.28	0.29	PO6	PO7	PO8	PO9	PO10	PO11	0.92
C303	1.40	1.84	1.58	0.57	PO5	PO6	P07	PO8	PO9	PO10	PO11	1.42

C410	1.44	0.96	0.96	0.96	PO5	PO6	PO7	PO8	PO9	PO10	0.48	0.48
C409	PO1	PO2	2.90	2.90	2.90	PO6	P07	PO8	PO9	2.90	PO11	2.90
C408	2.95	1.77	2.16	1.72	2.95	PO6	PO7	1.97	1.77	1.57	PO11	0.98
C407	1.78	1.20	0.14	0.83	PO5	0.95	PO7	PO8	PO9	PO10	PO11	PO12
C406	1.14	0.76	0.33	PO4	0.57	PO6	PO7	PO8	0.23	PO10	0.23	0.25
C405	1.47	0.95	1.03	0.44	0.44	PO6	PO7	PO8	PO9	PO10	PO11	0.31
C404	1.70	1.70	0.65	0.27	PO5	P06	PO7	0.39	PO9	PO10	PO11	0.40
C403	1.56	1.42	0.78	0.24	PO5	PO6	P07	PO8	PO9	PO10	PO11	0.78
C402	1.95	1.30	0.26	PO4	PO5	PO6	P07	0.12	PO9	PO10	PO11	0.54
C401	1.37	0.98	0.96	PO4	PO5	PO6	PO7	PO8	PO9	PO10	0.20	0.68
C316	2.93	1.47	1.76	PO4	1.17	PO6	PO7	PO8	0.98	1.76	PO11	0.98
C315	2.93	2.93	2.93	2.93	2.93	PO6	PO7	2.93	2.93	2.93	2.93	2.93
C314	0.71	1.0	0.58	0.8	PO5	PO6	PO7	PO8	PO9	PO10	PO11	0.46
C313	1.03	0.91	0.91	0.86	0.11	PO6	PO7	PO8	PO9	PO10	PO11	0.58
C312	0.15	0.47	0.24	0.20	PO5	PO6	PO7	PO8	PO9	PO10	0.20	0.20
C311	0.96	0.87	0.75	0.25	PO5	PO6	PO7	PO8	PO9	PO10	PO11	0.20
C310	2.02	1.35	1.20	1.88	PO5	PO6	PO7	PO8	PO9	PO10	PO11	1.75
C309	1.34	0.40	0.26	PO4	PO5	PO6	P07	1.08	1.12	1.23	0.84	1.21
C308	2.93	2.93	1.95	2.93	2.15	PO6	P07	P08	2.93	1.17	PO11	1.37
C307	2.18	2.18	2.18	PO4	2.97	PO6	PO7	PO8	2.97	1.19	PO11	1.65
C306	0.11	2.09	1.37	PO4	0.89	PO6	PO7	PO8	PO9	PO10	PO11	0.27
C305	1.15	1.62	1.34	1.63	0.47	0.28	0.31	0.46	PO9	0.58	PO11	0.11
C304	1.42	0.65	0.87	0.20	0.31	PO6	PO7	PO8	PO9	PO10	PO11	0.12

C411	0.90	1.30	0.37	1.24	0.12	PO6	PO7	PO8	PO9	PO10	PO11	0.81
C412	1.27	0.57	0.57	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	0.77
C413	1.25	0.49	0.24	PO4	0.45	0.62	PO7	PO8	PO9	PO10	PO11	0.50
C414	1.77	1.33	0.73	1.08	PO5	PO6	PO7	0.25	PO9	PO10	PO11	1.09
C415	2.85	2.85	2.38	2.22	2.85	2.85	1.59	2.54	2.85	2.85	1.43	2.38
C416	3.00	3.00	3.00	2.00	3.00	PO6	PO7	2.33	PO9	3.00	PO11	2.00

PO Attainment Level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO Attainment	1.54	1.35	1.17	1.10	1.33	1.17	0.99	1.42	1.58	1.75	0.86	0.98
Direct Attainment	1.47	1.29	1.09	1.02	1.26	1.09	0.89	1.43	1.63	1.81	0.75	0.92
InDirect Attainment	1.8	1.6	1.5	1.4	1.6	1.5	1.4	1.4	1.4	1.5	1.3	1.2

PSO Attainment

Course	PSO1	PSO2	PSO3
C101	PSO1	PSO2	PSO3
C102	PSO1	PSO2	PSO3
C103	0.75	0.63	PSO3
C104	PSO1	PSO2	PSO3
C105	PSO1	PSO2	PSO3
C106	2.64	1.76	PSO3
C107	PSO1	PSO2	PSO3
C108	PSO1	PSO2	PSO3
C109	PS01	PS02	PSO3

C110	PSO1	PSO2	PSO3
C111	PSO1	PSO2	PSO3
C112	PSO1	PSO2	PSO3
C113	PSO1	PSO2	PSO3
C114	PSO1	PSO2	PSO3
C115	PSO1	PSO2	PSO3
C116	PSO1	PSO2	PSO3
C201	0.57	1.14	PSO3
C202	1.73	0.93	PSO3
C203	0.76	0.40	0.31
C204	0.91	1	0.19
C205	1.08	0.72	0.36
C206	0.76	0.64	0.91
C207	2.40	2.40	1.60
C208	2.46	1.64	0.82
C209	0.48	0.95	PSO3
C210	0.51	0.63	0.27
C211	1.06	1.59	1.23
C212	0.62	PSO2	0.23
C213	0.88	0.48	0.12
C214	0.82	0.49	PSO3
C215	0.87	2.60	1.73
C216	2.14	1.14	1.55

C301	0.42	0.22	0.34
C302	0.84	PSO2	0.19
C303	1.86	1.14	1.69
C304	1.14	0.20	0.52
C305	1.15	0.85	0.82
C306	1.62	0.57	0.42
C307	1.39	1.98	1.49
C308	0.98	0.98	0.98
C309	0.93	0.79	0.66
C310	1.35	0.49	0.96
C311	0.21	0.43	0.50
C312	0.15	0.39	0.24
C313	0.69	0.87	0.59
C314	0.06	0.88	0.23
C315	2.93	2.93	2.93
C316	2.93	0.98	0.98
C401	0.97	0.39	0.38
C402	1.30	0.36	0.28
C403	1.56	1.56	1.56
C404	1.30	1.04	1.30
C405	PSO1	0.83	0.98
C406	0.66	0.54	0.68
C407	1.24	0.29	0.72

C408	1.97	1.97	2.62
C409	2.90	2.90	2.90
C410	0.48	PSO2	1.44
C411	1.41	1.02	PSO3
C412	0.69	0.58	0.37
C413	0.43	0.49	0.59
C414	1.18	0.88	0.97
C415	2.85	2.85	1.71
C416	2.00	1.75	PSO3

PSO Attainment Level

Course	PSO1	PSO2	PSO3
CO Attainment	1.28	1.14	1.01
Direct Attainment	1.25	1.07	0.94
InDirect Attainment	1.4	1.4	1.3

4 STUDENTS' PERFORMANCE (150)

Total Marks 102.25

Table 4.1

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	2019- 20 (CAY)	2018-19 (CAYm1)	2017- 18(CAYm2)	2016- 17(CAYm3)	2015- 16(CAYm4)	2014-15 (CAYm5)	2013-14 (CAYm6)
Sanctioned intake of the program(N)	120	120	120	120	120	120	120
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)	112	113	100	106	108	101	108
Number of students admitted in 2nd year in the same batch via lateral entry (N2)	0	13	8	3	17	20	19
Separate division students, If applicable (N3)	0	0	0	0	0	0	0
Total number of students admitted in the programme(N1 + N2 + N3)	112	126	108	109	125	121	127

Table 4.2

Year of entry	Total No of students admitted in the program (N1	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)				
+ N2 + N3)		l year	II year	III year	IV year	
2019-20 (CAY)	112	0	0	0	0	
2018-19 (CAYm1)	126	91	0	0	0	
2017-18 (CAYm2)	108	79	57	0	0	
2016-17 (CAYm3)	109	56	43	41	0	
2015-16 (LYG)	125	65	55	54	50	
2014-15 (LYGm1)	121	45	34	31	31	
2013-14 (LYGm2)	127	46	21	21	21	

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]				
		l year	II year	III year	IV year	
2019-20 (CAY)	112	0	0	0	0	
2018-19 (CAYm1)	126	108	0	0	0	
2017-18 (CAYm2)	108	96	104	0	0	
2016-17 (CAYm3)	109	101	100	100	0	
2015-16 (LYG)	125	100	104	104	100	
2014-15 (LYGm1)	121	82	82	82	76	
2013-14 (LYGm2)	127	102	96	91	84	

4.1 Enrolment Ratio (20) Total Marks 20.00

Institute Marks : 20.00

	N (From Table 4.1)	N1 (From Table 4.1)	Enrollment Ratio [(N1/N)*100]
2019-20 (CAY)	120	112	93.33
2018-19 (CAYm1)	120	113	94.17
2017-18 (CAYm2)	120	100	83.33

Average [(ER1 + ER2 + ER3) / 3]: 90.28

Assessment: 20.00

Total Marks 17.45

4.2.1 Success rate without backlogs in any semester / year of study (25)

Item	Latest Year of Graduation, LYG (2015-16)	Latest Year of Graduation minus 1, LYGm1 (2014-15)	= 0.0000 1000 01 0100000000000000000000
X Number of students admitted in the corresponding First year + admitted in 2nd year via lateral entry and seperated division, if applicable	125.00	121.00	127.00
Y Number of students who have graduated without backlogs in the stipulated period	50.00	31.00	21.00
Success Index [SI = Y / X]	0.40	0.26	0.17

Average SI [(SI1 + SI2 + SI3) / 3]: 0.28

Assessment [25 * Average SI]: 7.00

4.2.2 Sucess rate in stipulated period (15)

Item	Latest Year of Graduation, LYG (2015-16)	Latest Year of Graduation minus 1, LYGm1 (2014-15)	Latest Year of Graduation minus 2 LYGm2 (2013-14)
X Number of students admitted in the corresponding First year + admitted in 2nd year via lateral entry and seperated division, if applicable	125.00	121.00	127.00
Y Number of students who have graduated in the stipulated period	100.00	76.00	84.00
Success Index [SI = Y / X]	0.80	0.63	0.66

Institute Marks: 7.00

Institute Marks: 10.45

Average SI[(SI1 + SI2 + SI3) / 3]: 0.70

Assessment [15 * Average SI]: 10.45

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 9.74

Institute Marks: 9.74

Academic Performance	CAYm3 (2016-17)	LYG (2015-16)	LYGm1 (2014-15)
Mean of CGPA or mean percentage of all successful students(X)	6.47	6.60	6.41
Total number of successful students(Y)	100.00	104.00	82.00
Totalnumber of students appeared in the examination(Z)	100.00	104.00	82.00
API [X*(Y/Z)]:	6.47	6.60	6.41

Average API [(AP1 + AP2 + AP3)/3]: 6.49

Assessment [1.5 * AverageAPI]: 9.74

4.4 Academic Performance in Second Year (15)

Total Marks 8.79

Institute Marks: 8.79

Academic Performance	CAYm2 (2017-18)	CAYm3 (2016-17)	LYG (2015-16)
Mean of CGPA or mean percentage of all successful students(X)	6.69	5.94	5.83
Total number of successful students (Y)	104.00	100.00	104.00
Total number of students appeared in the examination (Z)	104.00	104.00	117.00
API [X * (Y/Z)]	6.69	5.71	5.18

Average API [(AP1 + AP2 + AP3)/3]: 5.86

Assessment [1.5 * AverageAPI]: 8.79

4.5 Placement, Higher Studies and Entrepreneurship (40)

Total Marks 28.27

Institute Marks: 28.27

Item	LYG (2015-16)	LYGm1 (2014-15)	LYGm2 (2013-14)
Total No of Final Year Students(N)	104.00	82.00	91.00
No of students placed in the companies or government sector(X)	66.00	57.00	63.00
No of students admitted to higher studies with valid qualifying scores(GATE or equivalent State or National Level tests, GRE, GMAT etc.) (Y)	5.00	1.00	3.00
No of students turned entrepreneur in engineering/technology (Z)	0.00	0.00	0.00
x + y + z =	71.00	58.00	66.00
Placement Index [(X+Y+Z)/N] :	0.68	0.71	0.73

Average Placement [(P1 + P2 + P3)/3]: 0.71

Assessment [40 * Average Placement]: 28.27

Program Name:

Assessment Year Name : CAYm1

S.No	Student Name	Enrollment No	Employee Name	Appointment No			
1	CHETHAN PRAKASH SHET	4PM15CS025	Legato	December 28, 2019			
2	GIRISH N SHET	4PM15CS030	Canarys Automations Pvt. Ltd.	U311 01 KA1 991 PTCO1 2096 Emp ld:1838 Sep 26,2019			
3	HARSHITA LOKESH.T	4PM15CS031	INFOSYS	HRD/3T/19-20/13080437 November 5 2019			
4	KSHAMA G N	4PM15CS036	TCS - NINJA	Card No: 101590 Associate No: 1714087 TCSL/DT20184520179/Bangalore			
5	MADHURI DEEKSHA DHANYA	4PM15CS038	SRICHID TECHNOLOGIES	ID Number S0020			

6	Nandan H S	4PM15CS043	SUBEX	July 1, 2019
7	NAYAN KUMAR S	4PM15CS044	SUBEX	July 31, 2019
8	NIROSHA M R	4PM15CS046	Augmented Transformations Pvt. Ltd.	July 16, 2019
9	NISHANTH K	4PM15CS047	GLOBALEDGE	30 Jul, 2019
10	PALLAVI PARAMESHWAR HEGDE	4PM15CS050	Hakuna matata Solutions Pvt. Ltd.	HM/HR/EC-PRO255 Mar 22 2019
11	PREETHAM S	4PM15CS059	SLK Software Services Pvt. Ltd.	CIN: U72200KA2000PTCQ27503
12	RAMAKRISHNA VAIDYA	4PM15CS064	TEK SYSTEMS	HYD/C/2019/OFE-065 February 4 2019
13	SAURABH SADASHIVA NAIK	4PM15CS111	TCS	TCSL/DT20184520144/Bangalore 23/06/2019
14	SHAINY DSOUZA	4PM15CS071	MU SIGMA	Emp No: 12943 Mar 16 2019
15	SHWETHA GANIGA	4PM15CS075	TCS	18/10/2019 TCSL/DT20184520169
16	Sinchana M	4PM15CS076	Capgemini	HR/Campus/JS09JSF051 August 5 2019
17	SONALI SHETTY	4PM16CS413	CAMPUS MANAGEMENT	CMI/LOA/C10723/2019-20/072219/506 Emp ID:C10723
18	SOUDA I SIDDIQUE	4PM15CS077	Aasaanjobs Pvt. Limited	October 17 2019
19	SOUNDARYA B S	4PM15CS079	INFOSYS	HRD/3T/19-20/13080444 17 October 2019
20	SUJESHARADHYA M D	4PM15CS084	WIPRO - Elite NLTH	8277342 Empld 20093931 May 10 2019
21	SUPRIYA K V	4PM15CS088	Mphasis	Employee ID 2372829
22	VARSHITHA H V	4PM15CS097	Mindtree	TN?80013296/19December 22 2019
23	VISHAL E	4PM15CS105	SRICHID TECHNOLOGIES	ID Number S0019
24	YASHODHA MAGADI	4PM15CS108	Analytic Quotient	Employee Number: 11274
25	SHRIPADA BALAKRISHNA BHAT	4PM15CS109	DELL India Pvt. Ltd.	September 11 2019
26	MANJUNATH B V	4PM15CS110	Accenture	C3767105 27-Nov-2019

27	VINAY G M	4PM15CS112	Mindtree	TN/80012565/19 November 13 2019
28	SUPRIYA H P	4PM15CS113	Infosys	HRD/3T/19-20/13548127 January 7, 2020
29	SUSHMITHA N	4PM15CS114	Mindtree	TN/80011631/19
30	SACHIN B C	4PM16CS410	Inspace	November 5 2019
31	Chaitra M K	4PM15CS024	Tech MahindraLtd.	Jun 21, 2019
32	Aishwarya S	4PM15CS002	Tech Mahindra	ID: 668978
33	Akshatha S B	4PM15CS006	TCS	ID:1711766
34	Jyothishree C	4PM15CS033	INFANION	ID:0182
35	Pradeep Pai	4PM15CS055	Subex	19-May-2019
36	Pratiksha PP	4PM15CS057	Mphasis	ID:2372531
37	Rahul T R	4PM15CS062	Mphasis	MPHTH2019-0560
38	Seema H R	4PM15CS069	Concentrix	31-12-2019
39	Srividya Shashtry	4PM15CS081	UST Global	19-11-2019
40	Sudeep Nooly B	4PM15CS082	CMS IT Services	ID:22005102
41	Surjith S K	4PM15CS089	Srichid	ID:S0017
42	Veena N	4PM15CS098	TEKNOTRAIT Solutions Pvt. Ltd.	30-Jan-2020
43	Vikas Hiremath	4PM15CS101	Accenture	18-02-2020
44	Vinay Kumar M G	4PM15CS103	NTT Data Services	12-Sept-2019
45	Vishwas D G	4PM15CS106	E-Soft Technologies	21-Aug-2019
46	Nuzath Khanum	4PM15CS049	M.Tech. at JNNCE, Shivamogga	Student ID: 190767
47	Akash P Y	4PM15CS003	Vyshanavi Information Technology	1st July, 2019, ID:492
48	Praveen B	4PM15CS058	M.Tech at UVCE, Bangalore	USN:19GACS4010
49	Akshatha T R	4PM15CS007	ASM Enterprise Solutions	ID:8165, Oct 30, 2019

50	Peter F Lopis	4PM15CS052	Mindscape Computing Pvt. Ltd	24 Oct 2019
51	Akshatha H	4PM15CS004	Mphasis	6th Aug 2019
52	Sanath S Karanth	4PM15CS067	Synergy, Synfinity Management Consultants	ID: B0103, 22 June 2019
53	Bhoomika S S	4PM15CS021	M.Tech at JNNCE, Shivamogga	USN:4JN19SCS03
54	Pallavi S Badiger	4PM15CS051	Terralogic Software Solution Pvt. Ltd	10th Feb 2019
55	Megha S	4Pm15CS041	Subex	26 July 2019
56	Anusha Tengse	4PM16CS401	Maintec	30 Jan 2020
57	Prathima P	4PM15CS056	M.Tech at JNNCE, Shivamogga	USN:4JN19SCS10
58	Suman S	4PM15CS085	M.Tech at JNNCE, Shivamogga	USN:4JN19SCS12
59	Akshatha P S	4PM15CS005	L & T Infotech	ID:10668243, 28th Jan 2020
60	V Revanth Reddy	4PM15CS094	Mindtree	Date: 03 Feb 2020
61	Vaibhav Y	4PM15CS095	TeamLease Services ltd.	05 Aug 2019, ld:X214001
62	Aniket Nagaraj Naik	4pm15cs011	NA	NA
63	Annapoorneshwari N S	4PM15CS012	NA	NA
64	Chethana P M	4pm15cs026	NA	NA
65	Punrva	4pm15cs060	NA	NA
66	Vinutha R M	4pm15cs104	na	na
67	Vyshnavi K	4pm15cs107	DXC Technologies	NA
68	Amulya H	4pm15cs010	Accuvate technologies	NA
69	Tasmiya	4pm15cs091	Finastra	Oct 2019
70	Pooja S	4pm15cs053	Galangar	NA
71	Likith Kumar D K	4pm16cs404	NA	NA

Assessment Year Name : CAYm2

S.No	Student Name	Enrollment No	Employee Name	Appointment No
1	ADITHI S HEGDE	4PM14CS002	KPMG	ID:70735 12-Oct-2018
2	AMITH G KAMATH	4PM14CS003	GLOBALEDGE	23-July-2018
3	ASHFIYA KHANUM SURI H J	4PM14CS011	NTT Data Serivice	ID:181067, June 10, 2019
4	BHAVANA B K	4PM14CS017	Mphasis	ID:2363007
5	BHUVAN P	4PM14CS018	3rd eye	TE/DEL/2019/09
6	CHAYA M S	4PM14CS023	FIS Solutions (India) Private Limited	JR52249/B/DG/22-Nov-2018
7	DHANYASHREE.H.U	4PM14CS026	HIGH PEAK Software	Emp ID HPS140
8	DUSHANTHA S B	4PM14CS027	SLK	EID NO: 108526 9/12/2018
9	JEEVITHA C	4PM14CS031	IBM	"Requisition ID 280497BR Candidate Ref. Number 3527471"
10	KAVITHA BASANAGOUDA RAGIKOPPA	4PM14CS034	SRICHID	"ID Number S0013 December 25 2017"
11	MADHU M B	4PM14CS038	Test and Verification Solutions India Pvt. limited	"TVSIND3254 December 16 2019 "
12	Madhuri M S	4PM14CS039	COMORIN Consulting Services	ID:CCS180026
13	Malini D K	4PM14CS040	Libre Wireless Technologies	ID:LIB-IN-132
14	Meghana B G	4PM14CS043	Mitra Softwares	ID:MIT055
15	Meghana S B	4PM14CS044	NOUS Info Systems	ID:NT194108
16	Mohitha D S	4PM14CS045	HUAWEI	NA
17	NAVEEN H K	4PM14CS049	ABC for Java and Testing	29-03-2019
18	Nisarga V	4PM14CS052	AXA BUsiness Services Pvt. Ltd	ID:E16969
19	Nischitha R	4PM14CS053	NTT Data	ID:181097
20	Nitasha R Salanke	4PM14CS054	Digital Harbor	ID: 19-07-384

21	POOJA PRABHUSHANKAR	4PM14CS056	Evive Software	ID:100165
22	Ashwini R	4PM15CS404	COMORIN Consulting Services	ID:CCS180025
23	PRAMOD B S	4PM14CS060	FISDOM Technology Pvt. Ltd	ID:308, 1 OCT 2019
24	PUSHPA G	4PM14CS064	GLOBALEDGE	Apr 22 2019
25	PUSHPA M P	4PM14CS065	ATOS Syntel	ID:5053075, 19-Nov-2018
26	SEEMA N S	4PM14CS075	Source one management services Pvt. Ltd.	11-Dec-2018, ID: 001415131
27	RAJESHWARI B M	4PM14CS067	SRICHID	"S0014 December 25 2017 "
28	SINCHANA K	4PM14CS081	MPHASIS	"APPS/1070860/07708238/Pune/July 7 July 2018 "
29	SINDHU S N	4PM14CS082	Government Women's Poly technique, ShiralaKoppa	20 / 11 / 2019
30	SPOORTHY M C	4PM14CS087	DXC TECHNOLOGY	30 / 08 / 2018
31	SURAKSHA P	4PM14CS091	Evive Software Analytics Pvt. Ltd.	"ID 100164 7 / 12 / 2017 "
32	SWATHI P	4PM14CS095	Xactly	ID:X002159, Jan 15, 2020
33	SWATHI V	4PM14CS096	PESPT Shimoga	ID:1171
34	T.P.SUDARSHAN	4PM14CS097	Infosys	"HRD/3T/18-19/12432118 July 30 2018 "
35	TEJASWINI D.G	4PM14CS099	AtoS Syntel Pvt. Ltd.	"5054017 December 19 2018 "
36	THEJAS PATEEL P	4PM14CS100	Orovia Software Pvt. Ltd.	December 31 2018
37	USHA R V	4PM14CS101	HARMAN International India Pvt. Ltd.	"15 March 2019 3874 "
38	VINAY VISHNU HEGDE	4PM14CS105	3rd eye	TE/DEL/2019/10
39	YUKTHI K RAJ	4PM14CS107	Infosys	"HRD/3T/18-19/12432124 ID 1010670 July 30 2018 "
40	Abhishek S	4PM15CS400	Mitra Softwares	ID:MIT066
41	Deviprasad B Patil	4PM15CS405	Team Space	ID:AL0973

42	Kavya S	4PM15CS406	G2 Circle	ID:G2-014
43	Darshan H N	4PM14CS025	Mitra Softwares	ID:MIT-069
44	Chethan Ganiger	4PM14CS024	Emphasis	ID:2356620, Oct 13, 2017
45	Prajwal D Sanu	4PM14CS059	Meru Infosolutions	9 Oct 2019
46	Madhu M	4PM15CS409	Softprolang	9 Aug 2019
47	Priya R	4PM14CS062	MBA at Symbiosis Institute of Business Management, Bangalore	PRN:19020841192
48	Sneha D	4PM14CS084	Mphasis	Date: 23 Sept 2020
49	Hinchana S	4PM14CS030	Agastya Internation Foundation	16 Dec 2019, ID:3225
50	Poorvi Bhat	4PM14CS058	Torry Harris Business Solutions	Nov 19, 2018, ID 5005
51	Vishwas N S	4PM14CS106	Orovia Software pvt. ltd	1st Feb 2020
52	Rachana M C	4PM14CS066	Arivon Technologies	10 July 2019
53	Chaithra C Bhat	4pm14cs020	Invensoft pvt. ltd.	E0124
54	Nikitha S Mallya	4pm14cs050	Tingg Creation	9th July 2018
55	Amulya B R	4pm14cs005	Lecturer	Polytechnic college
56	Sanmathi M O	4pm14cs073	Harman International	c279 26th June 2019
57	sushmitha S	4pm14cs094	NA	NA
58	Poojitha M G	4pm14cs057	NA	NA
-	-			

Assessment Year Name : CAYm3

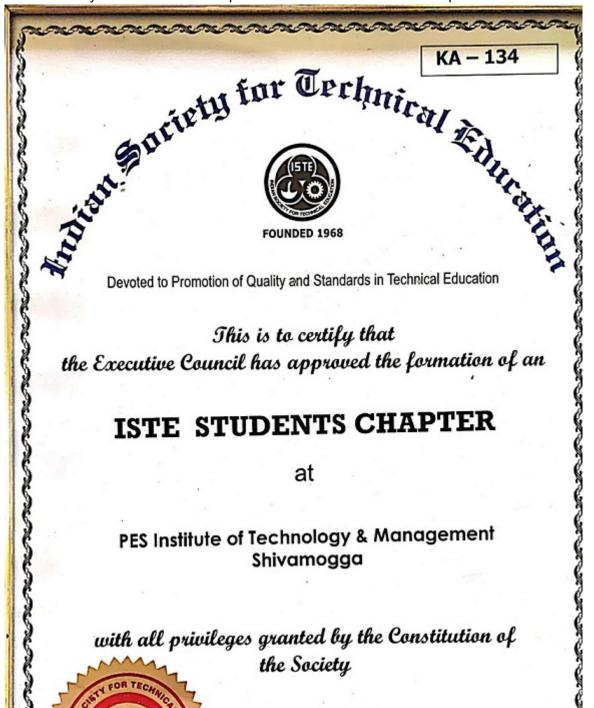
S.No	Student Name	Enrollment No	Employee Name	Appointment No
1	AISHWARAYA JOHN	4PM13CS001	MWB Technologies	NA
2	AJITH H	4PM13CS003	EVIVE HEALTH	July 1, 2017
3	AKHIL BIJU	4PM13CS004	Mindtree	TN/80006441/17 October 24 2017

4	AKSHATA MUKUND SHETTY	4PM13CS005	GLOBALEDGE	27 Jul 2017
5	AKSHAY S I	4PM13CS007	WNS	300691 Aug 11 2018
6	ANUSH Y V	4PM13CS011	Relyon Softech Itd	ID2380 June 07 2018
7	BHARGAVA BHAT U	4PM13CS018	Evive Software Analytics Pvt. Limited	Dec 28 2017 Emp ID: 100152
8	HARISH RAMNATH NAYAK	4PM13CS029	VM ware Software India Pvt. Ltd.	November 13 2019
9	Kavana P Jain	4PM13CS033	ExtraMarks	Emp. Code E9455 17 July 2019
10	MANJU SHARANAPPA UNKI	4PM13CS039	CADMAXX	ID CMET-1107N Feb 27 2019
11	MANJU T H	4PM13CS040	BETSOL	Employee ID: 0583 July 02 2018
12	MEGHA V	4PM13CS043	IBHAAN	AL/IDEAS/AE/027 ID: TC912AS010 January 24 2019
13	MEGHANA TILAK NAIK	4PM13CS045	Vyshnavi Information Technologies	ID 439 July 3 2017
14	NIKHIL S	4PM13CS051	PATTEM	PATTEM PD/HR/2019/05/08 May 20 2019
15	PRATIMA SUBRAHMANYA HEGDE	4PM13CS057	Global Edge	Global Edge
16	RANJITHA M	4PM13CS068	TECH MAHINDRA Ltd.	696646/1480810/ELTP Assosiate ID 552262 07 March 2018
17	RESHMA M	4PM13CS070	DXC Technology	17 JUly 2018
18	RESHMA S TADAS	4PM13CS071	Mastek	October 4 2017
19	SHWETHA POOJARI	4PM13CS086	Shifttocloud Software india Pvt. Ltd	NA
20	SUSHAINA K M	4PM13CS099	DXC Technology	16 Feb 2018
21	VAIDEHI H N	4PM13CS110	Maventic	MM 0472
22	Vinay A	4PM13CS112	Shopgro	22 Jan 2018
23	ABHILASH S V	4PM14CS400	Mitra softwares Pvt. Lmt.	MIT056 December 19 2018
24	RAGHAVENDRA D	4PM14CS411	Mitra softwares Pvt. Lmt.	Mitra softwares Pvt. Lmt. MIT063 May 15 2019

25	Anusha P S	4PM13CS012	Mtech at JNNCE Shimoga	17 09 2017 XD169
26	HARITHA J S	4PM13CS030	Oracle	NA
27	KAVYASHREE M B	4PM13CS034	Betsol	0409 June 30 2017
28	MEGHANA CHIDANANDA MALAGAVI	4PM13CS044	CISION	December 4 2018
29	MUKESH M SHET	4PM13CS048	FIS	Feb 08 2018
30	RAKSHITH K R	4PM13CS065	Evive Software Analytics Pvt. Limited	100154
31	SOUKHYA SHIVANANDA NAYAK	4PM13CS091	Sun Quest Information Systems India Pvt. Ltd.	SQ1506 December 13 2017
32	LOHITHNANDA D A	4PM14CS407	PACE WISDOM SOLUTIONS Pvt. Ltd.	PWS29 September 06 2018
33	Upasana U	4PM13CS106	INTL-FCStone	Dec 1, 2019
34	Sanjay N	4PM14CS415	Gas Turbine Research Establishment, DRDO	18 NOV 2019
35	Priya R Jain	4PM13CS059	Evive	08 Oct 2018
36	Sinchana B S	4PM13CS087	Cognizant	ID:791831, 22/04/2019
37	Shilpa Shetty	4PM13CS083	Powerschool	20 Aug 2018
38	Sindhu Rani	4Pm13CS090	Mahabaleshwara Enterprises, Bangalore	21 june 2018
39	Sushma R	4PM13CS100	DXC Technology	Feb 27, 2018
40	Vikas PS	4PM13CS111	Capgemini	22/11/2017
41	Nikitha N	4PM13CS052	Transcend 360 Labs	June 24, 2019
42	Sushm C P	4PM14CS417	Langoor Digital Pvt. Ltd	ID:Pd0692
43	Sachin P	4PM14CS414	Global Edge	23 Sept 2018, ID 3763
44	Yashaswini B J	4PM13CS114	VM ware	Aug 21, 2017, ID:362943
45	Poornima K	4PM13CS054	Accenture	19 Nov 2019 Id:C301887

46	Saman Raniya	4PM13CS075	CONCENTRIX	28 Mar 2018 ld:5040540
47	Akhila C V	4PM14CS401	Asst. Professor, GSSSIETW, Mysore	02/03/2020
48	Gururaj	4PM13CS028	Seed Startup House LLC	Aug 12, 2019
49	Poornima K S	4PM13CS055	Cargill Business Services India Pvt. Ltd.	ID: 9282, 20 May 2019
50	Deepak N	4PM14CS403	Scalene Works, People Solutions	19 Mar 2018
51	Ramyashree K P	4PM13CS067	Omega Health Care	ID:55097
52	Archana K	4PM13CS014	M.Tech at JNNCE	1700008624 16/09/2017
53	Nandini J	4pm13cs050	NA	NA
54	prajwal subramanya H	4pm13cs056	Maven Tech	NA
55	Deepshikha Sharma	4pm13cs023	IBM	NA
56	Keerthish C shettar	4pm13cs035	M. Tech at R V college of Engineering	na
57	Chethan Ullas Shet	4PM13CS022	Routeget	3rd June 2019
58	Priya S V	4PM13cs061	NA	NA
59	Sachin	4pm13cs072	NA	NA
60	Kotresh B V	4PM14CS405	NA	na
61	Sushmitha K	4pM13CS101	NA	NA
62	Sanajana D K	4PM13CS076	NA	NA
63	Sanjana J C	4PM13CS077	NA	NA
64	Priya B P	4PM13CS058	NA	NA
65	Supriya H B	4Pm13CS096	NA	NA
66	Suraksha S	4Pm13CS098	Na	NA

• All the faculty members of CSE Department have Life time membership in ISTE and Institute has the ISTE Student Chapter



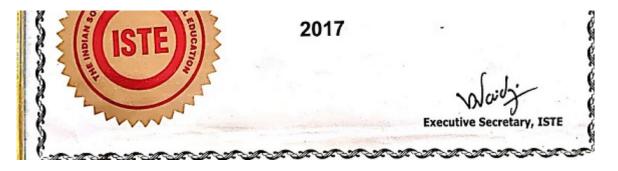
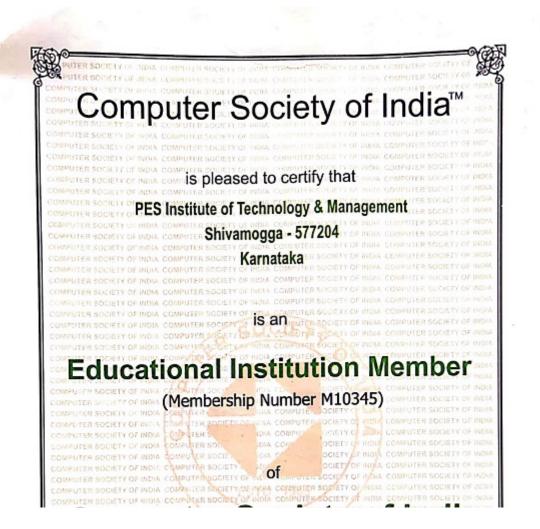


Figure 4.6.1.a ISTE Student Chapter

• Institute is educational Institution member of Computer Society of India



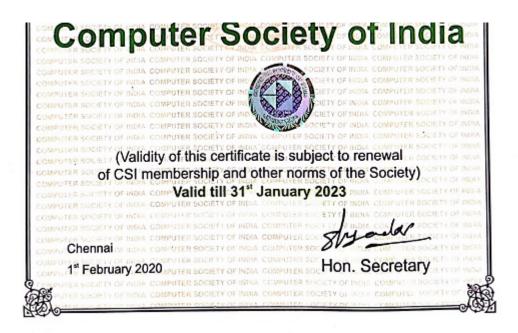


Figure 4.6.1.b Computer Society of India Certificate

• Institute is member of Board of IT Education Standerds





Certificate of Membership

This is to certify that

PES Institute of Technology and Management, Shivamogga

is a registered institutional member of Board for IT Education Standards (BITES) Since January 2019

Prof. K N Balasubramanya Murthy
Chairman, BITES

Sri M N Vidyashankar Co-Chairman, BITES

Figure. 4.6.1.c BITES Certificate

IEEE STUDENT BRANCH

- IEEE STUDENT BRANCH was formed on April 1, 2019 with Student Branch code STB11482 and School Code 60150124
 - Institute received IEEE Student Branch Award during 2019-20

Table 4.6.1 IEEE student branch list

FIRST NAME	LAST NAME	DATE OF	EMAIL ID	MEMBERSHIP
FIRST NAIVIE	LAST NAIVIE	BIRTH		ID
SUHAIB	AKRAM	29/01/1999	Suhaibakram73@gmail.com	95338417
PRADEEP	U R	10/06/1998	pradeepur.ujjaini@gamil.com	95338838
HITESH KUMAR	G BALEGAR	09/03/1998	gopinathhitesh@gmail.com	95338868
ROSHAN KUMAR	PRADHAN	10/02/1999	rockyroshan3@gmail.com	95048896
ANKIT	GAURAV	26/03/1998	ankitgaurav567@gmail.com	95262010

AMIT	NAIK	04/01/1998	gaamitnaik@gmail.com	95338853
ARPANA	HEGDE	22/02/1999	arpanakhegde@gmail.com	95338855
HARSHITHA	ВВ	14/07/1998	harshitha.bb98@gmail.com	95338860
MEGHANA	M	12/02/1998	meghanamanjunath1202@gmail.com	95338887
RAKESH	MP	30/06/1999	rakeshmp1999@gmail.com	95338896
POOJA	В	17/01/2000	Poojanayar121@gmail.com	95338912
PRAGATHI	SINGH	16/04/1999	pragathisingh7357@gmail.com	95338899
Deepak	Р	28/02/1998	deepak17.n@gmail.com	95338920
Sarah	Muskan	18/07/1998	sarahmuskan.1998@gmail.com	94938190
Bhavana	ΜV	12/06/1998	bhavana226191@gmail.com	95338925
Rakshitha	С	10/05/1998	rakshithac740@gmail.com	95338949
Prithvi	Rao H R	10/07/1998	prithviksiv@gmail.com	95338953
Varun	N Bhat	25/07/1999	varunvaru9482@gmail.com	95338971
Spoorti	Admani	07/07/1998	spoortiadmani98@gmail.com	95339298
keertana	U M	04/06/2000	keertanamu111@gmail.com	95339303
sandhya	S Hegde	23/05/1999	sandhyabasoor@gmail.com	95339320
Ajay	M Kumar	24/01/1998	ajaykumar1998ad@gmail.com	95339333
Divya	Bharati	06/04/1997	divyab850@gmail.com	95339351
Pooja	P Havali	06/01/1999	poojahavali06@gmail.com	95339353
Prakash	Bhasagi	26/10/1997	prakashrock14357@gmail.com	95157671
Amulya	ВР	02/02/1999	amulyabarige@gmail.com	95339358



Certificate Of Achievement

Proudly Presented to the IEEE Student Branch of

PES Institute of Technology and Management, Shivamogga

for securing the **Student Branch Award** for its performance and contribution towards betterment of Student Community in the year 2019-20



Figure. 4.6.1.d IEEE Student Branch Award

• Many students are members of IFERP (Institute for engineering research and publication)

USN	Name	IFERP Membership Number
4PM17CS072	Sharanamma	SMIN30567281
4pm18CS407	Shreya.M	SMIN16953470
4PM17CS059	Rakesh MP	SMIN30754291
4PM17CS086	Suhaib Akram S	SMIN79350864
4PM17CS075	Shoaib Ahmed	SMIN16435782
4PM17CS069	Seema	SMIN96543012



Fig.4.6.1.e IFERP Student certificate

Events organized by IEEE Student Branch

1	IEEE MSS sponsored Two Days Hands-on workshop on IOT	16-03-2019 to 17- 03-2019
2	IEEE MSS sponsored Two Days Hands-on workshop on MACHINE LEARNING	30-03-2019 to 31- 03-2019
3	IEEE MSS sponsored Two Days Hands-on workshop on Cloud and BlockChain	07-04-2019 to 08- 04-2019
4	IEEE MSS sponsored Two Days Hands-on workshop on Image & Speech Processing	14-04-2019 to 15- 04-2019
5	IEEE MSS Flagship Project Exhibition I2CONECCT	11-05-2019
6	Inauguration of IEEE PESITM Student Branch	11-05-2019
7	IEEE MSS sponsored Five Days Hands-on workshop on Latex	16-09-2019 to 20- 09-2019
8	IEEE MSS sponsored Two Days Hands-on workshop on IOT & Cloud	12-10-2019 to 13- 10-2019
9	IEEE MSS sponsored Two Days Hands-on workshop on Image Processing	12-10-2019 to 13- 10-2019
10	IEEE MSS sponsored Two Days Hands-on workshop on IOT	20-10-2019 to 21- 10-2019
11	IEEE MSS sponsored Two Days Hands-on workshop on Machine LEARNING	22-10-2019 and 26-10-2019
12	IEEE PESITM Student Branch sponsored Alumni Interaction on how to get placed	24-10-2019
13	IEEE PESITM Student Branch sponsored Mobile awareness program for Govt. school students	06-11-2019
14	IEEE MSS sponsored Two Days Hands-on workshop on Technofun	12-11-2019
15	IEEE MSS sponsored Two Days Hands-on workshop on IEEE day	14-11-2019
16	IEEE PESITM Student Branch sponsored Industry Expert Technical Talk	20-11-2019
17	IEEE AGM @ MIT Manipal	18-01-2020
18	IEEE Execom Attended by Student Chair Mr Varun and Branch Counsellor, Likewin Thomas @ SJEC, Mangalore	08-02-2020
19	Papers Published in the year 2019-20	04
20	Papers Published in the year 2018-19	11
21	Placed students of 2018-19 Batch	53
22	Placed students (still ongoing) for 2019-20 Batch	46
23	132 Hours of placement training by CAREER PRIME and GENESIS	
24	Dr Likewin Thomas Received 2 Lakh research grant from VTU	
25	IEEE Students handled 2 days hands-on workshop for BCA students on Machine Learning at PESIAMS	12-02-2020 to 13- 02-2020
		· · · · · · · · · · · · · · · · · · ·



Figure. 4.6.1.f IEEE MSS technically sponsored National Conference on Engineering Developments (NCED 2020), Feb 29, 2020



Figure. 4.6.1.g: IEEE MSS Flagship project exhibition - I2CONECCT, May 11, 2019



Figure. 4.6.1.h: IEEE MSS technically sponsored Current Engineering Trends (CET) Machine Learning Workshop, March 30-31, 2019

4.6.2 Publication of technical magazines, newsletters, etc. (5)

Institute Marks: 4.00

June2017	Jan 2018	June 2018	Jan 2019	June 2019
ACHIEVEMENTS, PRESENTATIONS AND PARTICIPATION SPEAK FOR INDIA REGIONAL ROUND NUMBER Surjeth S K of 2nd Year CS branch of PESITM participanted in Speak for India Karnataka Edition 20169 and have been selected for State Level finals to be held in Bengaluru in 2anuary 2017.	DEPARTMENT OF CSE TECHBYTE VOLUME 4 ISSUE 1 About CSE Compute Science & Expressing department imports high quality technical evaluation to its students with the high of its other of the ort computing facilities and highly qualitied teaching and supporting staff. I have prose with facilities the highlight development and than highe students start in a good other in the productional line. VISION To be a harder in providing quality electrics with sharps to chance it has vice programment from the students for the facilities. NISSION Is stress excludes to providing quality electrics for students by enemy proportion with the students of the vice vice gramment from the students have been provided to the proposition of the contraction. Is stress excludes to providing quality electrics to students by enemy provided incoming into contraction. Is stress excludes to providing quality electrics to students by enemy provided incoming into contraction. Is stress excludes to providing publication of which all the incoming provided in the stress of the provided in the provided in the stress of the students. Singuish and the stress of the provided provided in the provid	TECHBYTE THE OFFICIAL VILLAGY BRIDGETTS OF DESIREMENT OF CONFLICTS SCIENCE & ENCAREDAD ABOUT THE DEPARTMENT Computer Science & Single-sering department signals in Table 1997 of the single of the sin signals from the single of the single of the sin signals from the single of the single of the single-sering science and science an	CLOSE CONTYTING & REDCK CLASS CLASS	TECHBYTE THE OFFICE A PLANT NEWSTRATING OF COMMUNITY REPORT NEWSTRATING OF COMMUNITY REPORT NEWSTRATING OF COMMUNITY REPORT NEWSTRATING Companies Released to Report Newstrating despertances impacts high southly schroling despertances impacts high southly schroling despertances impacts high southly schroling of the set of the set schröding and the being of the set of the set schröding and developments at Relations to the set schröding and developments at Relation and the set of schröding and developments and from high play schröding and developments and from high play schröding and set of the set of the set of set of the set of the set of the set of set of the set of the set of the set of set of the set of the set of the set of set of the set of
Volume3	Volume4	Volume4	Volume 5	Volume5
Issue2	lssue1	Issue2	Issue 1	Issue2

Figure 4.6.2 Department News Letters

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

Table 4.6.3.a Students Participation in WAC Workshop at NITK, Suratkal

SI. No	Name	USN	Semester and Section	Event	Date	Prizes won (if any) or participation details	Event / Workshop / Conference Details
1.	ABHISHEK	4PM17CS001	3 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop

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2.	AISHWARYA M	4PM17CS005	3 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
3.	AMRUTHA P BHAT	4PM17CS006	3 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
4.	BHUVANA PRAKASH	4PM17CS019	3 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
5.	CHANDAN B R	4PM17CS024	3 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
6.	DARSHAN GOWDA K	4PM17CS026	3 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
7.	HARSHITHA M	4PM17CS033	3 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
8.	K S SRIDATTA	4PM17CS034	3 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
9.	KARTHIKEYA H S	4PM17CS035	3 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
10.	KRISHNA S	4PM17CS040	3 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
11.	KRUTHIKA H U	4PM17CS041	3 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
12.	MANOJ A R	4PM17CS045	3 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
13.	Gourav S Telkar	4PM17CS053	3 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop

14.	POOJA B	4PM17CS054	3 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
15.	POOJA KOTRESH HALANNAVAR	4PM17CS055	3 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
16.	PRAGATHI SINGH	4PM17CS059	3 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
17.	RAKESH M P	4PM17CS061	3 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
18.	RAKSHITHA B R	4PM17CS065	3 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
19.	SAHANA K S	4PM17CS069	3 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
20.	SEEMA	4PM17CS077	3 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
21.	SHREYA R BHAT	4PM17CS079	3 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
22.	SHWETHA B PATIL	4PM17CS081	3 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
23.	SINDHU B V	4PM17CS084	3 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
24.	SPOORTHI P	4PM17CS089	3 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop

25.	SURABHI M F	4PM17CS091	3 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
26.	SWATHI MALAGI	4PM17CS095	3 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
27.	VANDANA B	4PM16CS022	3 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
28.	Bhoomika N Kumar	4PM16CS051	3 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
29.	Navyashree R	4PM17CS053	3 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
30.	Aishwarya Raj C B	4PM16CS002	5 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
31.	Aishwarya S V	4PM16CS003	5 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
32.	Ajay M Kumar	4PM16CS005	5 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
33.	Ajay Shankar B P	4PM16CS006	5 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
34.	Akshatha B H	4PM16CS007	5 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
35.	Akshatha L S	4PM16CS009	5 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
36.	Amit Annappa Naik	4PM16CS010	5 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
37.	Ankit I	4PM16CS012	5 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
38.	Apoorva G	4PM16CS014	5 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop

39.	Arpana Karunakar Hegde	4PM16CS015	5 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
40.	Atheesh K S	4PM16CS017	5 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
41.	Bhavana M V	4PM16CS020	5 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
42.	Bhavesh Kumar S	4PM16CS021	5 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
43.	Deepa N S	4PM16CS027	5 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
44.	Deepak P	4PM16CS029	5 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
45.	Dhanush R	4PM16CS032	5 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
46.	Harshitha B B	4PM16CS036	5 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
47.	Hifzia Noorain	4PM16CS038	5 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
48.	Himanshu Bagati	4PM16CS039	5 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
49.	Hitesh Kumar G Balegar	4PM16CS040	5 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
50.	Karthik S	4PM16CS042	5 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
51.	Meghana M	4PM16CS047	5 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
52.	Meghana N Hegde	4PM16CS048	5 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
53.	Nayana Ganapati Naik	4PM16CS052	5 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop

54.	Neha Shanbhag	4PM16CS053	5 A	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
55.	Pradeep U R	4PM16CS056	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
56.	Pragathi S	4PM16CS057	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
57.	Prajwal R Rajpurohit	4PM16CS058	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
58.	Priyanka R Naval	4PM16CS063	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
59.	Rakshitha C	4PM16CS065	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
60.	Rakshitha N	4PM16CS066	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
61.	Rakshitha N	4PM16CS067	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
62.	Rhuthvikrajendra S	4PM16CS068	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
63.	Roshan Kumar Pradhan	4PM16CS070	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
64.	S Ramya	4PM16CS071	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
65.	Sarah Muskan	4PM16CS077	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
66.	Seema Naik	4PM16CS079	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
67.	Shilpashree U Kulkarni	4PM16CS081	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
68.	Shreya T A	4PM16CS082	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop

69.	Shrisha G Adiga	4PM16CS083	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
70.	Siddhartha Rao V S	4PM16CS084	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
71.	Smita Ishwar Kodiya	4PM16CS085	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
72.	Soujanya S	4PM16CS086	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
73.	Sourab S Vernekar	4PM16CS087	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
74.	Sowjanya Sahukar S A	4PM16CS089	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
75.	Spoorti Admani	4PM16CS090	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
76.	Srushti S Pai	4PM16CS092	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
77.	Suman	4PM16CS094	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
78.	Sumana K S	4PM16CS095	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
79.	Sushma E	4PM16CS096	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
80.	Tarun M	4PM16CS100	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
81.	Usha S V	4PM16CS101	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
82.	Varun N Bhat	4PM16CS103	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
83.	Varuna H S	4PM16CS104	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop

84.	Yashas S C	4PM16CS108	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop
85.	Priyanka R Naval	4PM16CS056	5 B	WAC 2019 WHAT AFTER COLLEGE	16 TH & 17 TH Feb 2019	Participated	Artificial Intelligence Workshop

Table 4.6.3.b Students Participation in various paper presentations

	Name Of The Student	Title Of The Paper	Name Of The Journal/Conference /Event /Publisher	Award/
	Pramoda D P Rahul A Esakknavar Sachin K C Venktesh Prasad H K	Ehr Based Healthcare System	National Conference On Engineering Developments, Pesitm Shivamogga	Pa
2.	Seema Naik Shipashree U Kulakarni Chaaya R Rumana Tabassum K M	Application Of Swarm Intelligence Algorithm To Solve The Vehicle Routing Problem In Vanets	National Conference On Engineering Developments, Pesitm Shivamogga	Pa
3.	Hitesh Kumar G Balegar Ajay M Kumar Nayana Ganapati Naik Gowrish S Patel	Sentiment Analysis In Kannada Document	National Conference On Engineering Developments, Pesitm Shivamogga	Pa
4.	Anoop Pttanashetty Harsha Sg Madhu K S Sourabh B N	Image Encryption System Using 3d Chaotic Maps	National Conference On Engineering Developments, Pesitm Shivamogga	Pa
_	Akshitha D V Bindhu A S Chilukuri Hempriya Meghana N Hegade	Application Of Machine Learning In Legal Proceedings	National Conference On Engineering Developments, Pesitm Shivamogga	Pa
	Aishwarya Raj Cb Aishwarya Saunshi Deepashree N Desai Sanjana Shivakumar	Cloud-Assisted Device And Data Clustering For Lifetime Prolongation In Wireless lot Networks	National Conference On Engineering Developments, Pesitm Shivamogga	Pa

7.	Akshatha H L Mouna M C Sannidhi S Syeda Noorain Afshan	Sensor Technology For Cattle Health Monitoring System	National Conference On Engineering Developments, Pesitm Shivamogga	Pa
8.	Akshatha L S Harshitha B U Complete Solution For Security In Home Ajayshanakar B P Bhavana M V Automation Using lot		National Conference On Engineering Developments, Pesitm Shivamogga	Pa
9.	Shrisha G Adiga Tarun M Varun N Bhat Yashas S C	Music Control Using Gestures	National Conference On Engineering Developments, Pesitm Shivamogga	Pa
10.	Deepak P Rakshitha C Arpana K Hegde Siddhartha Rao V S	Facial Emotion Recognition And Attendance System In Classroom		Pa
11.	Mr.Surjith S K Mr.Saurabh S N Ms.Soujanya P Ms.Sanjana K	Voice Enabled Chatbot Using Seq2seq And Legacy Techniques	International Conference On Cybernetics, Cognition And Machine Learning Applications (Icccmla) 2019 Springer	Pa
12.	Hitesh Kumar G Deepak P	Simplifying Spaghetti Processes to Find the Frequent Execution Paths	State Level "INFOZEST" at BIET Davanagere	Fii
13.	Ms.Kavyashree M B	Deep Learning Techniques And Applications	National Conference On Research In Science Engineering And Management, Pesitm Shivamogga	Pa
14.	Ms.Akila C V	Survey On Collborative Joint Training, Deep Learning Approach With Mrm	National Conference On Research In Science Engineering And Management, Pesitm Shivamogga,	Pa

Students of Computer Science and Engineering students Mr.Deepak and Mr.Hitesh Kumar have won the First Prize in State Level Intercollegiate Paper Pres Competition held at Bapuji Institute of Engineering and Technology (BIET), Davanagere



Figure. 4.6.3.a Mr.Deepak and Mr.Hitesh Kumar have won the First Prize in State Level Intercollegiate Paper Presentation Competition held at Bapuji Institut and Technology (BIET), Davanagere

Mr. Utkarsh (CSE) and his partner Mr. Vikas P S (CSE) secured place in top 10 team from Karnataka in Young India Challenge Quiz competition conducted Launcher held at MSRIT, 23rd Oct 2016.



Figure. 4.6.3.b Mr. Utkarsh (CSE) and his partner Mr. Vikas P S (CSE) secured place in top 10 team from Karnataka in Young India Challenge Quiz

Table 4.6.3.c Students Participation in various events - 2016-17

SL.NO	Name	USN	Semester	Event	Date	Prizes won(if any) or participation details	Event / workshop / Conference details
1.	Suhas Raamji	4PM12CS082	7 th sem B Section	Hackathon	110	Calenony awarn	Make in India organized by IIT, Bombay.
2.	Sahana G R	MPINITYCISHES		VTU Exam 7 th Semester	Jan 2016	University Topper	University Topper by

3.	Kasnyap,	4PM12CS015 4PM12CS002 4PM12CS001	8 th sem A-Section	National Conference on Product Design (NCPD -2016)	01/07/2016 to 03/07/2016	Presented a technical Paper	"face detection using Raspberry Pi and python" M.S Ramaiah Institute of Technology, Bangalore
4.	Monmmed Salman	4PM12CS012 4PM12CS045 4PM12CS012	8 th sem A-Section	National Conference on Product Design (NCPD -2016)	01/07/2016 to 03/07/2016	Presented a technical Paper	"Home automation Using Ardino" M.S Ramaiah Institute of Technology, Bangalore
5.	Gautham Raikar &	4PM11CS015 4PM12CS029 4PM12CS013	8 th sem A-Section	National Conference on Product Design (NCPD -2016)	01/07/2016 to 03/07/2016	Presented a technical Paper	"Smart Dustbin" M.S Ramaiah Institute of Technology, Bangalore
6.		4PM13CS107 4PM13CS111	7B	Young India Challenge Quiz competition	23/10/2016	Top 10 in young India Challenge Quiz competition	Young India Challenge Quiz competition conducted by Carrer Launcher held at MSRIT.
7.	Lubana & kavyashree		6 th A Section	"BOLLYWOOD BAAZIGAR QUIZ" Compition	18/02/2016	1 st prize	
8.	Haritha & Utkarsh		6 th A & 6 th B section	"BOLLYWOOD BAAZIGAR QUIZ" Compition	18/02/2016	Runner up	
9.	Ms. Sahana G R	4PM12CS068	7 th sem	first (University Topper) 7th semester examination in		by securing 83.44% in	Ms. Sahana G R (4PM12CS068) has stood first (University Topper) by securing 83.44% in 7th semester examination in VTU. (Source: fastvturesults.com)
10.	Suhas Ramji Roshan (PESIT, Bengaluru)		8th Sem,	shortlisted to participate in Make in India Hackathon at IIT Mumbai	February 10- 15, 2016.	Participated	Suhas Ramji, 8th Sem, CSE, PESITM Shivamogga Roshan (PESIT, Bengaluru) have been chosen to participate in the Make in India Hackathon at IIT-Bombay from February 10-15, 2016.

	1. Ajit 2. Kavyashri 3. Pria Jain	7th semester	Computer Science and Engineering of PESITM have been recruited by EVIVE HEALTH with a package of Rs 5.5 lak p.a.	November 19th, 2016	Participated	Three 7th semester students from Computer Science and Engineering of PESITM have been recruited by EVIVE HEALTH with a package of Rs 5.5 lak p.a.
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Table 4.6.3.d Students Participation in various events - 2017-18

SL.NO	Name	USN	Sem	Event	Date	Prizes won(if any) or participation details	Event / workshop / Conference details
1	Surjith SK	4PM15CS089	5 B	Speak for India (Karnataka Edition 2016)	January 2017.	Selected for State Level finals held in Bangalore on January 2017	Speak for India (Karnataka Edition 2016)
	Sachin P	4PM14CS414	6 A &				
	Vinay A	4PM13CS112	8 A & B				17 th Edition of National IT Fest
	Bhargav	4PM13CS018		National IT Februar	February	Participated in various Event.	epl Tome 2017 @ AIMIT, St Aloysius College (Autonomous), Mangalore.
2	Bhuvan	4PM14CS018		Fest epl Tome	16 th , 17 th		
	Jeevitha	4PM14CS031			2017	various Everit.	
	Harshitha	4PM13CS030					
	Nikhil	4PM13CS051					
3	Reshma. M	4PM14CS070	8 th B	Internship	January 13 th 2017	Successfully completed Internship.	D.R.D.D Banglore.
4	Akshatha PS	4PM15CS005	5th A	Course in Cloud Computing	Oct-17	Participated	Synchash Applications PVT.LTD
5	Harshita Lokesh T	4PM15CS031	5th A	Course in Cloud Computing	Oct-17	Participated	Synchash Applications PVT.LTD
6	Pallavi S Badiger	4PM15CS051	5th B	Course in Cloud Computing	Oct-17	Participated	Synchash Applications PVT.LTD

7	Kshama G N	4PM15CS036	5th A	Course in Cloud Computing	Oct-17	Participated	Synchash Applications PVT.LTD
8	Nirosha M R	4PM15CS046	5th A	Course in Cloud Computing	Oct-17	Participated	Synchash Applications PVT.LTD
9	Shwetha	4PM15CS075	5th B	Course in Cloud Computing	Oct-17	Participated	Synchash Applications PVT.LTD
10	Surjith SK	4PM15CS089	5th B	Course in Cloud Computing	Oct-17	Participated	Synchash Applications PVT.LTD
11	Shainy Wilson Dsouza	4PM15CS071	5th B	Course in Cloud Computing	Oct-17	Participated	Synchash Applications PVT.LTD
12	Jyothishree C	4PM15CS033	5th A	Course in Cloud Computing	Oct-17	Participated	Synchash Applications PVT.LTD
13	Aishwarya S	4PM15CS002	5th A	Course in Cloud Computing	Oct-17	Participated	Synchash Applications PVT.LTD

Table 4.6.3.e Students Participation in various events - 2018-19

SL.NO	Name	USN	Semester	Event	Date	Prizes won(if any) or participation details	Event / workshop / Conference details
1.	Hitesh Kumar G	4PM16CS040	5 th sem A Section	INFOZEST – 18 State level Competition	11-12 th April 2018	First Place	Paper Presentation
2.	Deepak P	4PM16CS029	5 th sem A Section	INFOZEST – 18 State level Competition	11-12 th April 2018	First Place	Paper Presentation
3.				IN/I A I NI A I I	13-15 th April 2018	First Place	TRAILBLAZER
4.	Surjith SK	4PM16CS089	8 TH Sem B Section	Test.C (National level symposim)	12/12/2018	First Place	National Level Technical symposium held at JNNCE, Shimoga.

5.	Mr. Saurabh SN	4PM15CS111	8 th Semester	Test. C (National level symposium)	12/12/2018	riist Place	National Level Technical symposium held at JNNCE, Shimoga.
6.	Mr. Vishal	4PM15CS105	8 th Semester	Test. C (National level symposium)	12/12/2018	Second Flace	National Level Technical symposium held at JNNCE, Shimoga.
7.	Mr. Ramkrishna Vaidya	4PM15CS064	8 th Semester	Test. C (National level symposium)	12/12/2018	Second Flace	National Level Technical symposium held at JNNCE, Shimoga.

Table 4.6.3.f Students Participating in Inter-college Sports Events

SINO	STUDENT NAME	IIGN	EVENT	D	ATE	ORGANIZING COLLEGE			
Si.NO.	STODENT NAME	0314	LVLINI	FROM	то	COLLEGE			
			YEAR-	2020					
1	Bhavesh Kumar S	4PM16CS021							
2	veeravalli Panith	4PM15CS099	1						
3	Amith Annappa Naik	4PM16CS010	CRICKET	6/3/2020	14/3/2020	SIT ,Tumkur			
YEAR-2019									
1	Roshan Kumar Pradhan	4PM16CS070							
2	Prasanna Ashok Naik	4PM16CS061							
3	Jagtar Singh Bawa	4PM16CS041	FOOT	22-3-2019	25-03-2019	SIT ,Tumkur			
4	Sabhiraj Singh	4PM17CS061	BALL						
5	Himanshu Bagati	4PM16CS039							
6	Sourabh V Kasar	4PM15CS080							
1	Bhavesh Kumar S	4PM16CS021	CRICKET	12-3-2019	15-03-2019	JNNCE, Shimoga			
2	veeravalli Panith	4PM15CS099	OTTIONE	12 0 2010	10 00 2010	l line ga			
			1						
1	veeravalli Panith	4PM15CS099	KHO-KHO	1/3/2019	2/3/2019	KIT, Tiptu			

			-	-	-	-
1	Roshan Kumar Pradhan	4PM16CS070	BASKET	24-9-2019	25-09-2019	VIT Tintu
2	veeravalli Panith	4PM15CS099				rii, iipiu
			YEAR-	2018		
1	Roshan Kumar Pradhan	4PM16CS070				
2	Sourabh V Kasar	4PM15CS080	FOOT ,			SIT, Tumkur
3	Sabhiraj Singh	4PM17CS061	BALL	20/2/2018	21/2/2018	SII, Tullikul
4	Prasanna Ashok Naik	4PM16CS061	DALL			
5	Jagtar Singh Bawa	4PM16CS041				
1	Roshan Kumar Pradhan	4PM16CS070	BASKET BALL	14/9/208	15/9/2018	PESITM, Shimoga
1	Anil B H	4PM16CS011			1	
2	Bhavesh Kumar S	4PM16CS011	CDICKET 2	7/2/2018	28/2/2018	JNNCE, Shimoga
_	Dilavesii Kuillai S	451011003021	CITICILLI			DIVIVOL, SIIIIIOGA
1	Pooja B	4PM17CS053				
2	Pragathi Singh	4PM17CS055	THROW ,	0/9/2018 1	0/10/2018	BIET, Davangeere
3	Vidyashree K	4PM18CS118	BALL		0, 10,2010	l l l l l l l l l l l l l l l l l l l
				!	Į	
1	Jagtar Singh Bawa	4PM16CS041	ATHLETIC	6/10/18 1	0/29/2018	SJCIT, Chikkaballapura
	-		YEAR-	2017		
1	Roshan Kumar Pradhan	4PM16CS070	1	20/3/2017	21/3/2017	SIT, Tumkur
2	Sourabh V Kasar	4PM15CS080	BALL			
		-				-
1	veeravalli Panith	4PM15CS099	CRICKET	20-3-2017	21-03-2017	JNNCE, Shimoga
				1	I	
1	Jagtar Singh Bawa	4PM16CS041	ATHLETIC1	1/3/2017	6/3/2017	VTU , BELGAUM
					ı	
1	Srividya Shastry T V	4PM15CS081	TABLE- TENNIS 1	2/9/2017	14-09-2017	VVCE-MYSORE
1	Roshan Kumar Pradhan	4PM16CS070	NETBALL 2	7-10-17	29-10-2017	GAT , Banagalore
			YEAR-	2016		
1	Srividya Shastry T V	4PM15CS081	TABLE- TENNIS	8/5/2016	9/5/2016	PESCE-MANDYA
						<u> </u>

1	Jagtar Singh Bawa	4PM16CS041	ATHLETIC1	4-11-16	15-11-206	Dr. T.TIT, kolar
	pagiai oliigii balia	<u> </u>	,	1	1.0 11 200	<u> </u>
1	Trupthi K J	4PM15CS093	. ×	/10/2016	9/10/2016	MCE-HASSAN
2	Pallavi	4PM15CS051	BALL	10/2010	0/10/2010	117 (007 114
	1	l	CHUTTLE		1	
1	Amith S Kumar	4PM13CS009	SHUTTLE 2	1/9/2016	22/9/2016	AIT, Chikamagalur
1	Amith S Kumar	4PM13CS009	KABADDI 2	1/4/2016	22/4/2016	KIT, Tiptur
1	Sourabh V Kasar	4PM15CS080	FOOT BALL	3/4/2016	14/4/2016	SIT, Tumkur

Table 4.6.3.g Student Participation/ Award List at Sahyadri College, Shivamogga

SI. No	Student Name	Event	Award / Participation	Date with location
1.	Prajwal R Rajpurohit	Skit	2 nd Price	
2.	Suhaib Akram			
3.	Sohan	Damas	3 rd Price	
4.	Nikitha	——Dance	3.4 Price	
5.	Pooja B			5 th March 2020 at Sahyadr
6.	Aishwarya D Gujjar	Anchoring	Participated	College, Kuvempu University, Shivamogga
7.	Harshavardhan Reddy	Photography	Participated	
8.	Poorna			
9.	Ankitha	Pick and Act	3 rd Price	
10.	Bhoomika			



Figure. 4.6.3.c CSE Student participation in Cultural event at Sahyadri College, Kuvempu University.

Table 4.6.3.h Student Participation in various cultural events

SL.NO	Date	Student Name	Activity	Event Name	College	Prize
1.	10-07-2017	Karthikeya H	Violin Play	"Yuva sourba" Kannada and sanskrit department	Kannada and sanskrit department ,Gajnur, Shimoga	Participation
2.	13-04-2018	Sandhya S	Folk/ Tribal	"Kalasurabhi 2018",AITM college, Belgavi	PESITM, Shimoga	Second
3.	13-04-2018	Prajwal R	skit	Kalasurabhi,AITM college, Belgavi	AITM college, Belgavi	Participation
4.	13-04-2018	Karthikeya H	Violin Play	Kalasurabhi, AITM college, Belgavi	AITM college, Belgavi	Participation
5.	16-03-2019	Prajwal R	Skit	"sayadri siri" Sayadri arts and science college,shivamogga	Sayadri arts and science college, Shimoga	Third
6.	09-11-2019	Prajwal R	Skit	20 th VTU youth Festival "INSIGNIA" SDM, Dharwad	SDM college, Dharwad	Participation
7.	09-11-2019	Karthikeya H	Violin play	20 th VTU youth Festival "INSIGNIA",SDM, Dharwad	SDM college, Dharwad	Participation
8.	05-03-2020	Prajwal R	Skit	"Saniha"Sahyadri Science College,Shimoga	Sahyadri Science College,Shimoga	Second
9.	05-03-2020	Suhaib Akram	Group Dance	"Saniha"Sahyadri Science College,Shimoga	Sahyadri Science College,Shimoga	Third
10.	05-03-2020	Sohan	Group Dance	"Saniha"Sahyadri Science College,Shimoga	Sahyadri Science College,Shimoga	Third
11.	05-03-2020	Nikitha	Group Dance	"Saniha"Sahyadri Science College,Shimoga	Sahyadri Science College,Shimoga	Third
12.	05-03-2020	роојаВ	Group Dance	"Saniha"Sahyadri Science College,Shimoga	Sahyadri	Third

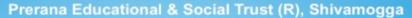
Table 4.6.3.i Student Participation in NPTEL Course Results during Jan-April 2019

SI No	Name	Subject Name	Result
1	Desai Sanjana Shivkumar	Programming in Java	Elite
2	Aishwarya S V	Introduction to Internet of Things	Elite
3	Neha Shanbhag	Programming in Java	Elite+Gold
4	Neha Shanbhag	Introduction to Internet of Things	Elite

5	Neha Shanbhag	Joy of Computing Using Python	Elite
	Karthik S	Joy of Computing Using Python	Successfully Completed
7	Arpana Karunakar Hegde	Joy of Computing Using Python	Elite
}	Deepak P	Data Mining	Successfully Completed
)	Deepak P	Big Data Computing	Elite
10	Desai Sanjana Shivkumar	Joy of Computing Using Python	Elite
11	Neha Shanbhag	Introduction to Automata, Languages and Computing	Elite
12	Madhu K S	Joy of Computing Using Python	Elite
3	Ajay M Kumar	Joy of Computing Using Python	Elite
4	Ajay M Kumar	Introduction to Automata, Languages and Computing	Elite
16	Ajay M Kumar	Data Mining	Elite
17	Rahul A Eskkanavar	Joy of Computing Using Python	Elite
18	Rahul A Eskkanavar	Data Base Management System	Successfully Completed
19	Siddhartha Rao V S	Introduction to Programming in C	Successfully Completed
20	Rakshitha C	Joy of Computing Using Python	Elite
21	Amit Naik	Joy of Computing Using Python	Elite
22	Ashwarya S V	Joy of Computing Using Python	Elite
23	Ashwarya S V	Programming in Java	Elite
24	Ashwarya S V	Introduction to Automata, Languages and Computing	Elite
25	Meghana M	Joy of Computing Using Python	Elite
26	Prdeep U R	Joy of Computing Using Python	Elite
27	Prdeep U R	Data Mining	Successfully Completed
28	Ashwarya S V	Introduction to Programming in C	Successfully Completed
29	Ajay Shankar B P	Privacy and Security in Online Social Media	Successfully Completed
30	Harshitha B B	Joy of Computing Using Python	Elite
31	Yashhas S C	Joy of Computing Using Python	Elite
32	V Ganesh	Joy of Computing Using Python	Elite
33	Ashwarya S V	Joy of Computing Using Python	Elite
34	Ashwarya S V	Programming in Java	Elite
35	Ashwarya S V	Introduction to Automata, Languages and Computing	Elite
36	Meghana M	Joy of Computing Using Python	Elite
37	Prdeep U R	Joy of Computing Using Python	Elite
38	Prdeep U R	Data Mining	Successfully Completed
39	Ashwarya S V	Introduction to Programming in C	Successfully Completed
10	Ajay Shankar B P	Privacy and Security in Online Social Media	Successfully Completed
41	Rahul A Eskkanavar	Introduction to Programming in C	Successfully Completed
12	Hithesh Kumar	Joy of Computing using python	ELITE+GOLD

43	Hithesh Kumar	Introduction to AUTOMATA and COMPUTABILITY	Elite		
44	Hithesh Kumar	Data Mining	ELITE+SILVER		
45	Hithesh Kumar	Introduction to R Software	ELITE+SILVER		
46	Hithesh Kumar	Machine Learning	ELITE+SILVER		
47	Hithesh Kumar	Machine Learning for Engineering and Science Applications	-(ELITE+GOLD		
48	Hithesh Kumar	Practical Machine Learning with Tensor	Successfully Completed		
49	Hithesh Kumar	Data Science for engineers	ELITE		
50	Hithesh Kumar	Programming, Data Structures, Algorithms using python	Successfully Completed		
51	Hithesh Kumar	Joy of Computing using python	ELITE+GOLD		
52	Ashwini S P	Problem Solving through Programming in C	Successfully Completed		
53	Nayana K	Problem Solving through Programming in C	Successfully Completed		
54	Sunil M E	Introduction to Machine Learning	Successfully Completed		
55	Sunil M E	Introduction to Abstract and Lear Algebra	Successfully Completed		
56	Surbhavi M F	Programming in Java	Elite		
57	Mythri n Chittaragi	Programming in Java	Elite		
58	Mythri n Chittaragi	Problem Solving through Programming in C	Successfully Completed		
59	Karthikeya H S	Programming in Java	Elite		
60	Karthikeya H S	Programming Data structure and Algorithm Using Python	Successfully Completed		
61	Karthikeya H S	Introduction to Programming in C	Elite+Silver		
62	Manoj A R	Problem Solving through Programming in C	ELITE		
	Manoj A R	Programming in Java	Elite+Silver		
63	Sunil M E	Introduction to Automata and Languages and Computaion	Successfully Completed		
64	Shrisha G Adiga	Joy of Computing Using Python	ELITE		
65	Tarun M	Joy of Computing Using Python	ELITE		
66	Arpana Karunakar Hegde	Joy of Computing Using Python	ELITE		
67	KSHAMA G N	Programming , Data structures and Algorithms using C	ELITE		
68	CHITRHA M	Programming , Data structures and Algorithms using C Successfully Com			
69	PALLAVI PARAMESHWA R HEGDE	Programming , Data structures and Algorithms using C	Successfully Completed		

70	KSHAMA G N	Programming , Data structures and Algorithms using Python	ELITE
71	AKSHATHA H	Programming , Data structures and Algorithms using Python	ELITE
72	AKSHATHA T R	Programming , Data structures and Algorithms using Python	Successfully Completed
73	MEGHA S	Programming , Data structures and Algorithms using Python	Successfully Completed
74	PRATIKSHA P P	Programming , Data structures and Algorithms using Python	Successfully Completed





PES INSTITUTE OF TECHNOLOGY AND MANAGEMENT

(Affilated to Visveswaraya Technological University, Belgavi & Recognized by AICTE, New Delhi)
NH-206, Sagar Road, Shivamogga, Karnataka - 577204
(An ISO 9001:2015 Certified Institution)

STUDENT ACHIEVEMENTS

Congratulations to all students on well-deserved sucess in NPTEL Exam



Elite + Gold Certified



Albinia di e

Elite + Gold Certified Introduction to Internet of Things-97% Programming in Java-90%



LOTTING CA

Elite + Gold Certified
Joy of Computing using Python,
By IIT ROPAR 3
Machine Learning,
by IIT MADRAS- Top 1%



NEHA SHANBHAG

Elite + Gold Certified Introduction to Internet of Things-97% Programming in Java-96%

Figure. 4.6.3.d Performance of CSE Students in NPTEL





Figure. 4.6.3.e Students of CSE participated in VTU University Football event at SIT, Tumkur



Figure. 4.6.3.f CSE Student participation certificate

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 [of Join
Dr. Jagadeesha S N	AECPJ2430B	ME/M. Tech and PhD	12/03/1996	Electronics and Computer Engineering	4	2	2	Professor	04/08/2016	04/08/2
Dr. Manu A P	AGHPA3557B	ME/M. Tech and PhD	10/03/2014	Information Technology		4		Professor	31/07/2017	31/07/2
Dr. Sunitha B	BYUPS9743M	ME/M. Tech and PhD	09/01/2018	Cloud Computing	3			Associate Professor	31/07/2017	31/07/2
Dr. Likewin Thomas	AFBPL8205Q	ME/M. Tech and PhD	23/02/2018	Machine Learning	8			Associate Professor	26/03/2018	26/03/2
Mr. Raghavendra K	APDPR5514E	M.E/M.Tech	07/01/2010	Computer Science & Engineering				Assistant Professor		08/08/2
Mr. Sunilkumar H R	CRWPS6455A	M.E/M.Tech	03/05/2014	Computer Science & Engineering	2			Assistant Professor		05/08/2
Mrs. Pratibha	BMRPP2412F	M.E/M.Tech	03/05/2014	Computer Science & Engineering	1			Assistant Professor		01/07/2
Mr. Chethan L S	AZJPC4463H	M.E/M.Tech	05/04/2013	Computer Science & Engineering	2			Assistant Professor		24/07/2
Mr. Shamantha G S	ENHPS4287K	M.E/M.Tech	05/04/2013	Networking & Internet Engineering				Assistant Professor		29/07/2

Mr. Sunil M E	DNSPS4784P	M.E/M.Tech	21/01/2017	Computer Science & Engineering	6	Assistant Professor	25/07/2
Mrs. Thara K	AKZPT3752H	M.E/M.Tech	05/04/2013	Computer Science & Engineering	1	Assistant Professor	25/07/2
Mr. Rajesh T H	BVAPR1587B	M.E/M.Tech	03/05/2014	Computer Science & Engineering		Assistant Professor	21/07/2
Mr. Devraj F V	APTPV1227J	M.E/M.Tech	03/05/2014	Computer Science & Engineering		Assistant Professor	21/07/2
Mr. Gurudev S Hiremath	AIYPH1107M	M.E/M.Tech	05/04/2013	Computer Science & Engineering		Assistant Professor	24/07/2
Mr. Ranjan Venugopal	BKFPR2581B	M.E/M.Tech	05/05/2016	Networking & Internet Engineering	2	Assistant Professor	29/08/2
Mr. Prabhu Kumar C	BIRPP4742G	M.E/M.Tech	05/05/2016	Networking & Internet Engineering	1	Assistant Professor	24/07/2
Mr. Puneetha B H	BFHPP4867H	M.E/M.Tech	05/04/2013	Computer Science & Engineering	4	Assistant Professor	13/02/2
Mrs. Divya S	CVYPD0538F	M.E/M.Tech	21/01/2017	Computer Science & Engineering		Assistant Professor	06/02/2
Mrs. Jyothi S S	EJUPS8453N	M.E/M.Tech	21/01/2017	Computer Science & Engineering		Assistant Professor	06/02/2

Mr. Pradeep	BNXPK9796G	M.E/M.Tech	05/04/2013	Computer Science and Engineering				Assistant Professor		21/07/2
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5.1 Student-Faculty Ratio (20)

Total Marks 10.00

Institute Marks: 10.00

UG

No. of UG Programs in the Department 1

			С	Comput	iter Science & Engineering	I			
	CAY			CAYm1			CAYm2		
Year of		(2019-20)		(2018-19)				(2017-18)	
Study	Sanction Intake	Actual admitted through lateral entry students		Sanction Actual admitted through lateral entry students		ıgh lateral	Sanction Intake	Actual admitted through latera entry students	
2nd Year	120	13	1	120	8		120	3	
3rd Year	120	8	1	120	3		120	17	
4th Year	120	3	1	120	17		120	20	
Sub- Total	360 24		3	360	28		360	40	
Total	384		3	388		400			
Grand Total 384			3	388		400			

PG

No. of PG Programs in the Department 1

		C	ompute	er Science & Engg.	
Voor of Study		CAY(2019-20)		CAYm1(2018-19)	CAYm2 (2017-18)
Year of Study		Sanction Intake		Sanction Intake	Sanction Intake
1st Year		0		0	24
2nd Year		0		24	24
Total		0		24	48
			Digi	tal Electronics	
Voor of Study		CAY(2019-20)		CAYm1(2018-19)	CAYm2 (2017-18)
Year of Study		Sanction Intake		Sanction Intake	Sanction Intake
1st Year		0		0	24
2nd Year		0		24	24
Total		0		24	48
		Maste	er of Bu	usiness Administration	
Year of Study		CAY(2019-20)		CAYm1(2018-19)	CAYm2 (2017-18)
rear or Study		Sanction Intake		Sanction Intake	Sanction Intake
1st Year		60		60	6
2nd Year		60		6	60
Total		120		66	66
Grand Total	120		114		162

SFR

No. of UG Programs in the Department	1
No. of PG Programs in the Department	1

Description	CAY(2019-20)		CAYm1 (2018-19)		CAYm2 (2017-18)	
Total No. of Students in	384	Sum total	412	Sum total	448	Sum total
the Department(S)	of all (UG+PG) students		of all (UG+PG) students		of all (UG+PG) students	
No. of Faculty in the Department(F)	16	F1	17	F2	19	F3
Student Faculty	24.00		24.24		23.58	
Ratio(SFR)	SFR1=S1/F1		SFR2=S2/F2	_	SFR3=S3/F3	
Average SFR	23.94	SFR=(SFR	1+SFR2+SFR3)/3			
F=Total Number of Facu	Ity Members in the Departm	nent (excludii	ng first year faculty)			

Note: 75% should be Regular/full time faculty and the remaining shall be Contractual Faculty/Adjust Faculty/Resource persons from industry as per AICTE norms and standards. The contractual faculty will be considered for assessment only if a faculty is drawing a salary as prescribed by the concerened State Government for the contractual faculty in the respective cadre.

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(2019-20)	16	0
CAYm1(2018-19)	17	0
CAYm2(2017-18)	19	0

Average SFR for three assessment years: 23.94

Assessment SFR: 10

Total Marks 20.00

Institute Marks: 20.00

Year	Profess	sors	Associate Pr	ofessors	Assistant Professors	
Teal	Required F1	Available	Required F2	Available	Required F3	Available
CAY(2019-20)	2.00	2.00	4.00	2.00	12.00	12.00
CAYm1(2018-19)	2.00	2.00	4.00	2.00	13.00	13.00
CAYm2(2017-18)	2.00	2.00	4.00	0.00	14.00	17.00
Average Numbers	2.00	2.00	4.00	1.33	13.00	14.00

Cadre Ratio Marks [(AF1 / RF1) + [(AF2 / RF2) * 0.6] + [(AF3 / RF3) * 0.4]] * 12.5 : 20.00

5.3 Faculty Qualification (25)

Total Marks 11.03

Institute Marks: 11.03

	x	Y	F	FQ = 2.5 x [(10X + 4Y) / F)]
2019-20(CAY)	4	12	19.00	11.58
2018-19(CAYm1)	4	13	20.00	11.50
2017-18(CAYm2)	2	17	22.00	10.00

Average Assessment: 11.03

5.4 Faculty Retention (25)

Total Marks 20.00

Institute Marks: 20.00

Description	2018-19	2019-20
No of Faculty Retained	16	15
Total No of Faculty	19	19
% of Faculty Retained	84	79

Average: 82.00

Assessment Marks: 20.00

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

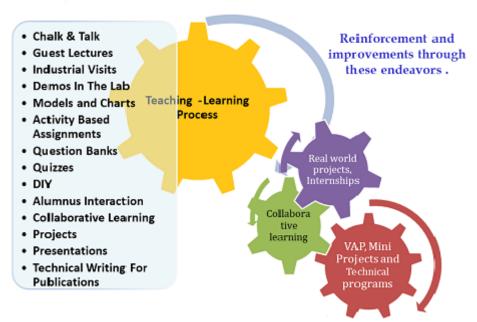
Total Marks 18.00

Institute Marks: 18.00

Innovations by the faculty in Teaching and Learning

- Use of modern teaching aids like LCD projectors, Internet enabled computer systems; WiFi enabled systems deployed to facilitate student learning environments.
- Video lectures delivered by the various eminent resource persons made available in the college digital library and it facilitates the faculty and students to utilize e-tutorials of NPTEL, access e-Journals and department library etc.
- The faculty members are encouraged to participate in STTP, webinar, FDP's and workshops on latest topics to keep pace with the advanced level of knowledge and technical skills.
- The faculty have been participating/presenting papers in National/International conferences and publish their articles in National/International journals to enrich their knowledge.
- Projects based learning students are encouraged to take up projects from lower semesters only to enhance their skills in their area of interest. 5th and 6th semester labs include a mini project to make students learn the subjects thoroughly with practical applications and develop their team work skills
- The Tech-fest/Student development activities/workshops are organized by the department an also to inculcate the technical skills of the students.
- Faculty also prepare the lesson plan as per the National Mission on Education through Information and Communication Technology (ICT) promoted by AICTE along with regular course materials.
- The department of Carrier development Cell regularly organizes soft skill classes based on the availability and requirement, to enhance the student's communication skills, grooming and body language to equip them for the professional world.

STUDENT CENTRIC TEACHING - LEARNING PROCESS



SI. No.	Pedagogical Methods	Activities
	Method : Website	
	Learning	Website is designed by a faculty to share NPTEL video link, notes, PPTs, Sample programs,
	Faculty: Mr. Chethan L	Assignments related to the subject and the students can visit the website for the easier access of the
01.	S.	information.
ν.	Assistant Professor	
	Sem/Class :6th Sem	Website Link:www.chethanls.wixsite.com/website
	Course/Course Code:	(//Ranjith/Desktop/www.chethanls.wixsite.com/website)
	Python / 17CS664	

Students are given a case study to conduct the survey on any one local entrepreneurship to understand the present business complexities. Students are asked to visit the small scale industry/ firms and prepare the reports about the visit. The report consist of information regarding the business, turn over, infrastructure, machinery, product manufacture/ service rendered, work force, market needs and the quality of the product. Three to four students in a group conduct case study Students with the local entrepreneur Mr. Prakash Prabhu.

Method: CASE STUDY Faculty: Mr. Ranjan V Assistant Professor Sem/Class :5th Sem Course/Course Code: Management and Entrepreneurship for IT industry / 17CS51



Created a google classroom for the subject storage area network. Students join as members of the google class room. Notes materials, Assignments, Quiz questions are posted in the app. Students can participate in the quiz by registering through app sign in and evaluation will be done.

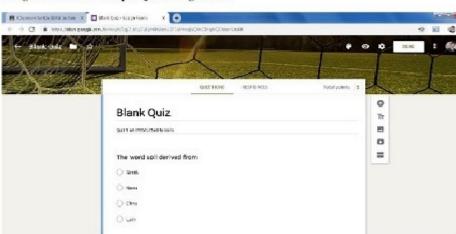
Google classroom: Sample Quiz Google form

Method: Google Class room Faculty: Mr. Chethan L

Assistant Professor Sem/Class: 7th Sem Course/Course Code:

SAN / 15CS754

Ю3.



_		
04	Faculty: Mr. Chethan L S. Assistant Professor Sem/Class: 3 rd Sem Course/Course Code:	Explained the simulation of lab experiments in local language (Kannada) for better understanding and students can view the video in YouTube and it has more than 4.3k views in YouTube channel. YouTube links of the same are shared below. Link: https://youtu.be/kQmdtYdYJdY (https://youtu.be/kQmdtYdYJdY) Link: https://youtu.be/NMECQYxrRLk (https://youtu.be/NMECQYxrRLk) Link: https://youtu.be/NMECQYxrRLk (https://youtu.be/NMECQYxrRLk) Link: https://youtu.be/wmivNuCLhP0 (https://youtu.be/wmivNuCLhP0) Link: https://youtu.be/SchtGrxNmgM (https://youtu.be/SchtGrxNmgM)
05	Faculty : Mr. Ranjan V Assistant Professor	Study material is made available in faculty blog. The students are provided with the updates of the class and also the assignments, PPTs, notes etc. Link to the blog is given below. Link: https://ranjancsepesitm.blogspot.com/ (https://ranjancsepesitm.blogspot.com/)
06	GS	Faculty has shared Google drive where student can access all the PPTs, notes of his subjects at a single place and it is easy for the students to access the same. The link of the google drive is given below. Link:https://drive.google.com/drive/folders/0B5aPufNCypYOczhDc2thcGEwb00 (https://drive.google.com/drive/folders/0B5aPufNCypYOczhDc2thcGEwb00)
07		Students are asked to write a test with the help of the text books and study materials. Complex/creative questions are asked to test the understanding level of the students.

Some concepts like shift and rotate instructions are taught with the help of role play so that students can understand and remember the concept easily. Method : ROLE PLAY Faculty: Mr. Sunil Kumar H R Assistant Professor Sem/Class: 4th Sem Course/Course Code 1: l08. Micro Processor and Micro Controllers /17CS44 And Course/Course Code 2: Computer Organization /17CS34 Method: Website Learning Website is designed to share NPTEL video links, notes, PPTs, Sample programs, Assignments Faculty: Dr. Manu A P. related to the subject and the students can visit the website for easier access of the information. Professor Website Link: http://www.apmanu.in (http://www.apmanu.in/?regp=1®r=) 09 Sem/Class:6th Sem Course/Course Code: Computer Graphics / 15CS62/L68 Method: NPTEL **Based Learning** Faculty: Dr. Sunitha Students will be able to B. S • Understand the structure, syntax, and semantics of the Python language. Associate Professor Sem/Class:6th Sem • Understand how object-oriented programming concepts work in Python. Course: Programming, • Develop your own Dynamic Programming and wrap up applications using the Python 10. l Data Structures and programming language. Algorithm using • Boost your hire ability through innovative and independent learning. Pvthon Course Code: Link: http://nptel.ac.in/courses/106106145/ (http://nptel.ac.in/courses/106106145/) 15CS664 Coordinators/Institute: Prof. Madhavan Mukund/ IIT Madras Method: Solo Learn Faculty: Mr. Sunil M For C++ and Java, we used a SOLOLEARN application learning tool and also used it as a app based compiler to execute the programs in the classroom. **Assistant Professor** Sem/Class: 4th Sem Course/Course Code: OOC / 17CS42

12	Assistant Professor Sem/Class: 5th Sem Course/Course Code: ATCI / 17CS54	Quiz test are conducted through Google quiz form and evaluation of the quiz as done automatically. Assignments also collected through Google form https://docs.google.com/forms/d/1TjPld68wg57dETWFSD4hwwyGoL4Qec3wQEijqbj8GOk/edit (https://docs.google.com/forms/d/1TjPld68wg57dETWFSD4hwwyGoL4Qec3wQEijqbj8GOk/edit) https://docs.google.com/forms/d/1Y6GrQKgtPcjBQ8wS7iYbFPwT5eQgNw7hjvjssW9jr_l/closedform (https://docs.google.com/forms/d/1Y6GrQKgtPcjBQ8wS7iYbFPwT5eQgNw7hjvjssW9jr_l/closedform)
13	Method: Quiz/ Assignment through Google Form Faculty: Mr. Sunil M E. Assistant Professor Sem/Class: 3 rd Sem Course/Course Code: DMS 18CS36	DMS Programming Assignment also collected through Google form
14	Course/Course Code:	In the lab, program basics are explained and students are asked to come prepared in the same week to execute program and after obtaining the program output, the students are asked to modify the program to get desired output. In the next weeks lab, students asked to write tests on the previous week executed program. The same is evaluated and marked for the respective week. On the same day, lab records corrected, evaluated, and marked. This procedure repeated for all the remaining programs.

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		
Name of the faculty	2018-19 (CAYm1)	2017-18 (CAYm2)	2016-17 (CAYm3)
Dr. Jagadeesha S N	3.00	5.00	3.00
Dr. Manu A P	3.00	5.00	3.00

3.00	5.00	3.00
3.00	5.00	5.00
3.00	5.00	5.00
3.00	5.00	5.00
5.00	5.00	3.00
3.00	5.00	5.00
5.00	5.00	5.00
3.00	5.00	5.00
3.00	5.00	3.00
0.00	5.00	5.00
3.00	5.00	5.00
3.00	5.00	3.00
3.00	5.00	3.00
5.00	5.00	3.00
3.00	5.00	3.00
0.00	5.00	3.00
3.00	5.00	3.00
	3.00 3.00 3.00 5.00 3.00 3.00 3.00 3.00 3.00 3.00 3.00 3.00 3.00 3.00 3.00	3.00 5.00 3.00 5.00 3.00 5.00 5.00 5.00 3.00 5.00 3.00 5.00 3.00 5.00 3.00 5.00 3.00 5.00 3.00 5.00 3.00 5.00 3.00 5.00 5.00 5.00 5.00 5.00 5.00 5.00 5.00 5.00

Mr. Kailash Rudra	3.00	5.00	3.00
Ms. Divya S	0.00	5.00	3.00
Mr. Prabhukumar C	0.00	5.00	3.00
Sum	60.00	110.00	82.00
RF = Number of Faculty required to comply with 20:1 Student Faculty Ratioas per 5.1	19.20	20.60	22.40
Assessment [3*(Sum / 0.5RF)]	18.75	32.04	21.96

Average assessment over 3 years: 24.25

5.7 Research and Development (30)

5.7.1 Academic Research (10)

Book Chapters Published

Book onapters	1 abilionioa		
Name of the Faculty	Book Title	Chapter	Year
Dr. Likewin Thomas	Clinical Decision Support System for Early Disease System for Early Disease Detection and Management: Statistics-Based Early Disease Detection	IGI GlobalDOI:10.4018/978- 1-5225-7131-5.ch005	2018-19
Mr. Sunil M E	Sentimental analysis tools	IGI Global Chapter 10	2017-18

List of faculties awarded PhD

SI. No.	Name of the faculty	University	Year of award of PhD
1	Dr Sunitha B S	VTU	2018
2	Dr. Likewin Thomas	NITK[Suratkal]	2018

Total Marks 11.00

Institute Marks: 6.00

Research Center

The department has being recognised as a research centre to peruse M.Sc (Engineering) through research and Ph.D., by the Visvesvaraya Technological University, Belagavi, Karnataka in the year 2018. The following students have registered for their Ph.D. on part time basis, under CSE Programmed Research Centre.

_		
SI	Guide name with designation	Research Scholars name with address
	Dr. A P Manu	1. Mr. Pavan Kumar V
	Professor	MLR Institute of Technology, Dandigal, Hyderabad
1	Dept of CSE PESITM	2. Mr. Janardhana D R
	Shivamogga	Sahyadri College of Engineering and Management, Mangalore

List of PhD Guided

SI. No.	Name of the faculty	PHD guided	Year of Completion
		Dr. Ravindra S	2019
1	Dr. Jagaseesha S N		
		Dr. Mohan K S	2019

List of faculty members Pursuing Ph.D.

SL.	Name of the	Designation	Research center	Enrolment	
NO.	faculty	Designation	Research center	year	
1	Mr. Raghavendra	Assistant	PES, Mandya	2017	
ı	K	Professor	FES, Manuya	2017	
2	Mrs. Pratibha S	Assistant	PES, Mandya	2047	
_	IVIIS. FIALIDITA 3	Professor	FES, Manuya	2017	
3	Mr. Sunilkumar H	Assistant	JNNCE,	2017	
3	R	Professor	Shivamogga	2017	
4	Mrc. Navana K	Assistant	PES, Mandya	2010	
4	Mrs. Nayana K	Professor	PES, Mariuya	2019	
E	Mr. Chethan L S	Assistant	JNNCE,	2042	
5	Mir. Chethan L S	Professor	Shivamogga	2013	
6	Mr. Sunil M E	Assistant	DES Mandya	2017	
6	IVII. SUIIII IVI E	Professor	PES, Mandya	2017	

Paper publications

SI. No.	Name of the Faculty	Title of the paper	Name of the Journal/Conference /Event /Publisher	Year
1.	Dr.Jagadeesha	Random routing scheme with misleading dead ends	International journal of electrical and computer engineering vol 9, ISSN:2088-8708 DOI:10.11591/ijece.v9i5.pp4176-4183	2019- 20
2.	Dr. Likewin Thomas	Home Automation Through NodeRed And Message Queuing Telemetry Transport (MQTT)	"Advances in Intelligent Systems and Computing" Springer. ISSN: 2194-5357 Under publication	2019- 20
	Dr. Likewin Thomas	Voice enabled chatbot using seq2seq and legacy techniques	International Conference on Cybernetics, Cognition and Machine Learning Applications (ICCCMLA) 2019 Springer Under publication	2019- 20
4.	Mr.Sunil M E	supervised	Journal of Emerging Technologies and Innovative Research vol 6, issue 5, may 2019 ISSN-2349-5162	2019- 20
5.	Mr. Ranjan V	Smart Agriculture System	International Journal for Scientific Research & Development Vol. 7, Issue 04, 2019 ISSN (online): 2321-0613	2019- 20
6.	Dr. Jagadeesha S N	Diffie-Hellman Type Key Exchange, ElGamal Like	International Journal of Network Security, Vol.20, No.4, PP.617-624, July 2018 DOI: 10.6633/IJNS.20180720(4).03 Citation 2	2018- 19
7.	Dr. Sunitha B S	Securing SaaS Cloud Infrastructure Using Portable TPM	International Journal of Computational Engineering Research doi:10.1098/rspa.1927.0118	2018- 19

8.	Dr. Sunitha B S	Enhancing Remote Attestation In Cloud Saas Infrastructure Using Portable Tpm	Journal of Emerging Technologies and Innovative Research ISSN: 2349-5162	2018- 19
9.	Dr. Likewin Thomas Mr. Puneeth B H	Virtual Cart: Novel Approach for Revamping Smart Shopping Experience	IEEE DOI: 10.1109/DISCOVER.2018.8674117 (https://www.researchgate.net/deref/http%3A%2F%2Fdx.doi.org%2F10.1109%2FDISCOVER.2018.8674117	2018-)
	Dr. Likewin Thomas	A Healthcare management using clinical decision support system	IEEE IEEE ISBN: 978-1-5386-6894-8 under publication	2018- 19
11.	Dr. Likewin Thomas Mr. Puneeth B H	OCR-Vr Wrapper Reader	IEEE International Conference On Recent Trends In Computational Engineering And Technologies Global Journal Of Engineering Science And Researches ISSN 2348 –8034 Under publication	2018- 19
	Dr. Likewin Thomas	Alphabetic Cryptography: Securing Communication over Cloud Platform	Advances in Intelligent Systems and Computing (AISC) Series, Springer. https://doi.org/10.1007/978-981-13-3338-5_19 (https://doi.org/10.1007/978-981-13-3338-5_19) □ Online ISBN 978-981-13-3337-8	2018- 19
13.	Dr. Likewin Thomas	Simplifying Spaghetti Processes to Find the Frequent Execution Paths	International Conference on Smart System, Innovations and Computing pp 693- 701 Springer, Singapore ISBN 978-981-10-5828-8 DOI 10.1007/978-981-10-5828-8	2018- 19

14.	Mr. Sunil H R		IEEE sponsored 3rd International Conference on Electrical, Electronics, Communication, Conference	2018- 19
15.	Mr. Puneeth B H	application for	IEEE:International conference on Recent trends in computational engineering and technologies doi.org/10.1111/0885-9507.00189 (https://doi.org/10.1111/0885-9507.00189)	2018- 19
16.	Dr. Jagadeesha S N	Proxy Re- encryption using Rectangular Integer Matrix Keys	IEEE DOI: 10.1109/ICACCI.2017.8126006 (https://www.researchgate.net/deref/http%3A%2F%2Fdx.doi.org%2F10.1109%2FICACCI.2017.8126006)	2017- 18
17.	Dr. Jagadeesha S N	Multi-hop	IEEE International Conference on Computational Systems and Information Technology for Sustainable Solutions DOI: 10.1109/CSITSS.2017.8447573 (https://doi.org/10.1109/CSITSS.2017.8447573)	2017- 18
18.	Dr. Sunitha B S	A Novel Approach to Enhance Security in Cloud based SERBAC	International Journal of Computational Engineering Research ISSN Online: 2250-3005	2017- 18
19.	Dr. Likewin Thomas	Progression	International Conference on Smart System, Innovations and Computing pp 729-738 Springer, SBN 978-981-10-5828-8	2017- 18
20.	Mr. Sunilkumar H R & Mr. Thara K L	A Survey on Secure Agile Software Development Process	National Conference on Advanced Research in Science, Engineering and management, PESITM , Shivamogga	2017- 18

21.	Mr. Chethan L	Improved low light image enhancement in wireless	IJAER	2017 18
	S	multimedia sensor networks Journal	ISSN 0973-4562 Volume 13	10
22.	Mr. Prabhu Kumar C	Hybrid Approach to Extract Text in Natural Scene Images	International journal for scientific research and development ISSN (Online) 2321-0613	2017 18
23.		TOL AASIA	133N. 2434-132A	2017 18
24.		Android App on Generic Medicine	IJSTE ISSN 2349784	2017 18
25.	Machine Learning Approach for 25. Mr. Pratibba S. anamoly		International Symposium on cloud computing and data analytics, NIT Mysore	2016 17
26.	Mr.Chethan L S	A survey of coverage analysis in wireless multimedia sensor networks	International journal of scientific development and research vol 1,issue 9	2016 17
27.	Mr. Sunil M E	Smart dustbin in National conference on Product Design	(NCPD) MSRIT	2016 17
28.	Mr. Sunil M E	Detecting Spam review in e-commerce website	National conference on Emerging Trends and	2016 17
29.	Mr. Sunil M E	Applications and Techniues of big data for development	A survey,National conference on Research in Science, PESITM shivamogga,	2016 17

30.	Mr. Sunil M E	deep learning techniques and applications	National conference on Research in Science, PESITM shivamogga	2016- 17
31.	Mr. Sunil M E	y .	National conference on Research in Science, PESITM shivamogga,	2016- 17
1 0	Mr. Prabhu Kumar C	Robust Video Watermarking against Noise and frame Attacks Using Wavelet Transforms and Singular Value Decomposition	Indian Journal of Science and Technology,	2016- 17

5.7.2 Sponsored Research (5)

2018-19 (CAYm1)

Project Title	Duration	Funding Agency	Amount
End to End verifiable and preferential strategy based electronic voting system using delegated proof of stake on block chain	1year	VTU TEQIP GRANT	200000.00
			Total Amount(X): 200000.00

Institute Marks: 0.00

2017-18 (CAYm2)

Duration	Funding Agency	Amount
	Duration	Duration Funding Agency

2016-17 (CAYm3)

Project Title	Duration	Funding Agency	Amount

Cumulative Amount(X + Y + Z) =

5.7.3 Development Activities (10) Institute Marks : 5.00

Research laboratories:

- Virtual LAB
- 1. To provide remote-access to Labs in various disciplines of Science and Engineering. These Virtual Labs would cater to students at the undergraduate level, post graduate level as well as to research scholars.
- 2. To enthuse students to conduct experiments by arousing their curiosity. This would help them in learning basic and advanced concepts through remote experimentation.
- 3. To provide a complete Learning Management System around the Virtual Labs where the students can avail the various tools for learning, including additional web-resources, video-lectures, animated demonstrations and self evaluation.
- 4. To share costly equipment and resources, which are otherwise available to limited number of users due to constraints on time and geographical distances

A list of sofware facilyt availble is tabulated as follows.

SI. No.	Licensed Software Description
1	Microsoft e-licensed
2	Window server
3	MS office
4	SQL Server
2 3 4 5 6	Windows
6	Linux
7	Keil Software
8	ARM7 LPC 2148 Kits

Instructional Materials

SI. No.	Details
1	VTU e-learning
2	Lab Manuals
3	NPTEL videos
4	Swayam videos
5	Assigments
6	Technical Seminar reports
7	Project thesis
8	Notes and PPts
9	Question bank (can make a repositories from lesson plan)

Working models/Charts/Monograms

SI. No.	Details
1	Animations
2	Lab Description Charts
3	Lab Manuals

5.7.4 Consultanc	y(from	Industry)	(5)
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Institute Marks:

2018-19 (CAYm1)

Project Title	Duration	Funding Agency	Amount

2017-18 (CAYm2)

Project Title	Duration	Funding Agency	Amount

2016-17 (CAYm3)

Project Title	Duration	Funding Agency	Amount

Cumulative Amount(X + Y + Z) =

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

Total Marks 26.00

Institute Marks: 26.00

Faculty Performance Appraisal and Development System (FPADS) is a platform where institution and its stake holders grow horizontally and vertically. It's a kind of motivation and encouragement to the faculty members to contribute towards the growth of the institution by updating themselves in all dimensions. The institution has a unique way of measurement of faculty performance and development system. As soon academic year starts the faculty appraisal format is shared by the HOD to all the teaching and non teaching staff of the department so that faculty members are well aware on the appraisal measurement criteria. Faculty is asked to indicate the predicted percentage of pass results in their handling subjects before they proceed with the teaching and learning process. The same is sent to the Human Resource (HR) department. During the month of September actual process begins where faculty members are asked to submit their self appraisal report to the HOD in a standard form which is common across the institute. At department level HOD will evaluate the report based on the criteria and one to one discussion will happen to maintain transparency. The same report is submitted to the principal for further processing for needful recommendations. Based on the appraisal and recommendations faculty members shall get salary hike/promotions/appreciations letter etc.

Implementation and effectiveness:

Evaluation of each and every staff members appraisal report is based the following criteria.

- 1. Qualifications
- 2. Experience
- 3. Students feedback
- 4. VTU exam results
- 5. Number of research papers published(National/International/Journals)
- 6. Number of patents filed/obtained
- 7. Number of projects work/dissertation and Ph.D. guided
- 8. Number of BE projects guided
- 9. Number of research projects applied/funded
- 10. FDPs conducted/attended
- 11. Details of the International/ National Conferences/ Seminars/ Workshops Conducted/ Attended
- 12. Pedagogy methods adopted/followed Details
- 13. Administrative responsibilities
- 14. Responsibilities on students co-curricular/extra co curricular activities
- 15. University duties/responsibilities

The process of performance evaluation is as follows:

- 1. The Faculty fills the self appraisal format and submits with necessary supporting documents to the HOD
- 2. The HOD evaluates and submits to the establishment section /HR department for further action
- 3. The establishment section/HR department consolidates and submits it to the Principal
- 4. The principal in consultation with HOD makes recommendations to the higher authority
- 5. The recommendations would be advising/encouraging, the faculty to participate in FDPs/workshops/seminars/conferences, submit proposal to funding agencies, enhance knowledge

A blank format of faculty appraisal form is as shown below

10	<u> </u>	PE	o insti	tute	OI			and I	ana	agement
Issue/ Rev. I			Date: 15/12/20				: 1 of 6			m No: R/PP-12/HR-0
			ce Apprais	al Forr	n 2019-	2020 (01-09		o 31-08-2	2020)	
ame of the		:				Departme	EMP Code:			
					te of Bir	th:		Date of J	oining	
obile No:	ion (Starting	from the la	test to the earl	AN No	:		Aac	lhar No:		
Degree		cialisation	University			Year	Class	obtained		Remarks
2. Experience	e (Starting f	from the late	st to the earlie	st)						
Designat		From	То	Total		Institution	Expe	erience		Remarks
		D/MM/YY	DD/MM/YY	Years			Cert	ificate Y/N		
				\square			_			
culty Develo	pment prog	grams atten	ded during th	e year.	Page 1	of B				
Name	of the FDP		In	stitution	1	Departn	nent	ent Date of starting/duration		
			+							
						led during the ye participation is as		e/Chairine a	Session/	Keynote Speaker etc
			,			,		,	,	
tional Confere	nce/ Semin	ars Conducte	d (nl indicate in	what ca	nacity sou	rce of funds, Venu	el			
- Content		and control te	- Ibs moreste ii	ca	p=1.11, 200	on runus, venu	-,			

Teaching Aids used

Books referred and read in the subject taught:
Use of Course plan (Give details) :

Was any outbound teaching used, If yes give details
Use of ICT in teaching, If yes give details:

Do you disseminate practical & expertise knowledge If yes give details

Was Course material prepared? If Prepared was it used by the students? If yes give details/specifics

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Summary:-										
a) Total Teaching experien	ce at Degree level		(PESITM+ other institu	te)						
b) Industrial Experience	b) Industrial Experience/									
c) Research experience										
(Excluding period spent f	or acquiring a degree)									
Additional qualification/training/ex	pertise obtained during Curren	nt acad	emic year							
3. Number of Research papers	published (Excluding those whic	ch has t	been communicated) for the cur	rent year only						
a. Journals – Internatio	nal/National Journals/									
b. Conferences – Intern	national/National Conferences	/	••••••							
c. Number of Patents of	c. Number of Patents obtained/filed: International/National									
(Attach a list of publication including	the title of the paper, Journal i	in which	h it is published, year and month	of publication, volu	me number, pages)					
4. A. Number of B. Tech pro	ojects/Number of ME/ Ph.D dis	sertati	ons Guided in the present acade	emic year/	//					
5. Details of Research projects	applied/undertaken during the	year.								
Title of the project	Name of the Age	ncy	Date of starting & duration	of the project	Amount					
6. Faculty Development progra	ms conducted during the year.	(pl indi	cate in what capacity, source of fur	nds, Venue, <u>No.of</u> par	rticipants)					
Name of	the FDP		Date of starting/duration	Number o	of participants					

10a. Administrative responsibility (Tick wherever appropriate)									
Role	Role Aug to Dec Feb to July								
Faculty Adviser/Mentor									
Head of the Department									
Chief Warden									
Warden									
Resident Warden									
Faculty Co-coordinator of Student Activity									
(Mention the name of the activity)									
Member/Chair/Co-Chair of Professional bodies like									
IEEE/IETE/CSI/ISTE etc.									
NBA Coordinator									
Other Activities*									
(Mention the type of activity)		1							

*(Lab in charge, counseling students, NBA assistance, calling parents with record, VTU marks entry, class teacher, mentor, lab preparation and monitoring, course coordinator, students club, self-initiation in organizing seminars, organizing industrial visits, preparing handouts, banners, ...); record to enclose

10b. Contributions to institute development in other areas / Any other information you would prefer to file (be brief and indicate each activity involved with a bullet head) Attach in a separate sheet/s if required

11.Present Academic (Theory & Practicars) v	TOTAL COURT OF COMM	(ose separa				
Semester			00	d / Even		
	Sub-1	Sub-2	Sub-3	Sub-4	Sub-5	Sub-6
	odd/even	odd/even	odd/even	odd/even	odd/even	odd/even
Subject name with code						
Course plan						
Course file						
Subject notes						
Scheme and evaluation of all tests						
No. of hours handled						
No. of units/modules completed						
Reasons for not completing all						
units/modules , if any						
Projected % results at the university *						
VTU results percentage						
Subject: theory/analytical						
Avg IA & max IA marks scored by students						
Avg & max marks scored by students in						
university exam						
Justification for variations in projected &						
obtained results for the subject (Use Separate sheet if necessary)						
(Use Separate sneet if necessary)						

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E. SDP - Seminars/ Conferences/ Workshops Conducted (Weight 5%) in & outside campus									
10 9 8 7 6 5 4 3 2 1									
Seminars/workshops/ symposiums conducted: 5 points									
: 2 points for one event, 4 points for two events and 5 points for three or more events;									
add two points if the event is held outside of our institute									
F. Student Co-curricular/activity (Weight 10%)									
10 9 8 7 6 5 4 3 2 1									
Final year BE/MBA-project Guided at college level 2 points per project subject to a max of 4 points for projects guided;									
Ph.D. dissertation 4points/award of Ph.D. to RS									
Students club activity – 2; Students technical paper guidance/mini projects – 1/paper/mini project, subject to a max of 3 points									
Total points scored on F limited to a maximum of 10									
G. Student Extra-curricular activity (Weight 5%)									
10 9 8 7 6 5 4 3 2 1									
To allocate points as per contribution by the staff member for the current year only									
Total self-assessment obtained by the staff member=									
[A x 0.05 + score of Bx0.015 + score of (C+F) x0.01 + score of (D+E+G) 0.005] X 100%									
Note: 1. Total calculated score should be s 100%. ; 2. Submission of wrong information is liable to be rejection of the self-appraisal report. ; 3. Staff									
/ faculty can use additional page if necessary for specific Remarks or comments.									
I									
will be held responsible. The above information is for the period 1 ⁵⁷ Sept 2019 to 31 ^e Aug 2020.									
Dated : Signature of the faculty with date									

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Assessment of the Faculty on the following Indicators:														
4	A. Academic (Weight 50%)													
	10	9	8	7	6	Т	5	4		3	Т	2	1	
[If the % res	sults obta	ined in t	he univ	ersity e	kam is	- 96 -	1009	6; 91	-95	%; 86	-90%	i; 81	-85;7	76-80%; 71-75%; 66-70%; 61-65%; 56-60%; 51-55%; &
<50% then p	oints sco	re are, A	A=10; 9	; 8; 7; 6;	5, 4, 3	, 2, 1	& o r	espe	ectiv	vely]				
Add 15% we	ightage 1	to the %r	esults	for analy	tical su	ubjec	ts							
Add 10% yyg	ightage 1	to the %r	esults i	f % Avg	-IA & 9I	6 avg	unive	ersity	/ ma	arks so	ored	lint	he su	bject is within 10% of each other
Add 1096 to	the %res	ults if an	v outbo	und/rei	nforce	men	t tead	hine.	has	heen	don	e in	the si	ubject to maximum of 100% for each subject And, further
														ge to obtain final score under this criterion
_														-
B. Research and Consultancy (Weight 15%)														
	10	9	8	7	6		5	4		3		2	1	
Patents Obt														
		•			•			•		•			•	and above for the current year only.
													•	rnals for the current year only
														bove for the current year only
			_						•				_	rated below Rs.50000. for the current year only
_		•		_										e generated below Rs.100000. for the current year only
							ubmitt	ed-	sub	oject to	o a m	iaxii	num:	four points for the current year only
Total points														
C	. Facult	y Develo	pment	Progra	mmers	Con	ducte	d/ A	tte	nded (Wei	ght	10%)	
	10	9	8	7	6		5	4		3		2	1	
	onducted								ten	ded:	3 роі	ints	for or	ne FDP and 5 points for two or more FDPs
). Semin	ars/Con	ferenc	es/Atte	nded (\	Weig	ht 5%)						
	10	9	8	7	6		5	4		3		2	1	
Seminars/w														
Seminars/workshops/ symposiums attended: 2 points for one event, 4 points for two events and 5 points for three or more events														

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Remarks by the HOD (use separate sheet if required) :
Remarks by the HOD (use separate sheet if required): 1. Self Assessment: (50% weight age) 2. Student Feed Back (20% weight age) 3. Contributions to institute development in other areas (10% weight age) 4. HOD's academic assessment (10% weight age) 5. HOD's administrator assessment (10% weight age) Principal Management
2. Student Feed Back (20% weight age)
Contributions to institute development in other areas (10% weight age)
HOD's academic assessment (10% weight age)
5. HOD's administrator assessment (10% weight age)
Principal
Management
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5.9 Visiting/Adjunct/Emeritus Faculty etc. (10)

Institute Marks:

6 FACILITIES AND TECHNICAL SUPPORT (80)

Total Marks 51.00

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

Total Marks 22.00

Institute Marks: 22.00

		Number		Weekly utilization	Technical Manpower Support				
Sr. No	Name of the Laboratory	of students per set up(Batch Size)	Name of the Important Equipment	the courses for which the lab is utilized)	Name of the Technical staff	Designation	Qualification		
1	Machine Learning Lab	22	Acer veriton 19.5inch desktop, core i5 6th generation processor, 4GB RAM, 1TB HDD, DVD drive, USB Keyboard and Mouse.	18 Hours	Mrs. Sahana	System Admin	B.E		
2	Computer Network Lab	22	Acer veriton 19.5inch desktop, core i7 8th generation processor, 4GB RAM, 1TB HDD, USB, Keyboard and Mouse.	18 Hours	Mrs. Sahana	System Admin	B.E		
3	Data Base Management Lab	22	Acer veriton 18.5inch desktop, dual core 2.50 GHZ processors, 2GB RAM 160 GB HDD, PS2 Keyboard and Mouse. 24 PORT 6 CISCO Switches	18 Hours	Mrs. Chetana S	Programme	ВСА		
4	Data Structure	22	Acer veriton 19.5inch desktop, core i5 6th generation processor, 4GB RAM, 1TB HDD, DVD drive, USB Keyboard and Mouse. 24 PORT 2 CISCO	24 Hours	Mr.Sharath S	Programmer	B.E		

			I				
5	Web Technology Lab	22	Acer veriton 18.5inch desktop, dual core 2.50 GHZ processors, 2GB RAM 160 GB HDD, PS2 Keyboard and Mouse. 24 PORT 6 CISCO Switches	18 Hours	Mrs. Chetana S	Programmer	вса
	Microcontroller		CRO, Signal generator, Trainer kits, ICs, Transistors, DC Power Supply (Fixed/variable), Tower Desktop. 24 PORT 2 CISCO Switches, Patch Chords, Breadboards, Resistors, Capacitors, 741 Opamps, 555				
6	and Embedded	22	timers, Cutters, Nose pliers, Wire snippers, Digital multimeters, Single Strand wires, Crocodile probes,	18 Hours	Mrs. Sahana	Programmer	B.E
	System Laboratory		BNCs, Voltmeters, Ammeters, ARM7 LPC2148 evaluation boards and kits, DC motor, Steeper Motor, PCI cards, RFC cables, Logic controller kit, 7 Segment Display Kit, Elevator kit, DAC kits				
7	Project Lab	22	Acer veriton 19.5inch desktop, core i5 6th generation processor, 4GB RAM, 1TB HDD, DVD drive, USB Keyboard and Mouse.	18 Hours	Mr. Sharath	System Admin	B.E
8	Computer Graphics Lab	22	Acer veriton 19.5inch desktop, core i7 8th generation processor, 4GB RAM, 1TB HDD, USB, Keyboard and Mouse.	18 Hours	Mrs. Sahana	System Admin	B.E
	Algorithms Lab 22 Core i5 7th gen, 4GB RAM, 1TB						
9	HDD, 18.5" Monitor, Keyboard and Mouse. 18	22	Acer veriton 19.5inch desktop, core i5 6th generation processor, 4GB RAM, 1TB HDD, DVD drive, USB Keyboard and Mouse. 24 PORT 2 CISCO	18 Hours	Mrs. Chetana S	Programmer	ВСА
	Hours Mrs. Chetana S Programmer BCA						
10	System Software Lab	22	Acer veriton 18.5inch desktop, dual core 2.50 GHZ processors, 2GB RAM 160 GB HDD, PS2 Keyboard and Mouse. 24 PORT 6 CISCO Switches	18 Hours	Mrs. Chetana S	Programmer	ВСА

11	C Programming Lab	30	C Programming Lab 30 Dual core 2.50GHz, 2GB RAM, 160GB, 18.5" Monitor, Keyboard and Mouse 24 Hours Mr. Sharath System Admin B.E	9 Hours	Mr. Sharath	System Admin	B.E
12	Analogue and Digital Electronics Lab	22	CRO, Signal generator, Trainer kits, ICs, Transistors, DC Power Supply (Fixed/variable), Patch Chords, Bread-boards, Resistors, Capacitors, 741 Opamps, 555 timers, Cutters, Nose pliers, Wire snippers, Digital multimeters, Single Strand wires, Crocodile probes, BNCs, Voltmeters, Ammeters	18 Hours	Mrs. Sahana	Programmer	B.E
13	C Programming Lab	30	C Programming Lab 30 Dual core 2.50GHz, 2GB RAM, 160GB, 18.5" Monitor, Keyboard and Mouse 24 Hours Mr. Sharath System Admin B.E	9 Hours	Mr. Sharath	System Admin	B.E

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

Total Marks 12.00

Institute Marks: 12.00

	Facility Name	Details	Reason(s) for creating facility	Utilization	Areas in which students are expected to have enhanced learning	Relevance to POs/PSOs
--	------------------	---------	---------------------------------	-------------	--	-----------------------

1	Virtual Lab/ Project Lab	Acer veriton 19.5inch desktop, core i5 6th generation processor, 4GB RAM, 1TB HDD, DVD drive, USB Keyboard and Mouse.	To develop the practical knowledge in some subjects like python, cryptography, data structures etc. Students can work in labs also during beyond the teaching hours in groups to develop mini projects and final projects and industry oriented projects.	Throughout the semester	All Areas Related to computer Science like Web development, image processing, computer Network research.	PO5,PO10,PO9
2	NPTEL	Core i3, 2GB RAM, 320 GB HD, Audio system, speakers, Projector, Mike.	NPTEL videos are very good and helpful, learning from the professors of IITs is very good and anyone not having internet connection can also have access to the offline lecture videos.	Throughout the semester	All Areas Related to computer Science like Web development, image processing, computer Network research.	PO1,PO2,PO3,PO4,PO5,PO10PO12,PSO1

3	RESEARCH LAB	Acer veriton 18.5inch desktop, dual core 2.50 GHZ processors, 2GB RAM 160 GB HDD, PS2 Keyboard and Mouse	It is a facility provided to conduct scientific, technological research. Student who engages in this can develop problem solving and critical thinking skills, as well as gain exposure to materials and equipments in lab setting.	Throughout the semester	All Areas Related to computer Science like Web development, image processing, computer Network research.	PO1,PO2,PO3,PO4,PO5,PO6,PO7,PO8,PO12,PSO1,PSO2,PSO3
4	SRICHID LAB	Acer veriton 18.5inch desktop, dual core 2.50 GHZ processors, 2GB RAM 160 GB HDD, PS2 Keyboard and Mouse.	Lab set up to develop IT products, web based applications and mobile applications. To train students on new technologies	Throughout the semester	All Areas Related to computer Science like Web development, image processing, computer Network research.	PO1,PO2,PO3,PO4,PO5,PO6,PO8,PSO1

6.3 Laboratories: Maintenance and overall ambiance (10)

Total Marks 6.00

Institute Marks: 6.00

Concerned faculty in charge along with instructor is responsible for maintenance of laboratory. All the laboratories are maintained periodically. Annual maintenance contract is given to the vendor for smooth maintenance of the laboratory UPS. In house maintenance is also carried out as per requirement. Overall ambience of the laboratories is maintained.

Maintenance of Laboratory Equipments

- 1. Log Register is maintained in the laboratories.
- 2. As per the requirement minor repairs are carried out by the lab technical staff. The CS Department has got computer maintenance cell.
- 3. Major repairs are outsourced.

4. Regular checkup of equipment is carried out at the end of every semester.

Overall Ambience

- 1. Department has enough laboratories with sufficient hardware and software which are used by students and staff on timetable basis to meet the curriculum requirements.
- 2. Usage of open source software is encouraged.

Table 6.3.a: Lab software details

SL NO	LAB NAME	Operating System	Software's Used
1	2F10C	Ubuntu 16.04 LTS	Freeglut3-dev Version 2.2.1-2 Anaconda3-4.3.1, Gedit-Version 3.18.3, LibreOffice 5.1.6.2, Oracle-xe-11.2.0, Vim version 7.4, GCC 5.4.0, Jupyter, Rstudio, Spyder, LaTex
2	2F10A	Ubuntu 16.04 LTS	Freeglut3-dev Version 2.2.1-2 Anaconda3-4.3.1, NS2, Gedit-Version 3.18.3, LibreOffice 5.1.6.2, Oracle-xe-11.2.0, Vim version 7.4, GCC 5.4.0,
3	2F16A	Ubuntu 16.04 LTS	Gedit-Version 3.18.3, LibreOffice 5.1.6.2, Oracle-xe-11.2.0, Netbeans 7.4, NS2, Vim version 7.4, GCC 5.4.0,
4	2F16C	Ubuntu 16.04 LTS	Gedit-Version 3.18.3, LibreOffice 5.1.6.2, GCC 5.4.0, MySQL server, Oracle-xe-11.2.0, Apache Server, PHP, Vim version 7.4
5	2F21A	Ubuntu 16.04 LTS	Gedit-Version 3.18.3, LibreOffice 5.1.6.2, GCC 5.4.0, Vim version 7.4
6	2F21C	Windows 7	MASM, KEIL, NXP, Flash Magic, Modelsim, Multisim

- 3. Conditions of chairs/benches are good. Chairs are provided for individual student in Labs.
- 4. Sufficient number of windows is available for ventilation and natural light and every lab has one exit.
- 5. Lab systems are backed up by 60 KVA UPS.
- 6. Each Lab is equipped with white board, computer, Internet, printers, projector and curtains for windows.
- 7. Internet facility with 100 Mbps bandwidth.
- 8. Do's, Don'ts and Safety measure are displayed in each laboratory.



Figure 6.3.a: System Software Lab (2F16C) view



Figure 6.3.b: Project Lab (2F10C) view

Microsoft Open License Agreement

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			Licen	see Authoriz	ation Number	_
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Protect License Product Eq. To Guard corrun Descriptorolacts you will need to use a specific Polame License Product Eq. (PLE). This VEE as insend re-your Figure 6.3.c: Microsoft License

TAXI					Original - Buyer's Copy	
PEWELL COMPUTERS	Invoice No.			Dat	Dated	
ESIDE: KIRAN X-RAV	TC1	1020		29	29-Sep-2008	
SHIVAMOGGA-577 204 /	Delivery Note 2649 Supplier's Ref.			Mo	Mode/Terms of Payment 100% AGAINST INSTALLATION Other Reference(s)	
PHONE: 08182 - 270863 (O) ELL NO: 94481 38669						
				Oth		
-mail : typewellcomputer@yahoo.com onsignee				Out	el Reference(s)	
THE PRINCIPAL	Buyer's Order No. 30.08.2008				Daled 30-Aug-2008	
PESIT&M						
SUDADAKERI	Despatch Document No.			Date	d	
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Figure 6.3.d: Windows Vista License

6.4 Project laboratories (5)

Total Marks 3.0

To do main and mini projects there is a dedicated Lab with 25 systems. The lab will be utilized by all the students who are interested to do the projects in house. High speed Internet facility is always available to these systems. The systems can support advanced software which are useful in projects.

Sr. No.	Name of the facility	Utilization
1.	Fedora , Ubuntu Apache Tomcat	All the students and faculty
2.	Eclipse, Net beans IDE	4 th ,5 th , 7 th , 8 th semester students and Faculty
3.	Mysql	All the students and faculty

6.5 Safety measures in laboratories (10)

Total Marks 8.00

Institute Marks: 8.00

Sr. No	Laboratory Name	Safety Measures
1	Machine Learning Lab / Project Lab	□ Fire fighting set up and Fire extinguisher have been installed near the laboratory. □ First aid box made available □ Earthing is well maintained in order to check leakage of current □ Main Circuit breakers installed □ UPS facility made available □ CCTV camera installed □ Centralized Firewalls facility provide
2	Microprocessor / Analog Electronics	□ Fire fighting set up and Fire extinguisher have been installed near the laboratory. □ First aid box made available □ Earthing is well maintained in order to check leakage of current □ Main Circuit breakers installed □ UPS facility made available □ CCTV camera installed □ Centralized Firewalls facility provide
3	Computer Network Lab / Computer Graphics Lab	□ Fire fighting set up and Fire extinguisher have been installed near the laboratory. □ First aid box made available □ Earthing is well maintained in order to check leakage of current □ Main Circuit breakers installed □ UPS facility made available □ CCTV camera installed □ Centralized Firewalls facility provide

4	Data Base Management Lab / Algorithms Lab	□ Fire fighting set up and Fire extinguisher have been installed near the laboratory. □ First aid box made available □ Earthing is well maintained in order to check leakage of current □ Main Circuit breakers installed □ UPS facility made available □ CCTV camera installed □ Centralized Firewalls facility provide
5	Web Technology Lab / System Software Lab	□ Fire fighting set up and Fire extinguisher have been installed near the laboratory. □ First aid box made available □ Earthing is well maintained in order to check leakage of current □ Main Circuit breakers installed □ UPS facility made available □ CCTV camera installed □ Centralized Firewalls facility provide
6	C Programming Lab / First year Lab	□ Fire fighting set up and Fire extinguisher have been installed near the laboratory. □ First aid box made available □ Earthing is well maintained in order to check leakage of current □ Main Circuit breakers installed □ UPS facility made available □ CCTV camera installed □ Centralized Firewalls facility provide

7 CONTINUOUS IMPROVEMENT (50)

Total Marks 34.00

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

Total Marks 13.00

Institute Marks: 13.00

POs Attainment Levels and Actions for Improvement- (2018-19)

POs Target Level PO 1 : Engineering Knowledge		Attainment Level	Observations	
PO 1	1.575	1.46	TARGET NOT ACHIEVED • Enhancement in the ability to Solve and analyze problems is desirable.	

Action 1: Conduct a hands-on sessions on Map-Reduce and Hadoop installation on single and multiple machines. Action 2: Conduct a tutorial class on Automata Theory, DMS, DAA, Computer Graphics and Visualization, Operation research. Action 3: Conduct an invited talk on Block-chain Action 4: Organize a workshop on Data Science Action 5: Organize a hands-on workshop on Python programming Action 6: Organized a hands-on workshop on Machine Learning and Data Science Action 7: Organized a hands-on workshop on Cloud computing Action 8: Organized a hands-on workshop on Image & Speech Processing Action 9: Arranged Special Classes on Discrete Mathematical Structures Action 10: Arranged Seminars on Current Engineering topics through technical seminar Action 11: Encouraged students to present paper in technical paper presentation of National Conference & International Conference Action 12: Guide students to implement their final year project on current engineering topics. Action 13: Encourage students to participate in IEEE sponsored project exhibition and activities

PO 2 : Problem Analysis

PO 2 1.275 1.18 • TARGET NOT ACHIEVE data obtained with expering	, into to arranged arranged tree
--	----------------------------------

Action 1: Conduct a hands-on sessions on Map-Reduce and Hadoop installation on single and multiple machines. Action 2: Encourage students to do mini projects on Big Data Analytic Action 3: Conduct a tutorial class on Automata Theory, DMS, DAA, Computer Graphics and Visualization, Operation research. Action 4: Conduct unit tests and quiz for Data Communication Action 5: Conduct a hands-on bridge course on C++ and Java Action 6: Conduct special classes for Java-based programming. Action 7: Conduct a technical talk on JFLAP tool. Action 8: Conduct a virtual lab on Cryptography, Network Security, and Cyber laws. Action 9: Conduct special classes for Python Action 10: Assigned Engineering problems and encourage students to analyze it in groups Action 11: Conducted invited talks on mathematical topics like Machine Learning, Data Science, IOT, Image Processing Action 12: Encouraged mini projects for all the practical oriented subjects like DBMS, Web Technology, Big Data Analytic, Computer Networks, Cloud and Python Action 13: Encourage students to take special tutorial sessions in groups Action 14: Form students learning teams to improve group study and monitor on a weekly basis Action 15: Guide students to implement their final year project on current engineering topics. Action 16: Encourage students to participate in IEEE sponsored project exhibition and activities Action 17: Encourage students to enroll in Certification courses like NPTEL, Course Era etc

PO 3: Design/development of Solutions

PO 3 1.08	TARGET NOT ACHIEVED • Ability to design and develop new software applications
-----------	---

Action 1: Conduct a hands-on sessions on Map-Reduce and Hadoop installation on single and multiple machines. Action 2: Encourage students to do mini projects on Big Data Analytic Action 3: Conduct a tutorial class on Automata Theory, DMS, DAA, Computer Graphics and Visualization, Operation research. Action 4: Conduct unit tests and quiz for Data Communication Action 5: Conduct a hands-on bridge course on C++ and Java Action 6: Conduct special classes for Java-based programming. Action 7: Conducted a technical talk on JFLAP tool. Action 8: Conduct a virtual lab on Cryptography, Network Security, and Cyber laws. Action 9: Encourage students to develop their project using the software engineering life cycle Action 10: Encourage students to participate in 24 hours hackathon Action 11: Guide students to build real-world applications like health-care system, RFID trackers, class attendance monitor system Action 12: Encourage students to present their ideas in national and international conference Action 13: Support students to come up with a patentable ideas. Action 14: Arrange industry expert invited talk Action 15: Conduct special classes for Python Action 16: Assign Engineering problems and encourage students to analyze it in groups Action 17: Encourage students to participate in IEEE sponsored project exhibition and activities Action 18: Encouraged students to enroll in Certification courses like NPTEL, Course Era etc

PO 4 : Conduct Investigations of Complex Problems

PO 4 0.975	0.94	• TARGET NOT ACHIEVED • Able to experimentally analyze the problems through relevant software's.
------------	------	--

Action 1: Conduct hands-on workshop on Rapid Miner Action 2: Conduct hands-on workshop on R Programming Action 3: Conduct hands-on workshop on Python Action 4: Conduct hands-on workshop on NS2/ NS3 Action 5: Conduct unit tests and quiz for Data Communication Action 6: Conduct hands-on bridge course on C++ and Java Action 7: Conduct special classes for Java-based programming. Action 8: Conducted a technical talk on the JFLAP tool. Action 9: Conduct a virtual lab on Cryptography, Network Security, and Cyber laws. Action 10: Encourage students to attend IEEE and other sponsored technical talks and hands-on workshop Action 11: Arrange student development programs on current engineering topics Action 12: Monitor project execution in a weekly basis Action 13: Encourage students to do mini projects on Big Data Analytic Action 14: Assign Engineering problems and encourage students to analyze it in groups Action 15: Encourage students to participate in IEEE sponsored project exhibition and activities Action 16: Encourage students to enroll in Certification courses like NPTEL, Course Era etc

PO 5 : Modern Tool Usage

PO 5 0.825 0.94 se	TARGET ACHIEVED • Able to obtain knowledge on additional software's and lab.
--------------------	--

TARGET ACHIEVED

PO 6: The Engineer and Society

PO 6 0.75 0.78	TARGET ACHIEVED • Problems faced by society were addressed through projects.
----------------	--

TARGET ACHIEVED

PO 7 : Environment and Sustainability

Action 1: Arranged worksl	825	0.78	TARGET NOT ACHIEVED Contribution of Computer Science in
<u>-</u>			building a solutions in societal and environmental contexts
	lents to actively participate in environmental contexts Actio	NSS sponsored activities Action 5: Conduct workshop on sus	students about the need to water and nature for future generation on 4: Encourage students to build a real-world application on tainable computing Action 6: Encourage students to build IOT based students to build societal projects
PO 8 : Ethics			
PO 8 0.9	9	1.22	TARGET ACHIEVED • Guest lecture on professional ethics and managerial skills is desirable.
TARGET ACHIEVED	,	,	
PO 9 : Individual and Te	eam Work		
PO 9 1.0	05	1.24	TARGET ACHIEVED • Ability to co-ordinate and team management through conduction of projects
TARGET ACHIEVED			
PO 10 : Communication	1		
PO 10 1.	125	1.18	TARGET ACHIEVED • Ability to present and convey the latest engineering trends.
TARGET ACHIEVED	•		
PO 11 : Project Manager	ment and Finance		
PO 11 0.4	45	0.52	TARGET ACHIEVED • Activities to improve managerial skills are desirable
TARGET ACHIEVED	•		
PO 12 : Life-long Learni	ing		
PO 12 0.9	975	1.04	TARGET ACHIEVED • Activities to adapt technical advancement are desirable.
TARGET ACHIEVED	'		

PSOs Attainment Levels and Actions for Improvement- (2018-19)

PSOs	Target Level	Attainment Level	Observations

PSO 1 : Ability to interpret the fundamental concepts and methodologies of computer systems.

PSO 1	1.35	1.26	TARGET NOT ACHIEVED • Exposure on techniques adopted in software industries
-------	------	------	---

Action 1: Conduct hands-on workshop on Rapid Miner Action 2: Conduct hands-on workshop on R Programming Action 3: Conduct a tutorial class on Automata Theory, DMS, DAA, Computer Graphics and Visualization, Operation research. Action 4: Conduct unit tests and quiz for Data Communication Action 5: Conduct hands-on bridge course on C++ and Java Action 6: Conduct special classes for Java based programming. Action 7: Conduct a technical talk on JFLAP tool. Action 8: Conduct a virtual lab on Cryptography, Network security and Cyber laws. Action 9: Conduct hands-on workshop on Python Action 10: Conduct hands-on workshop on NS2/ NS3 Action 11: Encourage students to attend IEEE and other sponsored technical talks and hands-on workshop Action 12: Arrange student development programs on current engineering topics Action 13: Assign Engineering problems and encourage students to analyze it in groups Action 14: Encourage students to participate in IEEE sponsored project exhibition and activities Action 15: Encouraged students to enroll in Certification courses like NPTEL, Course Era etc Action 16: Encourage students to attend their final year summer internship training at researching institutions like NITs, IITs..

PSO 2 : Apply the mathematical concepts to crack problems using suitable mathematical analysis, data structures and algorithms

PSO 2 1.05 1.04	TARGET NOT ACHIEVED • Exposure on design & analysis of components.
-----------------	--

Action 1: Conduct special classes for Discrete Mathematics Action 2: Conduct special classes for Automat Theory and Computation Action 3: Conduct a tutorial class on Automata Theory, DMS, DAA, Computer Graphics and Visualization, Operation research, Python. Action 4: Conduct unit tests and quiz for Data Communication Action 5: Conduct a hands-on bridge course on C++ and Java Action 6: Conduct special classes for Java-based programming. Action 7: Conduct a technical talk on the JFLAP tool. Action 8: Conduct a virtual lab on Cryptography, Network Security, and Cyber laws. Action 9: Conduct special classes for Big Data Analysis Action 10: Encourage students to do mini projects on Big Data Analytic Action 11: Assign Engineering problems and encourage students to analyze it in groups Action 12: Conduct invited talks on mathematical topics like Machine Learning, Data Science Action 13: Encourage mini projects for all the practical oriented subjects like DBMS, Web Mining, Big Data Analytic, Computer Networks, Cloud and Python Action 14: Arrange workshop on Machine Learning, IoT, Image Processing Action 15: Encourage students to take special tutorial sessions in groups Action 16: Arrange invited talks on current engineering trends Action 17: Form students learning teams to improve group study and monitor on a weekly base Action 18: Guide students to implement their final year project on current engineering topics. Action 19: Encourage students to participate in IEEE sponsored project exhibition and activities Action 20: Encourage students to enroll in Certification courses like NPTEL, Course Era etc

PSO 3: Develop ability to grasp the software development life-cycle and methodologies of software systems. Possess competent skills and knowledge of software design process. Familiarity and practical proficiency with a broad area of programming concepts and provide new ideas and innovations towards research.

PSO 3	0.975	1.02	TARGET ACHIEVED • Enhancement in the ability to Solve and analyze problems is desirable.
TARGET ACHIEVED			

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

Total Marks 8.00

Institute Marks: 8.00

Academic audit was conducted in the department by Academic Audit Committee

Academic Audit Committee

Academic Audit Committee (AAC) consists of faculty of the department, other department faculty and one or two external faculty from other institute. The academic audit team meets students for taking their feedback and also meets the teaching and Nonteaching staff to confirm the students' feedback and any other issues of the faculty.

The academic audit focuses on:

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

The following documents are made available to the AAC committee.

- Student's records
- CIE Components
- Course file and Study Materials
- Lab. Equipment Details
- Remedial classes
- Result Analysis
- · Seminars / Conferences attended

Academic Audit Report





PES INSTRITUTE OF TECHNOLOGY & MANAGEMENT NH-206, Sagar Road, Shivamogga INTERNAL QUALITY ASSURANCE CELL

ACADEMIC AUDIT REPORT (Internal / External)

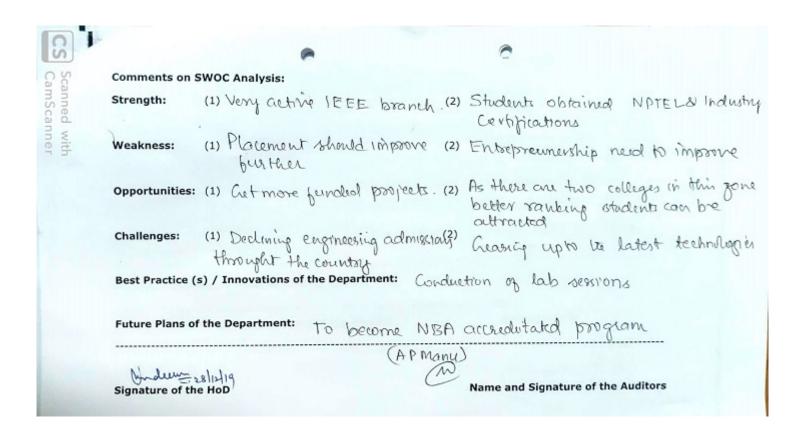
Name of the Department	:Com	:Computer Science & Engineering :2018-19 :28/12/2019		
Year	:2018			
Date of Audit				
Auditor Team	: 1	Dr. A. Guruva Reddy, Professor, Dept of ECE, PESITM		
Tel bent desired	: 2	Dr. Manu A P Professor, Dept of CSE, PESITM		
	: 3	Dr. Prassana Kumar H R, Professor, Dept of ISE, PESITM		

1. Student Records Audited (Minimum 10)

Records and details pertaining to the following students were audited:

SI. No.	Name of the Student	Semester/USN
1	Amith G. Kamath	4PM14CS003 648m (CN)
2	Varien N Bhat	4PM 16CS 103 5th sen (Net
3	Pooja R	4PM 16(SOSS 5Hean Gava)
4	Abhrshek NG	4PM MCSOOL 3rd sem (DS)
5	Ushar M Nork	4 PM 17 (3094 3 dean CUSP

2. Faculty Records Audited



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

Total Marks 6.00

Institute Marks: 6.00

Placement Details

SL. No	Academic Year	Total No of Students in final year	Total No of Students Placed	Overall Percentage of Students Placed		
1.	2016-17	91	63	69.2		
2.	2017-18	82	57	69.5		
3.	2018-19	104	66	63.46		
4.	2019-20*	108	34	30.63% *		

*present final year students Placement Package Details

SI.No	2016-	17	2017-1	18	2018-1	19	2019-20	
	Company	Package	Company	package	Company	package	Company	package
	Name	in LPA	Name	in LPA	Name	in LPA	Name	in LPA
1	Global edge	3	Global edge	3	Global edge	3	Infosys	3.65
2	Crimson Logic	3.5	Evive Health	6.5	SLK	3	Robosoft	3.2
3	Tech Mahindra	3.10	High Peak	3.7	Advanced India Pvt Ltd	2.75	Wipro	3.5
4	Evive Health	6.5	Youngstone	5	Mphasis	2.5	Global edge	3.2
5	Betsol	3.5	Mphasis	2.5	TCS - Ninja	3.5	TCS	3.5
6	Sunquest	4	SLK	3	Robosoft	3.25	Amazon	4
7	Amazon	3.5	Betsol	3.5	Tek Systems	6	Mphasis	3.5
8	Act	3	Vyshnavi	2.75	Wipro - Elite NIth	3.5	Betsol	4
9	IBM	3	AppNM	4.2	Infosys	3	Mindtree	3.5
10	Vyshnavi	2.75	INFOSYS	3.25	Mu Sigma	3.6	Subex	4-5

Higher Studies Details

SL. No	Academic Year	Studente	No. of students admitted to higher studies with valid qualifying scores (GATE or equivalent State or National Level Tests, GRE, GMAT etc.)
1.	2016-17	91	3
2.	2017-18	82	1
3.	2018-19	104	5

Institute Marks: 7.00

Item		2019-20	2018-19	2017-18
National Level Entrance Examination	No of students admitted	7	2	1
	Opening Score/Rank	19588	21602	10232
COMEDK	Closing Score/Rank	50406	45186	10232
State/ University/ Level Entrance Examination/ Others	No of students admitted	105	111	99
	Opening Score/Rank	15677	26114	15695
CET/Mgmt	Closing Score/Rank	123717	133310	95561
Name of the Entrance Examination for Lateral Entry or lateral entry	No of students admitted	13	8	3
details	Opening Score/Rank	3429	5763	13605
DCET	Closing Score/Rank	14451	15562	14592
Average CBSE/Any other board result of admitted students(Physics, Chemistry&Maths)		72	76	72

8 FIRST YEAR ACADEMICS (50)

Total Marks 37.38

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

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

Dr. Aveesh S.	ALUPT7731J	M.Sc. and PhD	14/03/2010	Differential Geometry	Associate Professor	18/07/2016	22	22	22	Yes	Reç
Dr. Chandru K	AZGPC8846B	M.Sc. and PhD	15/02/2019	Differential Geometry	Assistant Professor	29/01/2018	22	22	22	Yes	Reç
Mr. Umeshaiah	ABLPU8326K	M.Sc	23/02/2008	Mathematics	Assistant Professor	04/09/2008	22	22	22	Yes	Reç
Mrs. Veda L K	AIQPV0071N	M.Sc	17/03/2004	Mathematics	Assistant Professor	16/02/2009	22	22	22	Yes	Reç
Mrs. Swathi V	FZEPS8237P	M.Sc	24/03/2016	Mathematics	Assistant Professor	16/07/2015	22	22	22	Yes	Reç
Mr. Shreyas M.	FPPPS6592G	M.Sc	07/08/2019	Mathematics	Assistant Professor	29/07/2019	22	0	0	Yes	Reç
Dr. Shivakuma	AECPK7375N	M.Sc. and PhD	02/05/2000	Chemistry	Professor	01/08/2007	22	22	22	Yes	Reç
Dr. Praveen ku	BHQPP3039N	M.Sc. and PhD	13/08/2013	Chemistry	Assistant Professor	27/01/2014	22	22	22	Yes	Reç
Ms. Roopa C. I	DDRPR9742F	M.Sc	02/12/2017	Industrial chemistry	Assistant Professor	07/08/2017	22	22	22	Yes	Reç
Dr. Pramod Go	AXZPP7633A	M.Sc. and PhD	09/01/2017	Aerosol Physics	Associate Professor	01/02/2010	22	22	22	Yes	Reç
Ms. Ramya K	DVRPK0646F	M.Sc	19/03/2014	Solid State Physics	Assistant Professor	19/08/2013	22	22	22	Yes	Reç
Mrs. Rashmi H	CFFPR5329D	M.Sc	19/03/2011	Solid state physics	Assistant Professor	31/07/2017	22	22	22	Yes	Reç
Mrs. Deeksha I	BILPK2238J	MA	12/03/2013	English Literature	Assistant Professor	16/07/2018	22	0	0	Yes	Reç
Dr. Archana M	BDMPA5992B	M.Sc. and PhD	15/02/2019	Fluid Mechanics	Assistant Professor	25/07/2018	0	22	0	No	Reç

Mrs. Vasavi G.	AZCPV9665P	M.Sc	24/03/2016	Mathematics	Assistant Professor	16/07/2015	0	0	22	No	Reg
Abhipsa A Y	AKHPY7506L	M.Sc	24/03/2016	Chemistry	Assistant Professor	29/01/2018	0	0	22	No	Reg
Shruthi G S	GXGPS1448D	M.Sc	18/06/2015	Chemistry	Assistant Professor	18/07/2016	0	0	22	No	Reg
Narendra Babı	AWCPN1195P	M.Sc	12/03/2018	Solid state physics	Assistant Professor	22/08/2017	0	0	22	No	Reg
Mr. Chethan B	AOTPC5115P	M.E/M.Tech	03/05/2014	VLSI Embedded System	Assistant Professor	21/07/2014	22	22	22	Yes	Reg
Mrs. Shymala (AMJPC3468P	M.E/M.Tech	04/05/2014	VLSI Embedded System	Assistant Professor	08/08/2013	22	22	22	Yes	Reg
Mrs. Yajnodbha	ALQPY8597B	M.E/M.Tech	19/10/2013	Transportation Engineering	Assistant Professor	06/09/2010	22	22	22	Yes	Reg
Mrs. Pooja Y. E	CPGPP0160K	M.E/M.Tech	23/07/2015	Earthquake Engineering	Assistant Professor	06/02/2017	22	22	22	Yes	Reg
Mrs Neetha H I	ASBPN6858L	M.E/M.Tech	05/04/2013	Energy System	Assistant Professor	25/07/2012	22	22	22	Yes	Reg
Mr. Shanthveei	GAYPS9826J	M.E/M.Tech	08/09/2018	Electrical and Electronics Engineering	Assistant Professor	23/07/2018	22	22	0	Yes	Reg
Ms. Nayana K	AMXPN1818Q	M.E/M.Tech	08/04/2012	Information Communication Tachnology	Assistant Professor	24/01/2011	22	22	22	Yes	Reg
Ms. Ashwini S	AVRPA8448E	M.E/M.Tech	03/05/2014	Computer Science Engineering	Assistant Professor	21/07/2014	22	22	22	Yes	Reç

Mr. Kailash Ru	BOLPK0162B	M.E/M.Tech	23/07/2015	Computer Science Engineering	Assistant Professor	21/07/2014	22 22 22	No	Reç
Mr. Malteshkur	BSXPD3158G	M.E/M.Tech	21/01/2017	Mechanical Engineering	Assistant Professor	18/07/2016	22 22 22	Yes	Reç
Mr. Koushik P.	CXMPP8138D	M.E/M.Tech	03/12/2015	Mechanical Engineering	Assistant Professor	16/07/2015	22 22 22	Yes	Reç
Mr. Mahanthes	BTGPM0265H	M.E/M.Tech	05/05/2016	Mechanical Engineering	Assistant Professor	18/07/2016	22 22 22	Yes	Reç
Mr. Amruth P.	BBOPA3504R	M.E/M.Tech	05/05/2016	Mechanical Engineering	Assistant Professor	16/07/2015	22 22 22	Yes	Reç
Mr. Nandan N.	AGBPN8960H	M.E/M.Tech	06/06/2009	Environmental Engineering	Assistant Professor	17/09/2007	0 22 0	Yes	Reç
Mr Vishwas S	AKHPV5924B	M.E/M.Tech	05/04/2013	Electrical and Electronics Engineering	Assistant Professor	27/07/2012	0 22 22	No	Reç
Dr. Sendhil G	BSMPS7164N	M.A and Ph.D	12/02/2012	VOLLEYBALL	Assistant Professor	04/09/2008	16 16 16	Yes	Reç
Chandrashekh	AIOPC5400E	M.Phil	01/02/2008	electronic resources	Assistant Professor	01/08/2007	16 16 16	Yes	Reç

Year	Stud	nber Of dents(approved intake ngth) N	me	ember of Faculty embers(considering fractional ad) F	FYSFR (N/F)		ssessment= 20)/FYSFR(Limited to Max.5)	
2017-18(CAYm2)	120		6		20	5		
2018-19(CAYm1)	120		6		20 5			
2019-20(CAY) 120		6		20 5		;		
Average 120		6		20		5		

Institute Marks: 5.00

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]		
2017- 18	5	24	6	16.00		
2018- 19	5	23	6	15.00		
2019- 20	6	22	6	16.00		

Average Assessment: 15.67

8.3 First Year Academic Performance (10)

Total Marks 6.38

Institute Marks : 6.38

Academic Performance	2019-20	2018-19	2017-18
Mean of CGPA or mean percentage of all successful students(X)	6.83	6.72	6.47
Total Number of successful students(Y)	108.00	96.00	101.00
Total Number of students appeared in the examination(Z)	113.00	100.00	106.00
API [X*(Y/Z)]	6.53	6.45	6.16

Average API[(AP1+AP2+AP3)/3]: 6.38

Assessment [1.5 * Average API]: 6.38

8.4 Attainment of Course Outcomes of first year courses (10)

Total Marks 8.00

Institute Marks: 3.00

8.4.2 Attainment of Course Outcomes of all first year courses CAYm1 (2018-19)

SI. No.	Subject	Subject Code	NBA Code	CO Code	Target (%)	Achieved For set target	Attainment
				CO101.1		68.33	3
		40144	0404	CO101.2	50	71.28	3
1	Calculus & Linear Algebra	18MAT11	C101	CO101.3	50	71.94	3
				CO101.4		67.02	3
				CO102.1		53.00	0
				CO102.2		55.75	1
2	Engineering Physics	18PHY12/22	C102	CO102.3	45	57.70	1
				CO102.4		54.60	0
				CO102.5		53.58	0
				CO103.1		68.47	3
				CO103.2		63.67	2
3	Basic Electrical Engineering	18ELE13/23	C103	CO103.3	50	76.83	3
				CO103.4		74.57	3
				CO103.5		69.27	3
				CO104.1		51.82	0
	Elements of Civil	4000 /44/04	0404	CO104.2		52.52	0
4	Engineering & Mechanics	18CIV14/24	C104	CO104.3	55	55.21	1
				CO104.4		54.51	0
				CO105.1		73.45	3
_		405001.45/05	0405	CO105.2		73.45	3
5	Engineering Graphics	18EGDL15/25	C105	CO105.3	50	73.45	3
				CO105.4		73.45	3
				CO106.1		61.75	2
				CO106.2		61.75	2
6	Engineering Physics Lab	18PHYL16/26	C106	CO106.3	55	61.75	2
				CO106.4		61.75	2
				CO106.5		61.75	2
_	Basic Electrical Engineering	40515145105	0.40=	CO107.1		73.49	3
/	Lab	18ELEL17/27	C107	CO107.2	55	73.49	3
				CO108.1		88.96	3
				CO108.2		88.96	3
8	Technical English 1	18EGH18	C108	CO108.3	50	88.96	3
				CO108.4		88.96	3
				CO108.5		88.96	3
9	Advanced Calculus &	18MAT21	C109	CO109.1	50	69.02	3
_	Numerical Methods			CO109.2		69.55	3
				00.00.2		33.00	

1	1		1	CO109.3		66.51	3			
				CO109.3		69.77	3			
				CO109.4 CO110.1		67.81	3			
				CO110.1		58.78	1			
10	Engineering Chemistry	18CHE12/22	C110	CO110.2	55	70.14	3			
10	Lingineering Chemistry	1001 IL 12/22	0110	CO110.3	33	69.75	3			
				CO110.4		70.43	3			
				CO110.3		49.32	0			
				CO111.1		46.78	0			
11	C Programming for problem	18CPS13/23	C111	CO111.2	50	49.55	0			
' '	solving	1005313/23	0111	CO111.4	30	49.81	0			
				C0111.4		52.92	0			
				CO111.3		49.10	0			
				CO112.1	50	51.50	0			
12	Basic Electronics	18EL N14/24	C112	CO112.2		45.05	0			
12	Dasic Liectionics	Electronics 18ELN14/24 (0112	CO112.4		45.90	0			
				CO112.5		49.00	0			
				CO113.1		63.22	2			
				CO113.2		63.04	2			
13	Elements of Mechanical	18EME15/25	C113	CO113.3	55	67.95	3			
'	Engineering	TOLIVIL TO/20	3110	CO113.4	00	62.17	2			
				CO113.5		65.56	3			
				CO114.1		74.22	3			
14	Engineering Chemistry Lab	18CHEL16/26	C114	CO114.2	55	74.22	3			
				CO115.1		91.42	3			
1				CO115.2		91.42	3			
15	C Programming Lab	18CPL17/27	18CPL17/27	18CPL17/27	ab 18CPL17/27	C115	CO115.3	50	91.42	3
				C0115.4	1	91.42	3			
				CO116.1		72.31	3			
				CO116.2		72.31	3			
16	Technical English 2	18EGH28	C116	CO116.3	50	72.31	3			
				CO116.4		72.31	3			
				CO116.5		72.31	3			

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)

CAY (2019-20) & CAYm1 (2018-19)

- Three Internal tests for maximum marks of 30 are conducted and average of three internals is considered.
- 10 marks shall be awarded based on the evaluation of CCE component (i.e., Assignment, Class presentation, Mini Project, Case Study etc.)

Institute Marks: 5.00

- Maximum total internal marks for each course are 40. The student has to get a minimum of 16 marks to appear for the exam in the corresponding course.
- Semester end examination maximum marks is 60 is considered for external exam performance.
- The marks scored by the students in internal assessment are categorized based on CO's.
- 60% of university exam marks is considered as [N1] and 40% of internal assessment marks is considered as [N2] for every CO. The direct attainment of the course is given by [N1+N2] for every CO.
- For the laboratory, Continuous Internal Assessment is performed based on conduction of experiment, observations, viva and practical record for 24 marks. One semester end practical test is conducted for maximum of 16 marks. The total CIE marks for the laboratory course is 40. The student has to score a minimum of 20 marks to appear for the exam.
- Semester end examination maximum marks are 60 for the laboratory.
- The direct attainment is calculated by considering 50% weightage of SEE & 50% weightage of CIE.

CAYm2 (2017-18)

- Three Internal tests for maximum marks of 30 are conducted and average of best two internals is considered.
- 10 marks shall be awarded based on the evaluation of CCE component (i.e., Assignment, Class presentation, Mini Project, Case Study etc.)
- Semester end examination maximum marks is 60 is considered for external exam performance.
- The marks scored by the students in internal assessment are categorized based on CO's.
- 60% of university exam marks is considered as [N1] and 40% of internal assessment marks is considered as [N2] for every CO. The direct attainment of the course is given by [N1+N2] for every CO.
- For the laboratory, Continuous Internal Assessment is performed based on conduction of experiment, observations, viva and practical record for 24 marks. One semester end practical test is conducted for maximum of 16 marks. The total CIE marks for the laboratory course is 40. The student has to score a minimum of 20 marks to appear for the exam.
- Semester end examination maximum marks are 60 for the laboratory.
- The direct attainment can be calculated by considering 60% weightage of SEE & 40% weightage of CIE.

Procedure to measure the attainment level for the courses

The attainment of a particular CO in a course is calculated using the equation

% Course attainment
$$=\frac{x}{y} X 100$$

Where,

x = total marks scored by students in the particular CO scoring more than the set target

Y = number of participants (who attempted that CO)

Course Outcomes of First Year Subjects

Course Name and Code: Calculus & Linear Algebra [18MAT11]			
Semester :	1 Academic Year :2018-19		
	After studying this course, a student will be able to		
	Apply the Knowledge of calculus to solve the problems related to curvature and evaluate partial derivatives to estimate maxima and minima of multivariable functions.		
CO101.2	Define the concept of multiple Integrals to Evaluate area, volume and to solve problems on improper integrals.		
1 (() 1111 3	Solve first order ordinary linear/Non linear differential equation and able to apply in different engineering applications.		
	Use matrices techniques for solving system of simultaneous linear equations, Eigen values and Eigen vectors of the matrix.		

Course Name and Code: ENGINEERING PHYSICS [18PHY12/22]		
Semester :	1/2 Academic Year :2018-19	
	After studying this course, a student will be able to	
CO102.1	Understand various types of oscillations and their implications, the role of Shock waves in various fields	
CO102.2	Study and recognize the elastic properties of materials for engineering applications	
CO102.3	Realize the interrelation between time varying electric field and magnetic field, the transverse nature of the EM waves and their role in optical fiber communication.	
CO102.4	Learn the basics of quantum physics. Apprehend theoretical background of laser, construction and working of different types of laser and its applications in different fields	
CO102.5	Understand various electrical and thermal properties of materials like conductors, semiconductors and dielectrics using different theoretical models.	

Course Nan	Course Name and Code: Basic Electrical Engineering [18ELE13]		
Semester : 1 Academic Yea			
:2018-19	After etuduing this course a student will be able to		
	After studying this course, a student will be able to		
CO103.1	Understand the significance of Ohms law and their different applications		
CO103.2	Understand the concepts of generation of single and three phase voltages		
CO103.3	Analyze the importance of transformers and electrical wiring in engineering	field	
CO103.4	Understand the concepts of Direct current and different types of generator, their industrial applications	motors and	
CO103.5	Analyze the working of AC Generator with their working principal and its im power plant	portance in	

Course Name and Code: Elements of Civil Engineering & Mechanics [18CIV14/24]			
Semester	1/2 Academic Year :2018-19		
	After studying this course, a student will be able to		
	Mention the applications of various fields of Civil Engineering and compute the resultant of given force system subjected to various load.		
CO104.2	Comprehend the action of forces, moments and other loads on systems of rigid bodies and Compute the reactive forces and effects that develop as a result of the external loads.		

CO104.3	Locate the centroid and compute the moment of inertia of regular and built-up sections.
CO104.4	Express the relationship between the motion of bodies and analyze the bodies in motion.

Course Na	Course Name and Code: Engineering Graphics [18EGDL15/25]		
Semester	: 1/2 Academic Year :2018-19		
	After studying this course, a student will be able to		
CO105.1	Identify the importance of computer aided sketching and orthographic projection of Points and lines.		
CO105.2	Produce the sketch for projection of plane surfaces.		
CO105.3	Use the knowledge of sketching to represent projection of solid surfaces.		
	Understand the importance of Lateral surfaces and able to sketch Development of given isometric drawings of simple objects.		

Course Name and Code: ENGINEERING PHYSICS LABORATORY [18PHYL16/26]			
Semester: 1/2 Academic Year: 2018-19			
	After studying this course, a student will be able to		
CO106.1	Apprehend the concepts of interference of light, diffraction of light using laser light		
CO106.2	Apprehend the concepts of radiation, resistance, Fermi energy and understand the principles of operation of dielectic material, optical fibres, Photodiode and Transistor using simple circuits		
CO106.3	Determine elastic moduli and moment of inertia of given materials with the help of suggested procedures		
CO106.4	Recognize the resonance concept and its practical applications		
CO106.5	Understand the importance of measurement procedures, honest recording and representing the data and reproduction of final results		

Course Name and Code:		Basic Electrical Engineering Laboratory [18ELEL17/27]
Semester :	1	Academic Year :2018-
	Afte	r studying this course, a student will be able to
CO107.1	Select a suitable application	le measuring instrument for measuring electrical quantities for a given
CO107.2	Design the circ	uit and analyze different types of connections in single and three phase m.

Course Name and Code: Technical English-I [18EGH18]		
Semester:	1 Academic Year :2018-19	
	After studying this course, a student will be able to	
CO108.1	Use grammatical English and essentials of language skills and identify the nuances of phonetics, intonations and flaw less pronunciation.	

CO108.2	Implement English vocabulary at command and language proficiency.
CO108.3	Identify common errors in spoken and written communication.
CO108.4	Understand and improve the non verbal communication and kinesics.
CO108.5	Perform well in campus recruitment, engineering and all other general competitive examination.

Course Name and Code: Advanced Calculus & Numerical Methods[18MAT21]			
Semester :	2 Academic Year :2018-19		
	After studying this course, a student will be able to		
	Develop the applications of multivariate calculus to understand the solenoidal and irrotational vectors and also exhibit the interdependence of line, surface and volume integrals.		
	Demonstrate various physical models through higher order differential equations and solve such linear ordinary differential equations.		
	Construct a variety of partial differential equations and solution by exact methods/method of separation of variables.		
	Explain the applications of infinite series and obtain series solutions of ordinary differential equations. Apply numerical methods in the modeling of engineering problems.		

Course Name and Code: ENGINEERING CHEMISTRY [18CHE12/22]								
Semester :	1/2 Academic Year :2018-19							
	After studying this course, a student will be able to							
CO110.1	To Understand free energy in equilibria and electrochermical energy systems							
CO110.2	Comprehend the causes and effects of corrosion of metals and control of corrosion.							
CO110.3	Explain production and consumption of energy for industrialization and consumption of solar energy for different useful forms of energy							
CO110.4	Analyze the environmental pollution, waste management and water chemistry							
CO110.5	Identify the different techniques of instrumental methods of analysis of given solution, Foundamental principles of nano materials.							

Course Name and Code: C Programming for Problem solving [18CPS13]								
Semester :	1/2 Academic Year :2018-19							
	After studying this course, a student will be able to							
CO111.1	Comprehend basics of computer hardware, software and overview of C.							
CO111.2	Apply conditional and looping constructs to write C program.							
CO111.3	Illustrate Arrays, data types, expressions, control statements, functions, file and I/O operations							
CO111.4	Design iterative and recursive functions for computational problems. Illustrate usage of C library.							
C0111.5	Use Structures, Pointers and Preprocessor directives in problem solving.							

Course Nan	Course Name and Code: Basic Electronics [18ELN14]							
Semester :	1/2 Academic Year :2018-19							
	After studying this course, a student will be able to							
CO112.1	Describe the operation of diodes, BJT, FET and operational amplifiers							
CO112.2	Design and explain constructions of rectifiers, regulators, amplifiers and oscillators							
CO112.3	Describe the general operating principles of scr and its application							
CO112.4	Explain the working and design of fixed IC voltage regulator using 7805 and a stable oscillator using timer IC555.							
CO112.5	Different number conversions and construct simple combinational and sequential logic circuits using Flip Flops.							

Course Name and Code: Elements of Mechanical Engineering & Mechanics [18ME15/25]								
Semester :	1/2 Academic Year :2018-19							
	After studying this course, a student will be able to							
CO113.1	Identify different sources of energy and their conversion process.							
CO113.2	Explain the working principle of hydraulic turbines, pumps,							
CO113.3	Describe the working of I C engines and refrigeration systems.							
	Understand the properties of common engineering materials and their applications in							
CO113.4	engineering industry. Recognize various metal joining processes and power transmission							
	elements.							
CO113.5	Discuss the working of conventional machine tools, machining processes, tools and							
	accessories. Describe the advanced manufacturing systems.							

Course Name and Code: ENGINEERING CHEMISTRY LABORATORY [18CHEL16/26]								
Semester :	1/2 Academic Year :2018-19							
	After studying this course, a student will be able to							
CO114.1	Handling different types of instruments for analysis of materials using small quantities of materials involved for quick and accurate results.							
CO114.2	Carrying out different types of titrations for estimation of concerned in materials using comparatively more quantities of materials involved for good results.							

Course Name and Code: C Programming Laboratory [18CPL17]							
Semester :	1/2 Academic Year :2018-19						
	After studying this course, a student will be able to						
CO115.1	Explain the various commands used during the execution of the program.						
CO115.2	Utilize the process of debugging and execution.						
CO115.3	Develop and illustrate simple C programs.						
C0115.4	Construct flowchart and algorithm for the given problems.						

Course Name and Code:	Technical English-II [18EGH28]	
Semester: 2		Academic Year :2018-19

	After studying this course, a student will be able to						
CO116.1	Identify common errors in spoken and written communication.						
CO116.2	Get familiarized with English vocabulary and language proficiency.						
CO116.3	Improve nature and style of sensible writing and acquire employment and workplace communication skills.						
CO116.4	Improve their Technical Communication Skills through Technical Reading and Writing practices.						
CO116.5	Perform well in campus recruitment, engineering and all other general competitive examination.						

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

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

POs Attainment:

Total Marks 13.00

Institute Marks: 10.00

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C101	1.4	1.22	1.04	1.04	PO5	PO6	PO7	PO8	PO9	PO10	PO11	0.7
C102	1.0	1.11	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C103	1.4	1.69	1.6	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C104	1.34	1.15	0.54	0.53	PO5	PO6	PO7	0.32	PO9	PO10	PO11	PO12
C105	0.75	0.75	PO3	PO4	0.98	PO6	PO7	PO8	PO9	PO10	PO11	0.25
C106	0.67	0.83	PO3	PO4	0.83	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C107	0.98	0.98	0.25	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	0.25
C108	PO1	PO2	PO3	PO4	PO5	1.19	PO7	PO8	0.3	2.01	0.8	1.44
C109	1.38	1.38	1.04	1.04	PO5	PO6	PO7	PO8	PO9	PO10	PO11	0.69
C110	0.9	0.85	0.93	0.53	PO5	P06	PO7	PO8	PO9	PO10	PO11	PO12
C111	1.30	0.80	0.90	0.99	PO5	PO6	PO7	PO8	PO9	PO10	PO11	0.81
C112	1.04	1.09	1.11	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C113	1.93	1.86	1.88	1.79	PO5	PO6	PO7	PO8	PO9	PO10	PO11	1.19
C114	2.23	1.55	0.56	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C115	1.83	1.37	2.29	PO4	1.83	PO6	PO7	PO8	0.91	0.91	PO11	0.91
C116	PO1	PO2	PO3	PO4	PO5	0.42	PO7	0.97	0.55	1.89	0.65	0.97

PO Attainment Level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Direct Attainment	1.30	1.19	1.10	0.99	1.21	0.80	0	0.64	0.59	1.60	0.72	0.80
CO Attainment	1.30	1.19	1.10	0.99	1.21	0.80	0	0.64	0.59	1.60	0.72	0.80

PSOs Attainment:

Course	PSO1	PSO2	PSO3
C111	1.45	1.45	1.55
C115	1.58	1.81	1.12

PSO Attainment Level

Course	PSO1	PSO2	PSO3
Direct Attainment	1.52	1.63	1.34
CO Attainment	1.52	1.63	1.34

Institute Marks: 3.00

8.5.2 Actions taken based on the results of evaluation of relevant POs (5)

POs Attainment Levels and Actions for Improvement- (2018-19)

POs	Target Level	Attainment Level	Observations	
PO 1 : Engineering Knowledge				
PO 1	2.27	1.30	Set Target 55% Target Attained (57.11%)	
NA				

PO 2 : Problem Analysis

PO 2	1.98	1.26	Set Target 55% Target Attained (63.64%)
NA			

PO 3	1.75	1.10	Set Target 55% Target Attained (63.06%)
NA			

PO 4 : Conduct Investigations of Complex Problems

PO 4	1.71	0.99	Set Target 55% Target Attained (57.70%)
NA			

PO 5 : Modern Tool Usage

PO 5	2.00	1.21	Set Target 55% Target Attained (60.67%)
NA			

PO 6: The Engineer and Society

PO 6	1.6	0.80	Set Target 55% Not Attained (50%)
Action 1: NSS Activities for social responsibility			

PO 7: Environment and Sustainability

PO 7	NA	NA	First year courses do not contribute towards PO7
NA			

PO 8: Ethics

PO 8	1.5	0.64	Set Target 55% Not Attained (42.66%)
Action1:Interactions w	th working professionals with st	udents to increase awareness o	f responsibilities of engineers.

PO 9: Individual and Team Work

PO 9	1.14	0.59	Set Target 55% Not Attained (51.46%)
Action1: Career Development program by Genesis, Carrier prime with special attention to group discussion, leadership skills and team work			

PO 10 : Communication

PO 10	2.21	1.60	Set Target 55% Target Attained (72.55%)
NA			

PO 11 : Project Management and Finance

PO 11	1.67	0.72	Set Target 55% Not Attained (43.11%)	
Action 1: Skill develop	Action 1: Skill development with respect to real world problems and logical reasoning through training			

PO 12 : Life-long Learning

PO 12	1.69	0.88	Set Target 55% Not Attained (52.14%)	
Action 1: It is planned to have additional classes				

PSOs Attainment Levels and Actions for Improvement- (2018-19)

PSOs	Target Level	Attainment Level	Observations		
PSO 1 : Ability to interpret the fundamental concepts and methodologies of computer systems.					
PSO 1	1.4	1.51	Target Achieved		
NA					

PSO 2: Apply the mathematical concepts to crack problems using suitable mathematical analysis, data structures and algorithms

PSO 2	1.1	1.63	Target Achieved	
NA				

PSO 3: Develop ability to grasp the software development life-cycle and methodologies of software systems. Possess competent skills and knowledge of software design process. Familiarity and practical proficiency with a broad area of programming concepts and provide new ideas and innovations towards research.

PSO 3	1.2	1.34	Target Achieved
NA			

9 STUDENT SUPPORT SYSTEMS (50)

Total Marks 33.00

9.1 Mentoring system to help at individual level (5)

Total Marks 3.00

Institute Marks: 3.00

9.1. Mentoring system to help at individual level (5)

Type of mentoring: Professional guidance/career advancement/course work specific/laboratory Specific/all - round development. Number of faculty mentors: Number of students per mentor: Frequency of meeting:

(The department may report the details of the mentoring system that has been developed for the students for various purposes and also state the efficacy of such system)

The details of the mentoring system that has been developed in the department for the students for various purposes and their efficacy are given below. **Details of mentoring system**

Mentoring System : Yes

• Type of Mentoring : Total Development

• Number of faculty mentors: 18

• Number of students per mentor: 20-25

• Frequency of meeting : Once in a month

A faculty mentor is assigned to a group of 20 to 25 students to deal with their problems the mentor maintains record of students. The mentor observes the overall growth of student and provides counseling whenever required, The mentor also makes sure to maintain a regular parent-teacher dialogue.

Efficiency of such system

The mentoring/counseling system developed by the college has proved to be effective as defined by different parameters:

- The system develops an interaction among the students, teachers and parents.
- The system helps to improve the academic performance of the students.
- The system provides scope for healthy, positive and stress free state of mind.
- Teachers are also becoming more responsive to the learner needs day by day which is being reflected in the mentor diary maintained by the teacher.
- The mentors meet the students periodically and monitor their performance and their activities. Guidance regarding the slackness in academic progress and other issues is provided. Occasionally tutor meeting with the parents is conducted based on the requirement.

Lab-specific:

Each of the lab sessions are handled by 2 Teachers in order to have special care for the students while experiments are being handled.

- **Laboratory manual:** Providing the students with tailor made laboratory manual based on the experiments of the course to make them understand and know how about the different laboratory experiments.
- **Experiment demonstration:** A demonstrative presentation is given by the teacher concerned before every experiment. The Laboratory records are evaluated after the experiment is held. In other words, there is active involvement of the members of faculty Pre-experiment stage, at the time of experiment and after the experiment.
- **Student counseling:** Counsel irregular students to attend laboratory classes regularly and complete backlog experiments during specified extra hours.

Total Development:

As stated above, the college puts forward efforts to realize total development of the student. In addition to academics, literary, cultural and sports activities are conducted which offer leadership qualities, decision making abilities, team spirit, precision, analytical capabilities, socio psychological awareness etc. which make an individual and intellectually mature being.

Class Coordinator Responsibilities:

- Creating learning opportunities and motivating the student community.
- Providing guidance on academic, personal and career matters.
- Resolving academic issues of students.
- Tracking academic and extra-curricular performance of students.

Mentor's Responsibilities:

- · Take interest in developing student's career and well-being.
- Mentors keep track of their students' progress and achievements, setting milestones and acknowledging accomplishments.
- Monitor student's readiness for Personal Interview (including Resume, Dressing sense etc.)

- Evaluate Student Progress and Performance in Tests. Keep record of his/her attendance in the preparatory classes and keep the department HOD informed.
- Encourage students for attending all the sessions for sure success.
- Informing students about the profile of companies coming for recruitment as per information obtained from placement department.
- Engage the Student beyond the Classroom especially for communication practices and emphasize the importance of communication for sure success.
- Keep the department / panel members informed, if any student is not taking his/her sessions seriously.
- Guide student for practical training and project presentation.
- Guide students for technical interview.
- Guide and Evaluate student for GD for companies requiring GD.
- Guide students for General Knowledge about Industries in their domain.
- Provide Ethical Guidance

Professional Guidance:

The department is well equipped with knowledgeable Human resources in the form of members of faculty who by keeping themselves of development, offer guidance to the prospective professionals in addition to the classroom teaching. The Industry- institute Partnership cell and Entrepreneurship development cell have been putting efforts in this direction.

Career advancement:

- **Professional bodies registration:** To create awareness and to enhance the knowledge about the various activities and state of art research in the Computer Science Engineering, the students are encouraged and guided to take up registration in the professional bodies i.e.,IEEE, ISTE,IFERP etc...
- Following students are registered in IFERP(Institute for engineering research and publication)

Table: 9.1.1 IFERP Students list

USN	Name	IFERP Membership Number
4PM17CS072	Sharanamma	SMIN30567281
4pm18CS407	Shreya.M	SMIN16953470
4PM17CS059	Rakesh MP	SMIN30754291
4PM17CS086	Suhaib Akram S	SMIN79350864
4PM17CS075	Shoaib Ahmed	SMIN16435782
4PM17CS069	Seema	SMIN96543012

IEEE STUDENT BRANCH

• IEEE STUDENT BRANCH was formed on April 1, 2019 with

Student Branch code STB11482 and School Code 60150124

Table: 9.1.2 IEEE students list

FIRST NAME	LAST NAME	DATE OF BIRTH	MEMBERSHIP ID	EMAIL ID	PHONE NUMBER
SUHAIB	AKRAM	29/01/1999	95338417	Suhaibakram73@gmail.com	9113666956

PRADEEP	UR	10/06/1998	95338838	pradeepur.ujjaini@gamil.com	7829680768
HITESH	G	09/03/1998	95338868	gopinathhitesh@gmail.com	9686006919
KUMAR	BALEGAR	09/03/1990	9000000	gopinatifiles/l@gmail.com	9000000919
ROSHAN	PRADHAN	10/02/1999	95048896	rockyroshan3@gmail.com	9121536899
KUMAR	FRADHAN	10/02/1999	95046696	Tockyrositatis@gittaii.com	9121550099
ANKIT	GAURAV	26/03/1998	95262010	ankitgaurav567@gmail.com	9123295950
AMIT	NAIK	04/01/1998	95338853	gaamitnaik@gmail.com	9663741473
ARPANA	HEGDE	22/02/1999	95338855	arpanakhegde@gmail.com	9620926948
HARSHITHA	ВВ	14/07/1998	95338860	harshitha.bb98@gmail.com	9844875576
MEGHANA	М	12/02/1998	95338887	meghanamanjunath1202@gmail.com	8050401881
RAKESH	MP	30/06/1999	95338896	rakeshmp1999@gmail.com	7204545808
POOJA	В	17/01/2000	95338912	Poojanayar121@gmail.com	9900162167
PRAGATHI	SINGH	16/04/1999	95338899	pragathisingh7357@gmail.com	8971715440
Deepak	Р	28/02/1998	95338920	deepak17.n@gmail.com	9513887017
Sarah	Muskan	18/07/1998	94938190	sarahmuskan.1998@gmail.com	9591237696
Bhavana	MV	12/06/1998	95338925	bhavana226191@gmail.com	8310481794
Rakshitha	С	10/05/1998	95338949	rakshithac740@gmail.com	9008314281
Prithvi	Rao H R	10/07/1998	95338953	prithviksiv@gmail.com	9483800167
Varun	N Bhat	25/07/1999	95338971	varunvaru9482@gmail.com	9482592186
Spoorti	Admani	07/07/1998	95339298	spoortiadmani98@gmail.com	8139922885
keertana	UM	04/06/2000	95339303	keertanamu111@gmail.com	8919559148
sandhya	S Hegde	23/05/1999	95339320	sandhyabasoor@gmail.com	9945624401
Ajay	M Kumar	24/01/1998	95339333	ajaykumar1998ad@gmail.com	7411171958
Divya	Bharati	06/04/1997	95339351	divyab850@gmail.com	8495993312
Pooja	P Havali	06/01/1999	95339353	poojahavali06@gmail.com	8884086771
	-				

Table: 9.1.3 Events organized by IEEE Student Branch

S.No	Event Name	Date
1	IEEE MSS sponsored Two Days Hands-on workshop on IOT	16-03-2019 to 17-03-2019
2	IEEE MSS sponsored Two Days Hands-on workshop on MACHINE LEARNING	30-03-2019 to 31-03-2019
3	IEEE MSS sponsored Two Days Hands-on workshop on Cloud and BlockChain	07-04-2019 to 08-04-2019
4	IEEE MSS sponsored Two Days Hands-on workshop on Image & Speech Processing	14-04-2019 to 15-04-2019
5	IEEE MSS Flagship Project Exhibition I2CONECCT	11-05-2019
6	Inauguration of IEEE PESITM Student Branch	11-05-2019

7	IEEE MSS sponsored Five Days Hands-on workshop on Latex	16-09-2019 to 20-09-2019
8	IEEE MSS sponsored Two Days Hands-on workshop on IOT & Cloud	12-10-2019 to 13-10-2019
9	IEEE MSS sponsored Two Days Hands-on workshop on Image Processing	12-10-2019 to 13-10-2019
10	IEEE MSS sponsored Two Days Hands-on workshop on IOT	20-10-2019 to 21-10-2019
11	IEEE MSS sponsored Two Days Hands-on workshop on Machine LEARNING	22-10-2019 and 26-10-2019
12	IEEE PESITM Student Branch sponsored Alumni Interaction on how to get placed	24-10-2019
13	IEEE PESITM Student Branch sponsored Mobile awareness program for Govt. school students	06-11-2019
14	IEEE MSS sponsored Two Days Hands-on workshop on Technofun	12-11-2019
15	IEEE MSS sponsored Two Days Hands-on workshop on IEEE day	14-11-2019
16	IEEE PESITM Student Branch sponsored Industry Expert Technical Talk	20-11-2019
17	IEEE AGM @ MIT Manipal	18-01-2020
18	IEEE Execom Attended by Student Chair Mr Varun and Branch Counsellor, Likewin Thomas @ SJEC, Mangalore	08-02-2020
19	Papers Published in the year 2019-20	04
20	Papers Published in the year 2018-19	11
21	IEEE Students handled 2 days hands-on workshop for BCA students on Machine Learning at PESIAMS	12-02-2020 to 13-02-2020

MOOCs: Motivate and support the students to take up online certification courses to strengthen and build up their qualifications for their Academic progression and to achieve higher career paths in the applied areas of Computer Science Engineering.

Online Course

Students will be Learn for free, Learn Together and Learn from the Experts The Online courses have no eligibility criteria and are open to anyone and everyone. Students can review and assess their progress and directly interact with course instructors to understand concepts better An optional in-person proctored certification exam is offered at the end of the course to earn certificates from the online.

Table: 9.1.4 Online Course Exam Result List

SI No	Name	Course Title	Online Course
1	Anirudh Ranganath	Data Science	Coursera
2	Anirudh Ranganath	Data Science Methodology	Coursera
3	Anirudh Ranganath	Open Source Tools for Data Science	Coursera
4	Anirudh Ranganath	HTML Fundamentals Course	Solo Learn
5	Anirudh Ranganath	Intermediate Python for Data Science	DataCamp

6	Anirudh Ranganath	Introduction to Python	DataCamp
7	Anirudh Ranganath	Python Data Science Toolbox (part 1)	DataCamp
8	Hithesh Kumar	Intermediate Python for Data Science	DataCamp
9	Hithesh Kumar	Intro to SQL for Data Science	DataCamp
10	Hithesh Kumar	Introduction to Python	DataCamp
11	Hithesh Kumar	Machine Learning	Coursera
12	Hithesh Kumar	Python Data Science Toolbox (part 1)	DataCamp
13	Ajay Kumar	Importing Data in Python (part2)	DataCamp
14	Ajay Kumar	Cleaning Data in Python	DataCamp
16	Ajay Kumar	Python Data Science Toolbox (part 1)	DataCamp
17	Ajay Kumar	Python Programming Track	DataCamp
18	Ajay Kumar	Intermediate Python for Data Science	DataCamp
19	Darshan Hegde	C++	SoloLearn
20	Darshan Hegde	Java	SoloLearn
21	Darshan Gowda K	C++	SoloLearn
22	Keerthana U M	C++	SoloLearn
23	Anjali	C++	SoloLearn
24	Bhavana Nataraj	C++	SoloLearn
25	Gopika	C++	SoloLearn
26	Ganavi	C++	SoloLearn
27	Kruthika H U	C++	SoloLearn
28	Bhumika	C++	SoloLearn
29	Bindu R	C++	SoloLearn
30	ManasaPriya N S	C++	SoloLearn
31	Ankith Gaurav	C++	SoloLearn
32	Chanda B R	C++	SoloLearn
33	Monali	C++	SoloLearn
34	Krishana Praad N R	C++	SoloLearn
35	Elisheeba Sampreetha	C++	SoloLearn
36	Mythri N Chittaragi	C++	SoloLearn
37	Chaithanya K M	C++	SoloLearn
38	Manoj. A. R. Asimane	C++	SoloLearn
39	Karthikeya H S	C++	SoloLearn
40	Deepa N P	C++	SoloLearn
41	Harshitha M	C++	SoloLearn
42	Arpitha D M	C++	SoloLearn
43	Amurutha P Bhat	C++	SoloLearn
44	Chandana K S	C++	SoloLearn
45	Chandana K S	С	SoloLearn
46	Nagma Kouser	C++	SoloLearn
47	Komala R	C++	SoloLearn
48	Aishwaraya M	C++	SoloLearn

49	Deepa	C++	SoloLearn
50	BHuvana Prakash	C++	SoloLearn
51	Kusum	C++	SoloLearn
52	ManjuPriya	C++	SoloLearn

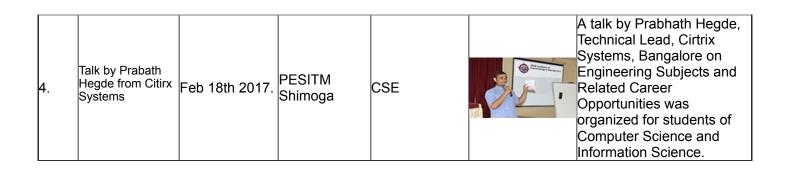
Value added training programs: Members of faculty handling different courses interact with students in clearing all their Concept-oriented and test based mechanics of the respective courses.

Training & Placement Cell guidance: Provide Career Guidance and other Training apart from arranging campus recruitment drives by the Training & Placement Cell. Support their research into Industry, companies, job and candidate profiles.

Table: 9.1.5 Industry visit and placement talk

SI.NO EVENTS	DATE OF CONDUCT	PLACE	DEPARTMENT	РНОТО	RELATED DETAILS
--------------	--------------------	-------	------------	-------	-----------------

1.	An invited Talk by Mr. Manual K, Software Architect, L&T, Europe	09-04-2018.	PESITM, Shivmaogga.	CSE	The Software Architect, L&T, Europe division, Mr. Manual K, gave an invited talk on 'Architecting software IT solutions for global roll out' to the students of computer science and information science & engineering, PESITM, Shivamogga on 09-04-2018.
2.	Industrial Visit to DXC technologies	23/03/2018	DXC Technologies	CSE	Around 110 students of B.E Pre-Final year CS&E have visited to DXC Technologies on 23/03/2018 to know about the Business operations & services that are rendered from an MNC like DXC. A talk was organized on "DXC Customers, Services & Carrier @ DXC" by Mrs. Rashmi Suryanarayana, Center Head, DXC Shimoga,
3.	Infosys Industrial Visit	31/03/2018	Infosys, Mysore	CSE	Department of CSE organized an industrial visit to Infosys, Mysore campus on 31/03/2018 from 10 AM to 4 PM. A total of 47 final year students accompanied by 2 faculties visited the campus. This visit was organized to know about IT industry and its Operations & Services that are rendered from an MNC like Infosys.



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

9.2. Feedback analysis and reward /corrective measures taken, if any. (10)

(Feedback collected for all courses: YES/NO; Specify the feedback collection process; Average Percentage of students who participate; Specify the feedback

Feedback on faculty teaching performance is taken from students through a well-defined format

Feedback collected for all courses (Yes/No): Yes

Specify the feedback collection process:

A standard feedback questionnaire is collected from the students every mid-semester course wise. At the end of semester, department conduct end course sur Number of Feedback Items: 06.

Number of Feedback levels: 01 to 05.

Any consistency check? : Yes.

Any performance/attendance profile: Yes.

Frequency of feedback collection: Once in a semester.

Feedback collection: Software.

Average percentage of students who participates: 80%

FORMAT of Student Feedback on Faculty:

SI. No.	Description				
1.	Has the teacher covered entire syllabus as prescribed by the university/college/board?				
2.	Has the teacher covered relevant topics beyond syllabus?				
3.	Effectiveness of teaching in terms of technical content/ Course content?				
4.	Effectiveness of teaching in terms of Communication Skills?				
5.	Effectiveness of teaching in terms of use of technical aids?				
6.	Pace on which contents were covered?				
7.	Motivation and inspiration for students to learn?				

8.	Support for the development of student skills Practical demonstration/ Hands on Training?
9.	Clarity of Expectation of students?
10.	Willingness to offer help and advice students?
11.	Feedback provided on student Progress?
12.	Subject Knowledge
13.	Level of Preparation
14.	Communication skills
15.	Presentation skills
16.	Clarifications to student queries/ doubts
17.	Classroom control

Rating Scale:

- 1. Excellent -E
- 2. Very Good -VG
- 3. Good-G
- 4. Satisfactory S
- 5. Not Satisfactory NS

Feedback analysis Process:

- 1. The feedback analysis is done manually
- 2. Collected feedback is scrutinized by the HOD
- 3. The feedback is quantified
- 4. All the parameters mentioned in the feedback form will be analyzed.
- 5. Ability of teaching with respect to each item and comprehensive ability of the teachers will be analyzed
- 6. All the feedback given by the students in the feedback software will be communicated to the respective faculty members along with their feedback levels to

Effectiveness

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

Basis of reward/corrective measure:

1. Faculty members who get average feedback below 70% are identified and provided With induction program and faculty development program in specified area.

Action taken report based feedback - Nil

PES Institute of Technology and Management

Computer Science and Engineering
APPRAISAL OF TEACHERS
ACADEMIC YEAR 2019

FACULTY NAME: ASHWINI S P Assistant Professor DESIGNATION: SUBJECT: C PROGRAMMING FOR PROBLEM YOUR SCORE: 88.48 Department of Computer Science and Engineering, PESITM is very happy to inform you that feedback analysis in October 2019 has been completed and your performance for subject C PROGRAMMING FOR PROBLEM SOLVING is as follows: **OVERALL %** SL NO QUESTIONNAIRE % 87.43 Presentation skills 1 Clarifications to student queries/ doubts 91.43 2 87.43 3 Subject Knowledge 88.48 85.14 Classroom control 4 89.14 Level of Preparation 5 90.29 6 Communication skills HOD's Comment: Satisfactory On behalf of Department & the Institution, I whole heartedly appreciate your effort in sharing your Knowledge. Congratulation in the relevent subject I feel you have done an Very Good work Head of the Department 10 10 1009 Principal

Fig. 9.2.1: faculty feedback sample

Table 9.2.1.a: faculty feedback of acdemic year 2019-20

		OVE	OVER ALL	Has the teacher covered entire syllabus as prescribed by the							Has the teacher covered rele		
S.No	FACULTY NAME	SUBJECT NAME	FEEDBACK	university/college/board?									
				E	VG	G	S	NS	Count	Score	E	VG	G
1	ASHWINI S P	Networks		27	15	6	1	0	49	87.76	26	19	4
2	CHETHAN L S	STORAGE AREA	89.2	34	10	7	1	0	52	89.62	34	11	6
3	CHETHAN L S	MACHINE LEARNING	90.68	28	17	3	0	0	48	90.42	28	17	3
4	CHETHAN L S	MACHINE LEARNING LABORATORY	90.91	29	16	3	0	0	48	90.83	27	19	2
5	DEVARAJ F V	Analog and Digital Electronics	80.28	15	22	13	1	1	52	78.85	19	18	13
5	DEVARAJ F V	Artificial Intelligence	92.49	18	4	1	0	0	23	94.78	15	6	1
7	DEVARAJ F V	Analog and Digital Electronics Laboratory	79.48	15	26	9	2	0	52	80.77	17	17	16
8	JAGADEESHA S. N.	Management and Entrepreneurship for IT Industry		25	13	10	1	0	49	85.31	26	12	11
9	JAGADEESHA S. N.	Advanced Computer Architectures	87.92	27	16	5	0	0	48	89.17	25	17	6
10	KODIKA	WEB TECHNOLOGIES AND ITS APPLICATIONS	97.13	44	8	0	0	0	52	96.92	46	6	0
11	KAILASH RUDRA	WEB TECHNOLOGY LABORATORY WITH MINI PROJECT	96.47	44	7	1	0	0	52	96.54	43	9	0

12	KAILASH RUDRA	Software Engineering	84.16	24	18	10	0	0	52	85.38	26	17	8
13	LIKEWIN THOMAS	Discrete Mathematical Structures	75.42	10	16	19	6	1	52	70.77	12	17	17
14	LIKEWIN THOMAS	Automata theory and Computability	84.53	25	17	7	3	1	53	83.4	26	15	8
15	MANU A P	Computer Networks	93.65	41	10	2	0	0	53	94.72	41	9	3
16	MANU A P	l aboratory	92.83	40	12	1	0	0	53	94.72	38	12	3
17	NAYANA K	STORAGE AREA NETWORKS	90.19	28	16	4	0	0	48	90.0	28	16	4
18	PRADEEP K	Software Engineering	78.98	17	17	17	4	0	55	77.09	15	22	16
19	PRATIBHA S	CLOUD COMPUTING AND ITS APPLICATIONS	90.35	26	12	4	0	0	42	90.48	24	15	3
20	PRATIBHA S	Data Structures and Applications	88.1	24	25	5	1	0	55	86.18	32	21	2
21	PRATIBHA S	Data Structures Laboratory	85.55	24	24	6	0	1	55	85.45	24	24	7
22	PUNEETH B H	Introduction to Software Testing	86.99	17	11	3	1	0	32	87.5	17	10	5
23	PUNEETH B H	Analog and Digital Electronics Laboratory	78.68	20	20	12	3	0	55	80.73	20	15	16
24	PUNEETH B H	Analog and Digital Electronics	78.48	17	17	18	2	1	55	77.09	18	17	18
25	RAGHAVENDRA K	Database Management System	91.55	70	23	7	2	0	102	91.57	72	21	7

26	RAGHAVENDRA	DBMS Laboratory	92.97	40	11	2	0	0	53	94.34	36	13	4
		with mini project	<u> </u>	 	 		-						
27	RAJESH T H	Dot Net framework for application development	82.95	35	23	15	4	2	79	81.52	37	21	14
.8	RAJESH I H	Data Structures and Applications	81.57	17	21	14	0	0	52	81.15	19	17	15
9	RAJESH I H	Data Structures Laboratory	83.29	23	19	9	1	0	52	84.62	20	18	12
30	KANJAN VENLIGOPAL	Management and Entrepreneurship for IT Industry		34	17	2	0	0	53	92.08	34	15	4
31	RANJAN VENUGOPAL	WEB TECHNOLOGY LABORATORY WITH MINI PROJECT	88.67	26	17	4	1	0	48	88.33	25	18	4
2	RANJAN VENUGOPAL	WEB TECHNOLOGIES AND ITS APPLICATIONS	89.39	28	17	2	1	0	48	90.0	27	18	2
33	SHAMANTH GS	MACHINE LEARNING	90.7	34	10	6	2	0	52	89.23	34	13	5
34	SHAMANTH GS	MACHINE LEARNING LABORATORY	89.9	34	11	5	2	0	52	89.62	33	14	4
35	SHAMANTH GS	Computer Organization	77.92	17	17	20	0	1	55	77.82	19	15	17
36	SUNIL M E	Automata theory and Computability	81.89	20	13	14	2	0	49	80.82	18	16	14
37	SUNIL M E	Discrete Mathematical Structures	80.07	18	22	13	1	1	55	80.0	18	19	17

38	SUNIL KUMAR H R	DBMS Laboratory with mini project	84.01	24	13	10	2	0	49	84.08	22	15	10
39	SUNIL KUMAR H R	Advanced Computer Architectures	90.31	35	9	7	1	0	52	90.0	35	9	7
40	SUNIL KUMAR H R	Computer Organization	76.75	13	19	20	0	0	52	77.31	12	20	18
41	SUNITHA BS	Advanced JAVA and J2EE	96.36	61	8	0	1	0	70	96.86	63	5	1
42	SUNITHA BS	Unix System Programming	88.24	33	13	10	2	0	58	86.55	34	14	10
43	SUNITHA BS	Computer Network Laboratory	91.02	35	9	4	1	0	49	91.84	31	14	4

9.3 Feedback on facilities (5)

Total Marks 3.00

Institute Marks: 3.00

9.3. Feedback on facilities (5)

(Assessment is based on student feedback collection, analysis and corrective action taken) Feedback on facilities is taken through a well-defined feedback form. Assessment is based on student feedback collection, analysis and corrective action taken.

Feedback on facilities (Format enclosed)

A standard procedure for feedback on facilities is taken up in the department as per the following steps:

- 1. Feedback is collected from the students on the facilities available in the college such as class room infrastructure, library, labs, canteen, playground, internet facility, etc.
- 2. The feedback is analyzed and the necessary corrective measures are implemented after discussions with the management.

Following is the process of feedback on facilities.

- 1) Feedback collection process
- 2) Feedback analysis
- 3) Corrective measures
 - 1. Feedback collection process:

Table 9.3.1: Details of feedback collection process

Items	Description
Feedback collected on all facilities provided by the college.	YES
Feedback collection process	Computerized
Feedback receiver	Administrative officer / Admin manager
Frequency of feedback collection	Once in an academic year
	5- Excellent 4- Good 3- Satisfactory 2- To improve 1-Poor
Purpose of comments	For improving the quality of facilities.

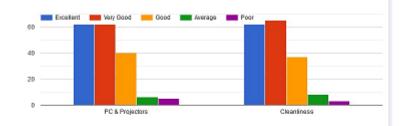
2) Feedback analysis
The feedback given by the students is consolidated and analyzed. The HOD / Principal discuss about the consolidated report with the management and come out with necessary actions.

Table 9.3.2: Feedback Format

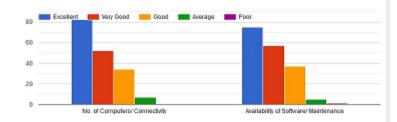
SI. No.	Feedback Question	Score	Deficient service – comments if any
1.	Help from office [Administration, Accounts section]		
2.	Assistance from exam section		
3.	Activities of Dept. Technical forums (Associations)		
4.	Class rooms and lab facilities		
5.	Placements		
6.	Library		
7.	Internet and WIFI		
8.	Canteen – Quality, Hygiene and Service		
9.	Hostel (If applicable)		
10.	Sports and Physical Education		
11.	Cultural forums		
12.	Drinking water availability		
13.	Toilets and cleanliness		
14.	Class room teaching		
15.	Training in Labs/ Workshops / CAD etc.		
16.	Tutorial classes		
17.	Mentoring Assistance		
18.	Additional coaching for repeaters (in difficult subjects)		
19.	Placement training (soft skills etc.)		
20.	Other services if any (Please indicate)		

Feedback on Facilities

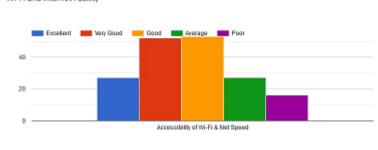
Class Room



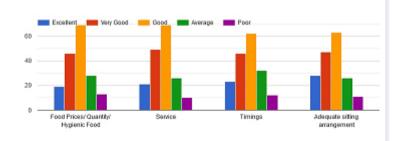
Computer Labs



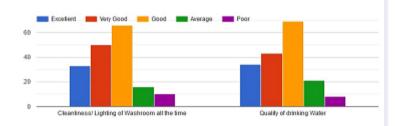
Wi-Fi and Internet Facility



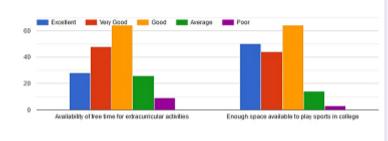
Canteen



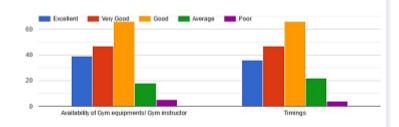
Washroom & Drinking water



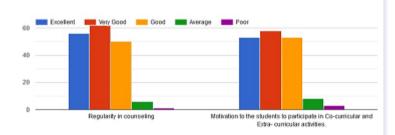
Extra-Curricular activities



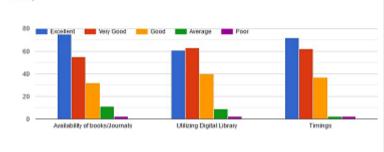
Gym



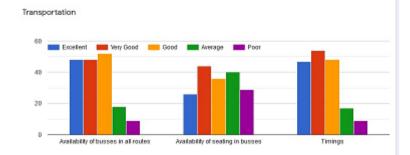
Mentoring System

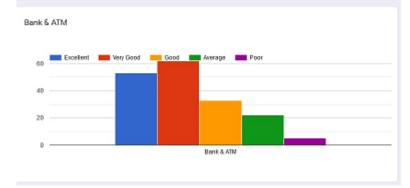


Library



Medical 60 Excellent Very Good Good Average Poor 40 Availability of Doctor and Medicines timings





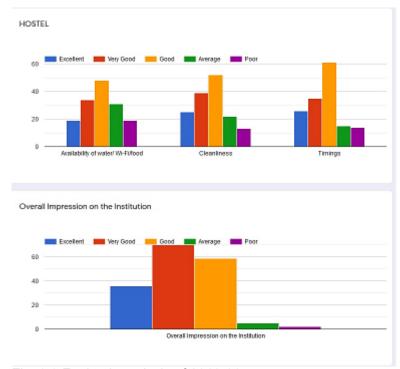


Fig. 9.3 Feeback analysis of 2019-20

3) Corrective measures

Some of the corrective actions initiated are:

- 1. Student's feedback on facilities such as class room ambiance, furniture and projector is To be increased. We have installed projectors in all class room
- 2. Student's feedback on facilities such as library, no of books to be increased. We have increased Purchase of books for central library.
- 3. Student's feedback on facilities such as speed of internet to be improved. We have increased the band width.

9.4 Self-Learning (5) Total Marks 3.00

Institute Marks: 3.00

9.4. Self-Learning (5)

(The institution needs to specify the facilities, materials and scope for self-learning / learning beyond syllabus, Webinars, Podcast, and MOOCs etc. and evaluate their effectiveness)

Self-Learning

Self-Learning method is an individualized method of learning collecting information, processing it, and retaining it without the needs for another individual to teach it.

- Library
- Digital library
- Departmental library
- Virtual Lab facility
- Wi-Fi enabled campus
- Internet access to all the computers for the benefit of students.
- Edusat Program from the university.
- Projects, Internship Modeling.
- Web based learning i.e NPTEL,SWAYAM, Coursera, etc. (independently by students)
- Accession of Journals
- Newspaper of major languages
- Professional bodies
- e-notes for few subjects of all Department
- Industrial visits
- EDUSAT programme

Table 9.4.1. Self - Learning facilities

SI. No.	Self-learning process	Description
1.	Library	The college/ department library is enriched with vast collection of books, journals, periodicals, research articles. The library is equipped with 18 systems with internet facility.

2.	Digital Library	 Faculty and students have access to the following content: E-BOOKs McGraw Hill Education (Engineering Express) Taylor and francis (E-Books & Journals) Knimbus (1.Digital Library Platform 2.Remote Access Solution 3.Mobile App) Springer nature (E-Books & Journals) ELSEVIER – SCIENCEDIRECT (Computer Science & Engineering) New Age International SHODHGANGA (A reservoir of Indian Theses) UN University Full-Text Publications NISCAIR Research Journals Open Access Publishing in European Networks - OAPEN (About 1000 titles) Indian Academy of Sciences(13 Journals)
3.	Professional bodies/other association activities	A professional association is one of the most important actions a student career. All career options related to professional association, valuable information and resources for their enhancement. College is a registered member of following professional ISTE, CSI,IFERP & IEEE.
4.	Industrial visit	 Industrial visit is a part of college curriculum during whichstudents visit companies and get insight regarding the internalworking environment of a company. It helps students to gain first-hand information regardingfunctioning of the industry. Provides an opportunity to plan, organize and engage in activelearning experiences both inside and outside class room. Provides an awareness and importance of industry in the realworking world. Assist them for future placement. Helps to enhance their interpersonal and communication skills,it also enriches the knowledge about industrial practices.

5.	Seminars & workshops	 A seminar is a group meeting led by an expert that focuses on specific topic or disciplines such as emerging technologies and jobopportunities. Attending seminar will have numerous benefits to a student forimproving communication skills and gaining domainknowledge. Seminars are conducted frequently at the department level andthe seminars offer students to interact with industry experts, research persons, entrepreneurs and small business partners. Workshops allow a student to further develop marketablebusiness skills in a focused interactive environment.
6.	Assignments	 It enables students to go through the topics in a more elaboratemanner in order to explore the academic topic, which lead to anoverall better learning experience. Assignments help the students to understand the subject in amore detailed pattern. Faculty gives assignments on regular basis and they are graded.

Table 9.4.2. Self – Learning facilities beyond the sylla							
SI. No.	Self-learning process	Description					
1.	Online certification courses	Online certification courses are conducted by NPTL) and certificates are issued to the students.					
2.	Research Publications	 Expands the knowledge of students in various fields and increases visibility, credibility and competitiveness of students. Helps in presenting papers in conferences. 					

3.	MOOC(Massive Open Online Course)	Objectives of MOOC: It creates the opportunity for sharing ideas & knowledge and alsohelps improving lifelong learning skills by providing easy access to global resources. It improves cross-cultural relation-ships which lead tocollaboration between institution educators and learners locallyand internationally. Enhances active learning. Contextualized content can be shared by all. VTU e-resources (EDUSAT) SWAYAM
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Utilization and its effectiveness:

The overall aim of this review is to evaluate the effectiveness of self-directed learning on the professional development of students.

- Most of the students reached to a conclusion that self-learning process is an effective approach for learning but not more than the traditional method of teaching.
- Students are motivated to improve their initiation in reaching their goals.
- Students are able to scan through the reading material available to them.
- Many of the needs of students are best met by learning process. The students are encouraged to learn by themselves for their present and future needs.
- Students are able to do better in competitive examinations and get placed in suitable companies.

List of the students who have completed nptel online certification courses

NPTEL Online Course Exam Result List

Table 9.4.3. Details of Self – Learning

SI No	Name	Subject Name	Result
1	Desai Sanjana Shivkumar	Programming in Java	Elite
2	Aishwarya S V	Introduction to Internet of Things	Elite
3	Neha Shanbhag	Programming in Java	Elite
4	Neha Shanbhag	Introduction to Internet of Things	Elite
5	Neha Shanbhag	Joy of Computing Using Python	Elite
6	Karthik S	Joy of Computing Using Python	Successfully Completed
7	Arpana Karunakar Hegde	Joy of Computing Using Python	Elite
8	Deepak P	Data Mining	Successfully Completed

9	Deepak P	Big Data Computing	Elite
10	Desai Sanjana Shivkumar	Joy of Computing Using Python	Elite
11	Neha Shanbhag	Introduction to Automata, Languages and Computing	Elite
12	Madhu K S	Joy of Computing Using Python	Elite
13	Ajay M Kumar	Joy of Computing Using Python	Elite
14	Ajay M Kumar	Introduction to Automata, Languages and Computing	Elite
16	Ajay M Kumar	Data Mining	Elite
17	Rahul A Eskkanavar	Joy of Computing Using Python	Elite
18	Rahul A Eskkanavar	Data Base Management System	Successfully Completed
19	Siddhartha Rao V S	Introduction to Programming in C	Successfully Completed
20	Rakshitha C	Joy of Computing Using Python	Elite
21	Amit Naik	Joy of Computing Using Python	Elite





EL Online Certification

(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to

HITESHKUMAR G BALEGAR

for successfully completing the course



MACHINE LEARNING, ML

with a consolidated score of

Online Assignments | 19.59/25 | Proctored Exam | 57.75/75

Total number of candidates certified in this course:

1287

Prof. A. Ramesh Chairman

Centre for Continuing Education, IITM

Feb-Apr 2019 (8 week course) Prof. Andrew Thangaraj NPTEL Coordinator **IIT Madras**



Indian Institute of Technology Madras







Fig. 9.4 NPTEL Certificate

9.5 Career Guidance, Training, Placement (10)

Total Marks 8.00

Institute Marks: 8.00

9.5. Career Guidance, Training, Placement (10)

(The institution may specify the facility, its management and its effectiveness for career guidance including counselling for higher studies, campus placement support, industry interaction for training/internship/placement, etc.)

The Department of Training and Placement provides job opportunities to the graduating students through campus placement. The process normally begins at the end of the sixth semester and continues till eight semesters and beyond. Students are recruited in reputed companies and offered high salary package.

Availability of career guidance facility

Placement cell is a crucial interface between industry and academia by providing a platform for the companies to hire the right talent and at the same time providing the students a kick start to their dream career.

The placement cell is headed by **Mr. Pramod Prbhudev P L**, who has extensive experience in both industries. It is the nodal point of contact for both companies seeking to establish a fruitful relationship with our college and for conducting training sessions.

The Cell handles all aspects of placements, right from contacting companies to managing all logistics of arranging pre-placement talks, online tests, group discussions and conducting final interviews.

Placement cell also organizes career guidance workshops like career opportunities in IT sector, civil services, defines services etc. Students are also motivated and to pursue higher studies as well. Android app developed by Ministry Labor and Employment, Govt. of India under National Career Scheme (NCS) is also promoted among final and pre-final year students, so that they will get information regarding employment oppertunities in Govt. Sector.

Management of placement and training cell for Computer Science & Engineering

SI.No.	Name	Designation	Department
1	Mr. Pramod Prbhudev P L	Head CDC	Career Development Cell
2	Mrs. Aruna A	Manager	Career Development Cell
3	Mr. Sudhakar	CDC	Career Development Cell
4	Dr. Likwin Thomos	Placement Co-ordinator	Computer Science & Engineering
5	Mr. Puneeth B H	Placement Co-ordinator	Computer Science & Engineering

Facilities of Placement cell

The Career Guidance Cell (CDC) has Board Room, HR Cabins, Waiting Hall, Aptitude material etc.,

Placement cell activities

- 1. Placement cell will orient students on core company opportunities and preparations.
- 2. Required for placements (Arrangement for Personality development program,

Communication skills, Group discussion practice, Mock interview session, Industry Internship programs).

- 3. Invite companies for placements and internships.
- 4. Placements for all the students are planned at regular intervals.
- 5. Industry collaboration activities are formalized with companies.
- 6. Mock interviews are conducted for the students often to analyze their strength and weakness (Online test, Technical & HR interviews) through Bizotic software.
- 7. The cell provides complete support to the visiting companies at every stage of placement process.
- 8. The placement cell provides soft skills and aptitude development sessions for all the students.

Counseling for higher studies

PESITM has been witnessing its alumni pursuing higher studies from renowned universities which require the students to qualify and meet certain criteria. Guidance and motivation are provided for the students by respective student mentors and counselling experts.

PESITM provides resources to students to prepare for the entrance exams conducted for higher studies. PESITM encourages the students on career prospectus which enable and regularly organizes career guidance programs from different organizations, to guide the students in the admission procedure for higher studies to choose the right carrier option.

Pre-placement training

Placement training is organized from semester one onwards to make students industry ready. The training comprises of aptitude and domain specific. PESITM provides placement for all eligible students. Students appearing for campus recruitment are put through a very rigorous training programme. Students are trained in Aptitude, Soft skills and domain- specific training which is supplemented by training by senior technical / HR personnel of leading IT Companies. As a result of this intensive training, our students are highly appreciated on the job performance by all major recruiters and these companies come back to PESITM for recruitment.

Table 9.5.1: Training Overview at PESITM Placement Cell Year 2018-19

SL NO	COURSE	TRAINING DATES	DAYS	TRAINING DURATION	TRAINING COMPANY	Topic
1	B.E FINAL YEAR	17 th , 20 th Sep to 24 th to 30th Sep, 2018	11 DAYS	72 HOURS	CAREER PRIME	Time Management + Team Building Written Communication Human Values Goal Setting & Decision Making Initiative & Leadership Qualities IT - Technical
2	B.E PRE- FINAL YEAR	8th, 9th Sep, 2018 & 15th & 16th Sep, 2018	4 DAYS	24 HOURS	CAREER PRIME	Aptitude Time Management + Team Building Communication Skills Written Communication
3	B.E SECOND YEAR	16th, 20th, 21st, 23rd, 24th, 27th, & 28th, Aug, 2018.	Integrated training	24 HOURS	GENESIS	Basics of Aptitude Self-Development & Presentation Skills, Soft skills, Verbal & Soft skills Reasoning / Aptitude C/C++ Programming,

4	B.E FIRST YEAR	16th, 18th, 20th, 21st, 23rd, 24th, 25th, & 28th, Aug, 2018		12 HOURS	GENESIS	Basics of Aptitude Self-Development & Presentation Skills, Soft skills,
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Year 2017-18

SL NO	COURSE	TRAINING DATES	DAYS	TRAINING DURATION	TRAINING COMPANY	Topic
1	B.E FINAL YEAR	18th to 23rd, 28th to 31st Aug, 2017 & 1st Sep, 2017	12 DAYS	72 HOURS	CAREER PRIME	Time Management + Team Building Written Communication Human Values Goal Setting & Decision Making Initiative & Leadership Qualities IT - Technical
2	B.E PRE- FINAL YEAR	8th & 9th Sep, 2017 & 5th to 10th Feb, 2018	8 DAYS	48 HOURS	CAREER PRIME	Aptitude Time Management + Team Building Communication Skills Written Communication
3	B.E SECOND YEAR	17th & 18th August, 2017 & 5th & 6th, 19th & 20th 26th & 27th Feb,2018 & 5th & 6th March, 2018	Integrated training	24 HOURS	GENESIS	Basics of Aptitude Self-Development & Presentation Skills, Soft skills, Verbal & Soft skills Reasoning / Aptitude C/C++ Programming,
4	B.E FIRST YEAR	18th & 19th August, 2017 & 5th & 6th, 19th & 20th 26th & 27th Feb,2018 & 5th & 6th March, 2018	Integrated training	24 HOURS	GENESIS	Basics of Aptitude Self-Development & Presentation Skills, Soft skills,

Year 2016-17

NO OOKSE DATS DURATION COMPANY

1	B.E FINAL YEAR	12 th , 14 th Sep to 24 th Sep, 2016	11 DAYS	72 HOURS	CAREER PRIME	Time Management + Team Building Written Communication Human Values Goal Setting & Decision Making Initiative & Leadership Qualities IT - Technical
2	B.E PRE- FINAL YEAR	14th to 16th Mar, 2017 & 6th to 8th April, 2017, 16th May, 2017	7 DAYS	48 HOURS	ETHNUS	Aptitude Time Management + Team Building Communication Skills Written Communication
3	B.E SECOND YEAR	6th to 8th March, 2017, 30th& 31st March – 2017, 1st April, 2017, 15th May, 2017	7 DAYS	48 HOURS	ETHNUS	Basics of Aptitude Self-Development & Presentation Skills, Soft skills, Verbal & Soft skills Reasoning / Aptitude C/C++ Programming,
4	B.E FIRST YEAR	9th& 10th March & 3rd& 4th April, 2017	4 DAYS	24 HOURS	GENESIS	Basics of Aptitude Self-Development & Presentation Skills, Soft skills,

Placement Process and Support

The training division of the placement cell through its custom-made modules not just prepares the students for the corporate world but also to life at large. The cell organizes training personality development, soft skills, quantitative aptitude, company-specific modules, a crash course of technical topics and other placement related training every year to all students across all semesters with the help of Bizotic. To strengthen the industry-academia interaction, a number of technical talks, seminars, are also organized by inviting industry experts on topics like Robotics, Artificial Intelligence, Machine Learning, Cyber Security, Data Analytics, life in a corporate world etc.,

Recruitment Process

- 1. Prepare the students database based on their merit.
- 2. Invite companies to visit PESITM for recruitment.
- 3. If the company accepts, collect the relevant data like the minimum cut-off percentage, branches in demand, selection procedures etc.,
- 4. Inform the students of the requirement.
- 5. Prepare the data base of eligible candidates.
- 6. Finalize the schedule for the sent in concurrence with the industry & conduct the process.
- 7. Prepare the list of selected candidates.

- 8. Get the appointment letters / selection letters (e-mail) from the company.
- 9. Distribute the appointment letters / intimate the students regarding selection.
- 10. Get the date of joining from the company and inform the students.

Table 9.5.2 Placement details for CAYm1: 2018 - 19

SI. No	Company	Total number of students placed
1	GLOBALEDGE	3
2	SLK Software's	2
3	ABC GROUP	3
4	MPHASIS	3
5	ADVANCED INDIA PVT LTD	1
6	TCS - NINJA	4
7	ROBOSOFT	1
8	TEK SYSTEMS	1
9	CAREER PRIME	4
10	CALL IN IT	9
11	WIPRO - Elite NLTH	3
12	RAPIDD TECHNOLOGIES	1
13	INFOSYS	2
14	MU SIGMA	1
15	SRICHID TECHNOLOGIES	5
16	HAKUNA MATATA	2
17	QSPIDERS	3
18	TECH FORTUNE	4
19	RIIIT - INTERNSHIP	6
20	SYNFINITY	1
21	CAMPUS MANAGEMENT	1
22	TECH MAHINDRA	2
	Total	62

Placement details for CAYm2: 2017 - 18

SI. No	Company	Total number of students placed
1	GLOBALEDGE	5
2	EVIVE	5
3	HIGH PEAK	1
4	YOUNGSTONE	1
5	MPHASIS	2
6	SLK	1
7	BETSOL	1
8	VYSHNAVI	1
9	SRICHID	4
10	AppNM	2
11	CALL IN IT	6
12	ABC	5
13	INFOSYS	2
14	MAINTECH	12
15	NINJACART	4
16	QSPIDERS	3
17	RIIIT	2
18	VEE TECH	8
Total		65

Placement details for CAYm2: 2016 - 17

SI. No	Company	Total number of students placed
1	GLOBALEDGE	2
2	CRIMSON LOGIC	1
3	TECH MAHINDRA	3
4	EVIVE HEALTH	3
5	ACT	1
6	IBM	1
7	VYSHNAVI	1
8	ETHNUS	2
9	ABC GROUP	3
10	JSPIDERS	7
11	CAREER PRIME	2
12	RIIIT	3
13	VEE TECHNOLOGIES	7

14	BETSOL	1
15	SRICHID	4
16	SUNQUEST	4
17	INFOSYS BPO	10
18	AMAZON	10
19	JOULESTOWATTS	7
	Total	72

9.6 Entrepreneurship Cell (5) Total Marks 2.00

Institute Marks: 2.00

9.6. Entrepreneurship Development Cell (5)

The department has constituted a committee for Entrepreneurship Development Cell. The mission of EDC is producing successful entrepreneurs assimilate with qualities using innovative and ethical business practices to make global impact. Instill the passion and spirit among students to pursue entrepreneurship. **INTRODUCTION**

Entrepreneurship Development Cell, the abbreviation of which is EDC, has been established in PES Institute of Technology and Management, Shivamogga. Ever since its inception, the cell has embarked on its flagship programme of continuous innovative thinking in order to enhance the country's economy. At the same time, the cell also concentrates on the rural fronts so as to develop the potential of the rural youth and revamp their traditional mindset. Battling against odds appears to have become something of a habit for the unemployed youth. The EDC tries to extricate these youngsters from their wrangle with employment opportunities by crowning them as young and dynamic entrepreneurs. These dynamic youngsters evolve from the corporate shadows and reach an enviable position. From the position of job seekers, they get ordained as job givers. They expand the availability of jobs, thereby minimizing the nation's anxiety over the rapidly increasing unemployment rate.

The EDC redefines the role of the youth to make them more independent. The youngsters are thus shaken out of their complacent mood regarding their employment opportunities. Such entrepreneurs become icons of success with the help of the prospective tool called innovation. They also cater to the evergrowing employment needs of the society. Leaving no stone unturned in their innovative and constructive pathway, they prove to be the heartbeat of a nation's progress and prosperity. Thus, the EDC empowers the youth with entrepreneurial skills.

Long Term Goals (4 Years)

- 1. Motivate students to develop their own start-ups
- 2. Develop business incubators
- 3. Create corpus fund to seed ventures

• Short Term Goals (2 Years)

- 1. To provide a platform for interaction with entrepreneurs
- 2. Impart entrepreneurial education/skills amongst students through various trainings and exercise
- 3. Arrange vibrant interaction with organizations promoting the cause of entrepreneurship.

• The Broad Objectives of EDC Are

- 1. To create awareness on entrepreneurship among the students.
- 2. To inculcate entrepreneurial spirit and culture among the Science and Engineering graduates and post graduates.
- 3. To conduct programs in Entrepreneurship enabling skills.
- 4. To identify and motivate budding entrepreneurs.
- 5. To create a database on industrial information to facilitate entrepreneurs by providing information on entrepreneurial opportunities.
- 6. To assist entrepreneurs in sourcing finance, identifying market, preparation of business plan and product development.
- 7. To guide the prospective entrepreneurs in knowledge-based ventures.
- 8. To help entrepreneurs to acquire necessary skills to run the industry effectively.
- 9. To bridge the gap between Industries and Institutions by carrying out the research activities for the industries.
- 10. To conduct skill industrial development training programs with updated technologies.
- 11. To provide need-based consultancy services to industries.

EDC activities:

- 1. Arranging In-plant training in their core subject.
- 2. Awareness programmes for UG students.
- 3. Providing impetus for final year students to launch their own enterprise / business after passing out.
- 4. Arranging seminars and guest lectures of famous Industrialists.
- 5. Conducting seminars to understand state-of-the-art technology.

EDC committee Members of Institute:

SI. No	Name	Designation	Department	Category
1	Dr. Chandrappa D. N.	Professor	E&C	Chairman
2	Dr. Basavarajappa Y. H.	Professor	Mechanical	Member
3	Mr. Pramod Prabhudev	Placement Manager	CDC	Member
4	Mr. Kunjan D. Shinde	Assistant Professor	E & C	Member
5	Mr.Pradeep K	Assistant Professor	CS & E	Member
6	Mr. Nandan Shenoy	Assistant Professor	CV	Member
7	Mr. Santhosh M. B.	Assistant Professor	Mechanical	Member
8	Mr. Kiran M. R.	Assistant Professor	EEE	Member



Fig.9.6.1 Awareness Program on Entrepreneurship Development



Fig. 9.6.2 Talk on how to become a Successful Entrepreneur

9.7 Co-curricular and Extra-curricular Activities (10)

Total Marks 8.0

Institute Marks: 8.

9.7: Co-curricular and Extra-curricular Activities (10)

Activities and their details:

(The institution may specify the co-curricular and extra-curricular activities) (Quantify activities such as NCC, NSS etc.)

The college encourages the students to take part in both co-curricular and extra-curricular activities.

Co-curricular Activities

Every year there is an abundance of stimulating programs and activities are conducted from which students learn a lot. Co-curricular activities are an integral part of college life, offering students additional values to explore their talents, passions and interests. Participating in co-curricular activities which are conducted by our college and other institutions, our students continue to apply what they learn in the classroom toenhance their knowledge and performance.

Student's Achievements



Figure: 9.7.1 Mr.Deepak and Mr.Hitesh Kumar have won the First Prize in State Level Intercollegiate Paper Presentation Competition held at Bapuji Institute c Engineering and Technology (BIET), Davanagere. 2017-18
Second Place in VTU State Level Intercollegiate Cultural Events (https://pestrust.edu.in/pesitm/second-place-in-vtu-state-level-intercollegiate-cultural-events/)



Figure: 9.7.2 Our College students won Second Place in VTU State Level Intercollegiate Cultural Events in Folk Dance category 2017-18

Table 9.7.1 Student's activities for the academic year 2018-2019

SL.NO	Name	USN	Semester	Event	Date	Prizes won(if any) or participation details	Event / workshop / Conference details
3.			7 th sem B	- J	13-15 th April 2018	First Place	TRAILBLAZER
4.	Surjith SK	4PM16CS089	8 TH Sem B Section	Test.C (National level symposim)	12/12/2018	First Place	National Level Technical symposium held at JNNCE, Shimoga.

5.	Mr. Saurabh SN	8 th Semester	Test. C (National level symposium)		First Place	National Level Technical symposium held at JNNCE, Shimoga.
6.	Mr. Vishal	8 th Semester	Test. C (National level symposium)	12/12/2018	Second Place	National Level Technical symposium held at JNNCE, Shimoga.
7.	Mr. Ramkrishna Vaidya	8 th Semester	Test. C (National level symposium)	12/12/2018	Second Place	National Level Technical symposium held at JNNCE, Shimoga.

Table 9.7.2 Student's activities for the academic year 2017-2018

SL.NO	Name	USN	Sem	Event	Date	Prizes won(if any) or participation details	Event / workshop / Conference details
ļ	Akshatha PS	4PM15CS005	5th A	Course in Cloud Computing	Oct-17	Participated	Synchash Applications PVT.LTD
5	Harshita Lokesh T	4PM15CS031	5th A	Course in Cloud Computing	Oct-17	Participated	Synchash Applications PVT.LTD
6	Paqllavi S Badiger	4PM15CS051	5th B	Course in Cloud Computing	Oct-17	Participated	Synchash Applications PVT.LTD
7	Kshama G N	4PM15CS036	5th A	Course in Cloud Computing	Oct-17	Participated	Synchash Applications PVT.LTD
3	Nirosha M R	4PM15CS046	5th A	Course in Cloud Computing	Oct-17	Participated	Synchash Applications PVT.LTD
9	Shwetha	4PM15CS075	5th B	Course in Cloud Computing	Oct-17	Participated	Synchash Applications PVT.LTD

10	Surjith SK	4PM15CS089	5th B	Course in Cloud Computing	Oct-17		Synchash Applications PVT.LTD
11	Shainy Wilson Dsouza	4PM15CS071	5th B	Course in Cloud Computing	Oct-17		Synchash Applications PVT.LTD
12	Jyothishree C	4PM15CS033	5th A	Course in Cloud Computing	Oct-17		Synchash Applications PVT.LTD
13	Aishwarya S	4PM15CS002	5th A	Course in Cloud Computing	Oct-17	I .	Synchash Applications PVT.LTD
	Hitesh Kumar G	4PM16CS040	Α	INFOZEST – 18 State level Competition	11-12 th April 2018	First Place	Paper Presentation
	Deepak P	4PM16CS029	Α	INFOZEST – 18 State level Competition	11-12 th April 2018	First Place	Paper Presentation

Table 9.7.3 Student's activities for the academic year 2016-2017

SL.NO	Name	USN	Semester	Event		Prizes won(if any) or participation details	Event / workshop / Conference details
3.	Abhishek S A	4PM12CS015 4PM12CS002 4PM12CS001	8 th sem A-Section	National Conference on Product Design (NCPD -2016)	01/07/2016 to 03/07/2016	Presented a technical Paper	"face detection using Raspberry Pi and python" M.S Ramaiah Institute of Technology, Bangalore
4.	Salman	4PM12CS012 4PM12CS045 4PM12CS012	8 th sem A-Section	National Conference on Product Design (NCPD -2016)	01/07/2016 to 03/07/2016	Presented a technical Paper	"Home automation Using Ardino" M.S Ramaiah Institute of Technology, Bangalore
5.	Gautnam Paikar &	4PM11CS015 4PM12CS029 4PM12CS013	8 th sem A-Section	National Conference on Product Design (NCPD -2016)	01/07/2016 to 03/07/2016	Presented a technical Paper	"Smart Dustbin" M.S Ramaiah Institute of Technology, Bangalore

6.	Mr.Utkarsh & Mr. Vikas PS	4PM13CS107 4PM13CS111	7B	Young India Challenge Quiz competition	23/10/2016	Top 10 in young India Challenge Quiz competition	Young India Challenge Quiz competition conducted by Carrer Launcher held at MSRIT.
1 2 3	Ajit Kavyashri Pria Jain		7th semester	Computer Science and Engineering of PESITM have been recruited by EVIVE HEALTH with a package of Rs 5.5 lak p.a.	November 19th, 2016		Three 7th semester students from Computer Science and Engineering of PESITM have been recruited by EVIVE HEALTH with a package of Rs 5.5 lak p.a.
	Ms. Sahana G R	4PM12CS068	7 th sem		August 30th, 2016	by securing 83.44% in	Ms. Sahana G R (4PM12CS068) has stood first (University Topper) by securing 83.44% in 7th semester examination in VTU. (Source: fastvturesults.com)
	Sachin P	4PM14CS414		National IT	Fahruary 16th	Participated in	17 th Edition of National IT Fest epl Tome 2017
	Vinay A	4PM13CS112	1				
	Bhargav	4PM13CS018	6 A &				
9.	Bhuvan		8 A & B	Fest epl Tome 2017	17 th 2017	various Event	@ AIMIT, St Aloysius College (Autonomous),
	Jeevitha	4PM14CS031	1	2017			Mangalore.
	Harshitha	4PM13CS030	1				
	Nikhil	4PM13CS051					
	Surjith SK	4PM15CS089	5 B	Speak for India (Karnataka Edition 2016)	January 2017.	finals held in	Speak for India (Karnataka Edition 2016)
	Reshma. M	4PM14CS070	8 th B	Internship	January 13 th 2017	Successfully completed Internship.	D.R.D.D Banglore.

SportsPhysical Education Department aims to prepare the students to maintain a physical and mental wellbeing to face the challenges of life. The objective of the department is:

- To encourage sportsmanship and to promote friendly relations among the students.
- To development of human and ethical values through sports among students.
- To organize tournaments in different sports/games every year.
- To train students to participate in inter college, inter university, state, national and international level sports.

At the beginning of every academic year, principal conducts a meeting with committee members for planning and conducting sports and games event. Based on the discussions, calendar of sports events is framed and circulated among the departments to reach all the students.

Members of sports committee

Table 9.7.4. Members of Sports Committee

	on a monimum or or opera			
SI. No.	Name of the Faculty	Designation	Department	
1.	Dr. Sendil Krishna	Physical Education Director	Physical Education	
2.	Prof. Sunil M. E.	Member	Computer Science and Engineering	
3.	Prof. Ganesh U. L.	Member	Mechanical Engineering	
4.	Prof. Shashank S. B.	Member	Electronics and Communication Engineering.	
5.	Prof. Arjun U.	Member	Information Science and Engineering	
6.	Prof. Sanjay	Member	Civil Engineering	
7.	Prof. Shanth Veeresh	Member	Electrical and Electronics Engineering	
8.	Dr. Chandrashekhar	Member	Basic Science (Mathematics)	

Table 9.7.5 Facility of Sports

SI. No.	Event	Venue	Category	No. of courts available						
	Outdoor Facility									
1.	Throw Ball	PESITM Ground	Men/Women	01, Mud Court						
2.	Kabaddi	PESITM Ground	Men/Women	01, Mud Court						
3.	3. Volley Ball		Men/Women	01, Mud Court						
4.	Cricket	PESITM Ground	Men/Women	01 Ground						
5.	Kho-Kho	PESITM Ground	Men/Women	01, Mud Court						
6.	Net-ball	PESITM Ground	Men/Women	01, Mud Court						
7.	Tennis	PESITM Ground	Men/Women	01, Mud Court 01, Synthetic Court						
8.	Basket Ball	PESITM Ground	Men/Women	01, Synthetic Court						
9.	Track field	PESITM Ground	Men/Women	1 (400 meters track)						
		Indoor Facility								

7.	Table Tennis Indoor Cour PESITM		Men/Women	2 Tables
8.	Yoga Indoor Court, PESITM		Men/Women	
9.	Chess	Chess Indoor Court, PESITM		
10.	Carom	Indoor Court, PESITM	Men/Women	

Table: 9.7.6 Students participated in various inter-college sports events

	CTUDENT NAME	LION	EVENIT		DATE	ORGANIZING
SI.NO	STUDENT NAME	USN	EVENT	FROM		COLLEGE
			Y	EAR-2020		
1	Bhavesh Kumar S	4PM16CS021				
2	veeravalli Panith	4PM15CS099				
3	Amith Annappa Naik	4PM16CS010	CRICKET	6/3/2020	14/3/2020	SIT ,Tumkur
	•		Y	EAR-2019	-	
1	Roshan Kumar Pradhan	4PM16CS070				
2	Prasanna Ashok Naik	4PM16CS061		22-3-2019	25-03-2019	SIT ,Tumkur
3	Jagtar Singh Bawa	4PM16CS041				
4	Sabhiraj Singh	4PM17CS061	FOOT			
5	Himanshu Bagati	4PM16CS039	BALL			
6	Sourabh V Kasar	4PM15CS080				
4	Discoult IX	45044000004	<u> </u>	1	1	
1	Bhavesh Kumar S	4PM16CS021	CRICKET	12-3-2019	915-03-2019	JNNCE, Shimoga
2	veeravalli Panith	4PM15CS099				
1	veeravalli Panith	4PM15CS099	KHO-KHO	1/3/2019	9 2/3/20	19KIT, Tiptu
1	Roshan Kumar Pradhan	4PM16CS070	BASKET	24-9-2019	25-09-2019	
2	veeravalli Panith	4PM15CS099	BALL	27-3-2013	23-03-2013	KIT, Tiptu

			Υ	'EAR-2018		
1	Roshan Kumar Pradhan	4PM16CS070				
2	Sourabh V Kasar	4PM15CS080	БООТ			
3	Sabhiraj Singh	4PM17CS061	FOOT	20/2/2018	21/2/2018	SIT, Tumkur
4	Prasanna Ashok Naik	4PM16CS061	BALL			
5	Jagtar Singh Bawa	4PM16CS041				
1	Roshan Kumar Pradhan	4PM16CS070	BASKET BALL	14/9/208	15/9/2018	PESITM, Shimoga
1	Anil B H	4PM16CS011	1			
2	Bhavesh Kumar S	4PM16CS021	CRICKET	27/2/2018	28/2/2018	JNNCE, Shimoga
_	bliavesii Kulliai S	4FW10C3021	CITICILLI			printoL, Shimoga
1	Pooja B	4PM17CS053				
2	Pragathi Singh	4PM17CS055	THROW BAL	ц 0/9/2018 ⁻	10/10/2018	BIET, Davangeere
3	Vidyashree K	4PM18CS118	7			, , , , , ,
1	Jagtar Singh Bawa	4PM16CS041	ATHLETIC	26/10/18	10/29/2018	SJCIT, Chikkaballapura
			Y	'EAR-2017		
1	Roshan Kumar Pradhan	4PM16CS070	FOOT	20/3/2017	21/3/2017	SIT, Tumkur
2	Sourabh V Kasar	4PM15CS080	BALL 20/3/	20/3/2017	21/3/2017	STI, TUTIKUI
				T	T	
1	veeravalli Panith	4PM15CS099	CRICKET	20-3-2017	21-03-2017	JNNCE, Shimoga
1	Jagtar Singh Bawa	4PM16CS041	ATHLETIC	1/3/2017	6/3/2017	VTU , BELGAUM
1	Srividya Shastry T V	4PM15CS081	TABLE- TENNIS	12/9/2017	14-09-2017	VVCE-MYSORE
		-	-	•		
1	Roshan Kumar Pradhan	4PM16CS070	NETBALL	27-10-17	29-10-2017	GAT , Banagalore
		-	Y	'EAR-2016		
1	Srividya Shastry T V	4PM15CS081	TABLE- TENNIS	8/5/2016	9/5/2016	PESCE-MANDYA
1	Silviuya Silastiy I V	4FW113C3U61	LEININIS	0/3/2010	9/3/2010	
1	Jagtar Singh Bawa	4PM16CS041	ATHLETIC	14-11-16	15-11-206	Dr. T.TIT, kolar
4	Tarradh: IZ I	4DN44500000	1	1	1	<u> </u>
<u> </u>	Trupthi K J Pallavi	4PM15CS093 4PM15CS051	THROW BAL	18/10/2016	9/10/2016	MCE-HASSAN
		1 /101/115(15/15/1	1	1	1	

1	Amith S Kumar	4PM13CS009	SHUTTLE	21/9/2016	22/9/2016	AIT, Chikamagalur
1	Amith S Kumar	4PM13CS009	KABADDI	21/4/2016	22/4/2016	KIT, Tiptur
1	Sourabh V Kasar	4PM15CS080	FOOT BALL	13/4/2016	14/4/2016	SIT, Tumkur

Gymnasium



Fig. 9.7.3 Gymnasium Photos NSS Activities

- The aim of NSS is to promote national consciousness and a sense of social responsibility, discipline and dignity of labour and to help students to develo their personality. Two types of programme i.e. Regular activities & 10 days special camp. These activities are supported by the Principal & NSS Officer with co-ordination.
- NSS special camps are arranged during August –September every year. More than hundred boys and girls participate in the camps. Government prima and High school and slum area were selected for community service and educational programmes.
- Besides the annual camp, regular works in the college campus are also undertaken. Students who attend the camp are given certificate and are eligible for grace marks for seeking admission to higher courses.
- Activities undertaken by the NSS have included environment enrichment and conservation, health, family welfare and nutrition programmes, projects
 aimed at creating an awareness for improvement of the status of women, women's development and gender justice, work in hospitals, production
 oriented work, non-formal education, healthy life-style education, AIDS awareness programmes, total authorities in rehabilitation work during natural
 calamities and emergencies.
- There are around 250 students volunteers in NSS unit of PESITM.

2019-20 NSS Activity -Digitalization Awareness Program







Fig. 9.7.4 2019-20 NSS Activity -Digitalization Awareness Prograr 2018-19 NSS Activity - Swaccha Bharath Abhiyan













Fig.97.5 2018-19 NSS Activity - Swaccha Bharath Abhiyan Sadbhavana Diwas Celebration



Fig.9.7.6 Sadbhavana Diwas Celebration

2017-18 NSS Activity - Blood Donation Camp





Fig.9.7.7 2017-18 NSS Activity - Blood Donation Camp 2016-17 Blood Donation Camp







Fig.9.7.8 2016-17 Blood Donation Camp

Extra-Curriculum Activities

Table 9.7.6 Extra-Curriculum Activities







SI.No	Events
1.	Rangoli
2.	Poetry Writing
3.	Sudoku
4.	Mehendi
5.	Essay Writing (English/Kannada)
6.	Debate (English/Kannada)
7.	Quiz
8.	Pick N Speak (English/Kannada)
9.	Pot Painting
10.	Sketching
11.	Cooking without fire
12.	Painting
13.	Dumb Charades
14.	Anthakshari

CSE - Department events-2018-19

Table 9.7.7 Extra co-curricular Activities 2019

SL.NO	EVENT NAME	DATE	SEMESTER	NAME OF WINNERS/PRIZE
1.	Throw ball (women)	27/03/19	8 th SEM	Pallavi SB, Trupthi KJ, Shifa Kousar, Srividya S
2.	Volley ball (Women)	27/03/19	8 th SEM	Pallavi SB, Trupthi KJ, Shifa Kousar, Srividya S
3.	Table Tennis	27/03/19	6 th SEM 6 th SEM	Roshan P – Winner(M) Sannidhi - Winner(W) Shrisha A – Runner (M) Srividya S – Runner(W)
1.	Cricket	27/03/19		Karthik B, Shreenag T.P.S, Anup SH ,Suhail Amir Prajwal R, Roshan Praddhan, Veeravalli Panith, Veeresh, Shrisha Adiga, Venkatesh, Sourabh SV, Prasanna AN.
5.	Volley ball (Men)	27/03/19		Roshan P, Rahul E, Panith V, Veeresh, Shrisha A, Sourabh SV, Prajwal R, Karthik B, Shreenag T.P.S
S.	Basketball	27/03/19	6 th SEM	Roshan P, Rahul E, Panith V, Veeresh, Shrisha A, Sourabh SV, Prasanna AN
7.	Football	27/03/19		Roshan P, Brijesh Kumar, Panith V, Prasanna AN, Siddharth Rao, Sourabh SV, Pradeep UR.
3.	Cricket	27/03/19	8 th SEM	8 th semester students batch won Runner prize
)	Logo deign	23/02/19		Brijesh and Roshan – Winner Divya Bharathi and Chandana – Runner
0.	Singing(Cultural)	5/1/19	5 th SEM	Harshitha BU - winner
1.	Collage			Akshatha LS Krishna
ر. ا	Pencil Sketch(Literature)	5/1/19	5 th SEM	Himanshu
	Poster Design(Literature)	5/1/19	5 th SEM	Meghana

Table 9.7.8 Extra co-curricular Activities 2018

SL.NO	EVENT NAME	DATE	SEMESTER	NAME OF WINNERS/PRIZE
-------	------------	------	----------	-----------------------

1.	Singing	26/10/2018	3 rd SEM	Achinthya – Winner Karthikeya H.S - Runner
2.	Singing	27/10/2018	5 th SEM	Harshitha BU – Winner Harshitha BB - Runner
3.	Pencil Sketch	24/10/2018	5 th SEM	Meghana, Himanshu
4.	Pencil Sketch	26/10/2018	3 rd SEM	Krishna Prasad N, Bindu.
5.	Foot Ball(boys)	13/10/2018	5 th B 5 th A	5 th B Sem Winner 5 th A Sem Runner
6.	Chess	13/10/2018	5 B	Pradeep – Winner. Sourabh S V – Runner.
7.	Chess	13/10/2018	7 th A	Nandan – Winner Peter Lopis – Runner
8.	Table Tennis(Girls)	11/10/2018	3 rd ,5 th ,7 th SEM , A B Section	Sannidhi – Winner. Arpitha – Runner.
9.	Table Tennis(Boys)	11/10/2018	3 rd SEM , A Section	Karthik - Winner. Abhishek – Runner.
10.	Table Tennis(Boys)	11/10/2018	5 th SEM ., A Section 5 th SEM , B Section	Bhavesh – Winner Amith N – Runner Roshan - Winner.
11.	Table Tennis(Boys)	11/10/2018	7 th SEM B Section	Shrisha – Runner . Sujesh – Winner. Suhas – Runner .
12.	Designing / Painting Competition regarding "Junk Food and its effect on health"	29/9/2018	All Sem Students	

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

Institute Marks: 10.00

Vision:

To be the most preferred institution for engineering & management education, research and entrepreneurship by creating professionally superior and ethically strong global manpower.

Mission:

To prepare students for professional accomplishments and responsible global citizenship while fostering continuous learning and to provide state-of-the-art education through the committed and highly skilled faculty by partnering and collaborating with industry and R&D institutes.

10.1.2 Governing body,administrative setup,functions of various bodies,service rules, procedures, recruitment and promotional policies (10)

Governing Council of the institute

The Governing Council of the Institute is constituted as per the norms of AICTE, New Delhi, Affiliating University & Govt. of Karnataka and it is the supreme administrative body. The Governing Council of the institute has a robust framework for the governance and it works towards meeting the interests of all stake holders. The Governing Council meets a minimum of two times a year or whenever needed.

The Governing Council of PESITM is given below

Name	Designation	Position	
Prof. M R Doreswamy	Chancellor, PES University, Bengaluru	Chairman	
Sri B Y Raghavendra	Management Trustee, PES Trust (R), Shivamogga Member of Parliament, Shivamogga	Member	
Prof. JawaharDoreswamy	Treasurer, PES Institutions. Pro-Chancellor- PES University, Bengaluru	Member	
Sri B. Y. Vijayendra	Joint Treasurer, PES Trust (R), Shivamogga	Member	
Smt. S. Y. Arunadevi	Joint Secretary, PESITM & Trustee	Member	
Smt. S. Y. Umadevi	Industry Executive	Member	
Smt. Tejaswini Raghavendra	Trustee	Member	
Dr. S. S. Gupta	Director, Rajiv Gandhi Institute for Steel Technology, JSW steels, Bellary, Karnataka. Member.	Member	
Dr. M R Shivakumar.	Principal, SRSIT, Bangalore	VTU Nominee Member.	
Dr. G P Prabhukumar	Emeritus Professor New Horizon College of Engineering, Bangalore	Member	

Dr. L S Nandeesh	Professor of Chemistry, Academic Director and NAAC Consultant (Sri Jagadguru Renukacharya Education Society, Bangalore)	Member
Prof. Dr. R. Nagaraja	Chief Coordinator – Administration, PES Trust (R), Shivamogga	Member
Dr. Jagadeesh S N.	HOD & Professor PESITM, Shivamogga	Member
Dr. Guruvareddy	Professor, Dept of ECE PESITM, Shivamogga.	Member
Dr. Chaitanya Kumar M V	Principal PESITM, Shivamogga	Member Secretary

Major Responsibilities of the Governing Council

- To uphold the legal stature of the college in view of AICTE, UGC, State Government and affiliating University (VTU) or any other body or agency.
- To take decisions regarding the intake and addition or discontinuation of any program accordingly recommending the Principal to take formal steps with the affiliating body to put this into action.
- Fix the fee structure and any charges applicable in accordance with the recommendation of administrative bodies and the prescribed fee structure of affiliating university.
- Extension, Renovation or Procurement plans recommended by Core Committee.
- Decide the promotions or penalties as recommended by the Academic Committee.
- Approve the budget and recommend necessary corrections.
- Nominate and constitute other central committees for smooth discharge of responsibilities

Powers and Functions of the Governing Council

The Governing Council shall exercise powers and discharge the functions as follows:

- Ensure proper management& maintenance of the institution in relation to land, infrastructure, equipment, and funds, including loans and grants received from AICTE, Central Government and Government of Karnataka.
- Ensure compliance with norms and standards prescribed by the Government of Karnataka and affiliating University.
- To ensure implementation of provision of acts, instructions, rules, and regulations prescribed by AICTE and Government of Karnataka in matters of service conditions of the staff relating to appointment, leave Provident Fund, age of retirement and disciplinary actions.
- To submit reports and returns from time to time to AICTE, Government of Karnataka and affiliating University.
- Create a peaceful and favorable atmosphere for study free from ragging.

Powers and Functions of Chairperson of Governing Council

- The Chairperson shall ensure that the Governing Council is functioning properly to meet the desired deliverables.
- In the event of taking a vote on any decision and if a tie occurs, then the decision of Chairperson shall be final.
- The Chairperson shall ensure that the decisions taken in the Governing Council meeting are implemented by Member Secretary.

Powers and Functions of Member Secretary of Governing Council

- Principal of the institution, by default, is the Member Secretary of the Governing Council.
- Member Secretary executes the decisions taken in the Governing Council on behalf of the Governing Council.
- He would take correspondence on behalf of the Governing Council meeting in relation to the decisions taken in it and get it confirmed by the Chairperson and members present. With confirmation, the proceedings would be forwarded to AICTE, Government of Karnataka and affiliating University.
- He will exercise powers and functions as maybe imposed and assigned by the Governing Council from time to time.
- The Member Secretary would issue appointment letters to the staff selected by the Recruitment Committee after the approval from the sponsoring trust and the Governing Council of the institute.

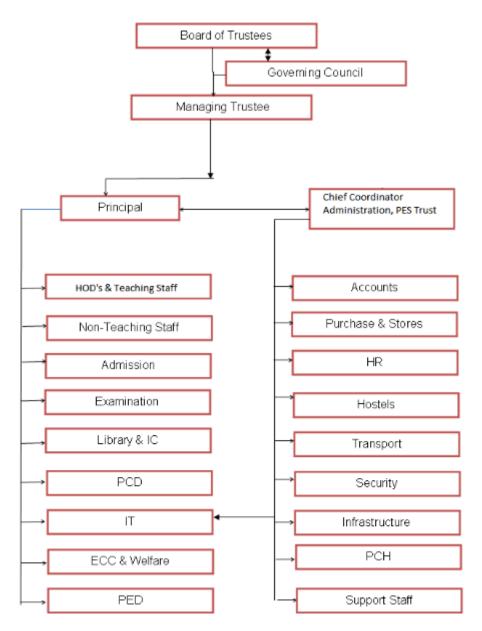


Fig 10.1: Organizational Chart

Functions of key administrative positions

	Position	Functions	
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Principal	 He functions as the Head of the Institution and is the Member-Secretary of the GC. He is responsible for the overall development of the Institution. Ensure the attainment of the vision of the Institution through strategic mission. Define quality policy and objectives. Define & delegate responsibilities of various positions in the organization. He is the final authority for all academic, admission, administrative, cocurricular and extracurricular, research, placement, innovation, resource mobilization, planning and development, recruitment. He also coordinate the needs of meeting statutory and regulatory requirements of the government (AICTE, UGC, DTE) and University (VTU). He channelizes the growth and benchmarking activities of accreditation (NBA/NAAC) and affiliation (VTU) processes for the institute. He is the single point contact (SPC) for external bodies (industries, academia, regulators, institutions/organizations, companies) and also for stakeholders: industries, parents, and alumni.
Vice-Principal	 To discharge the routine duty of Principal in his absence. Head of the Internal Quality Assurance cell. Alumni interaction. Branding tasks & admissions Prepare and execute the academic calendar. Oversee the teaching-learning process. Carry out result analysis and submit corrective measures to Principal. Initiate better teaching-learning methods. Co-curricular activities. Formation of the student council. Sports & Cultural activities.

Head of Departments

- He / She is the functional and administrative head of the concerned department.
- He/she ensures the smooth running of the concerned department by laying goals and milestones of the department. Vision and Mission statements too are chalked out for streamlining all further actions.
- HOD builds and leads the team of required numbers of faculty members
- The HOD ensures planning, execution, troubleshooting of all academic activities (theory and lab classes), examination (CIE)along with supporting smooth conduction of VTU examinations, research and publication, projects and developmental activities.
- He/she coordinates intra (with IIIC, T & P and other depts. /centers at the institute) and inter (with other academia and industries) institutional communicational roles.
- HOD plans and organizes events (conferences, seminars, workshops, and training) and conducts industrial visits and guest lectures for the benefit of dept. (students and faculty members).
- He/she organizes meetings with stakeholders (particularly, parents) in the form of PTM.
- Develop Calendar of events, Timetables for each section/semester, Upkeep and
 maintain records of the department, maintain laboratories and assets, assign duties
 and monitor faculty performance, verifies faculty appraisal, benchmark the growth
 parameters, monitor mentoring of students by the mentors (faculty team), identify
 and execute action on departmental needs, develop team towards audits and
 compliance, monitor R&D and project activities of the department, ensure upkeeping of departmental library, lead team towards publications and IP, seek
 MOUs from related industries.
- He/she renders all support to the team lead, Principal.
- He/she encourages and motivates the team to contribute to the positive growth of the department, in turn, the institution.

Manager, Training & Placements	 Director T & P is solely responsible for planning, connecting, organizing, culminating all activities leading to the placement needs of the graduating students. He develops and nurtures contacts/connects with industries/companies/ organizations/alumni database in view of placement needs. He ensures the smooth coordination with various stakeholders required for the process of placement. He initiates the process of feedback collection from the visiting companies/organizations for offering placement and shares with concerned departments for better understanding and possible improvements in the subsequent sessions/years. He coordinates activities for pool-in placement drives. Facilitate career guidance to the students. He significantly contributes to building the brand value of the institution.
I/C Library	 The Librarian is responsible for the resources of the Library and Information Centre comprising of assets in both hard and soft forms. The associated duties are: He envisages the plans, initiates actions for addressing all possible needs of primary stakeholders - students, teachers and research scholars (via identifying and ordering books, reference material, journals, online resources, issue of resources and maintenance of records). He with his team undertakes series of tasks towards optimal utilization and for maintenance of the library. Maintain library discipline and culture. Prepare annual budget for library
Director Physical Education	 Proposing an annual budget. Creation and upkeep of sports facilities. Purchasing of sport items. Conduct training camps. Ensure the smooth conduct of sports. Encourage students to participate in regional / zonal / VTU tournaments.

10.1.3 Decentralization in working and grievanceredressal mechanism (10)

Majority of the decisions within the department are made by the respective heads of the departments.

Sl. No	Name	Head of the department
1.	Dr. Jagadeesha S. N.	Computer Science & Engineering
2.	Dr. Hiremath M. N.	Civil Engineering
3.	Dr. Manoj Kumar	Electrical and Electronics Engineering
4.	Dr. Chandrappa D.N	Electronics and Communication Engineering
5.	Dr. Prasanna Kumar H. R.	Information Science & Engineering
6.	Dr. Basavarajappa Y H	Mechanical Engineering
7.	Dr. Prasanna Kumar T M	MBA

Institute Marks: 10.00

A number of committees are present in the college that is formed taking into the considerations of the stakeholders. There is diversification that ensures that the committees address any issues faced by the stake holders and also aims for the improvements under the purview of the respective committees. The various committees, their in-charge, roles and responsibilities & meeting details are given below:

1. Academic Monitoring Committee (AMC)

Name	Position
Dr. S N Jagadeesha, HOD-CSE	Chairman
Dr. Guruva Reddy, Vice-Principal	Member
Mr. Rakesh, Dept. of ECE	Member
Dr. Girish, Dept. of ME	Member
Mr. Kiran Kumar, Dept. of EEE	Member
Dr. Manu, Dept. of CSE	Member
Dr. Pramod, Dept. of ISE	Member
Dr. ArvindMallik D M, Dept. of MBA	Member
Dr. Shivkumar, Dept. of Basic Science	Member

Roles & Responsibilities:

- The AMC thoroughly works on designing the educational process
- It continuously reviews and monitors the process keeping in view the emerging needs and expectations of the industry
- The AMC along with the strength of the faculty members continuously works on updating and restructuring the innovative skill sets for promoting academic excellence

- To verify faculty –academic pre-preparation and generate verification reports.
- To conduct monthly audit of course delivery and submit report to HOD.
- To conduct midterm & end term academic monitoring /verification and submit report to HOD
- To maintain departmental academic file
- To prepare departmental academic calendar
- To make sure that daily attendance report of each class is filled properly before submitting.
- To monitor works of class teacher and smooth conduction of academics.
- To conduct departmental audit per semester
- To conduct interdepartmental audit per semester
- To observe lecture conduction of faculty member along with senior faculty members.

Meetings

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY	30/10/2019	09	0
CAY	16/01/2020	09	0
CAYm1	18/10/2018	06	3
	29/01/2019	09	0
	26/04/2019	09	0
	20/10/2017	07	2
CAYm2	29/01/2018	09	0
CAY m2	27/04/2018	09	0
	26/07/2018	09	0
	26/08/2016	09	0
	26/10/2016	07	2
CAYm3	27/01/2017	09	0
	28/04/2017	09	0
	31/07/2017	08	1

Time Table Committee

Name	Designation
Dr. Aveesh S T, Dept. of Mathematics	Coordinator

Mr. Shivanand D C, Dept. of M.E	Member
Mr. Rakesh M K, Dept. of Civil Engineering	Member
Mr. Raghavendra K, Dept. of CSE	Member
Mr. Vishnu V M, Dept. of ECE	Member
Mr. Arjun U, Dept. of ISE	Member
Mrs. Neetha H M, Dept. of EEE	Member
Dr. Chandru K, First Year	Member

- Time-Table preparation for each department.
- To Prepare Individual Timetable & Room wise Timetable get approval by the Principal.
- Allotment of Classrooms, Labs, Tutorial Rooms etc.
- Correlate the timetable with the calendar of events of the department & College.

Meetings

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY	22-01-2020	7	01
CAYm1	06-06-2019	8	00
CAYMI	05-01-2019	8	00
CAYm2	12-06-2018	8	00
CAY m2	08-01-2018	8	00
CAYm3	05-06-2017	7	00
	09-01-2017	7	00
	07-01-2017	1	00

2. Discipline Committee

Name	Position
Dr. Girisha L, Associate Professor, Dept. of ME	Chairman
Dr. Praveen Kumar C M, Asst. Professor, Dept. of Chemistry	Member
Mr. Rakesh, Asst. Professor, Dept. of Civil Engineering	Member
Mrs. Neetha, Asst. Professor, Dept. of EEE	Member
Mrs. Prathibha, Asst. Professor, Dept. of CSE	Member

Dr. Sendhil, Physical Director	Member
Dr. M N Hiremath, HOD- CV & Chief Warden – Boys Hostel	Member
Mrs. Yagnodhbhavi, Asst. Professor, Dept. of CV & Chief Warden – Girls Hostel	Member

- To maintain and enforce strict discipline within the college campus.
- All the students should wear their ID Cards while they are in the campus and their respective class rooms.
- In case of any violation of dress code or disturbance in the class, the ID card will be confiscated from the student which will be handed over to the student on the same day with a warning and advice from the Disciplinary Committee Members.
- In case of any misbehavior or violation of the college rules, the ID cards of the students will be kept with the Disciplinary Committee Members till the enquiry is over.
- To enforce total prohibition of cell phone usage by the students within the college campus. Please note that cell phone is prohibited in the college campus and if a student is found carrying a cell phone, it will be taken away and handed over to the Principal.
- To monitor the movement of the students in the college and prevent students loitering around in the corridors during the college working hours.
- To ensure that all the students attend classes without bunking and prevent them from leaving the college early. Please note that no student can leave the college early without prior permission from the concerned authorities.
- Smoking is strictly prohibited in the college campus and ensures that this is being strictly followed.
- To ensure that students maintain complete silence in the library.
- To maintain proper discipline in the college canteen and student common boys/girl resting room during the college working hours.
- If any damage is caused to the college property by any student / group of students, the cost of the same will be recovered with a fine from the said student / group of this will be followed by disciplinary action.
- If any indiscipline is found by any of the students, warn them on the first instance. Take disciplinary action based on the rules and regulations of the committee, if the pattern of misconduct continues.
- Submit the enquiry report of any incidents/issues after conducting a committee meeting.

Meetings

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
	17.08.2019	7	0
	28.09.2019	5	2
CAY	23.09.2019	7	0
	26.11.2019	7	0
	19.12.2019	7	0
	25.02.2020	6	1
CAYm1	03.09.2018	7	0
	24.10.2018	7	0
		<u>.</u> -	-

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	31.10.2018	7	0	
	24.11.2018	5	2	
	20.12.2018	7	0	
	11.01.2019	6	1	
	23.02.2019	7	0	
	27.03.2019	7	0	
	20.04.2019	7	0	
	29.05.2019	7	0	
	22.06.2019	7	0	
	26.09.2017	7	0	
	21.10.2017	7	0	
	24.11.2017	5	2	
	29.12.2017	7	0	
CAYm2	02.02.2018	6	1	
	30.03.2018	7	0	
	26.04.2018	7	0	
	31.05.2018	5	2	
	23.06.2018	7	0	

3. Anti-Ragging Committee

Name	Designation
Dr. Chaitanya Kumar M V,Principal	Chairman
Dr. Prasanna Kumar T M, HOD-MBA	Coordinator
Dr. Jagadeesha S N, HOD-CSE	Member
Dr. Manoj Kumar, HOD - EEE	Member
Dr. Shivkumar K, HOD-Chemistry	Member
Dr. Sendhil, Physical Education Director	Member
Dr. Basavarajappa Y H, HOD-M.E	Member
Dr. Prasanna Kumar H R, HOD-ISE	Member
Dr. M N Hiremath, HOD-Civil & Warden-Boys Hostel	Member
Dr. Chandrappa D N, HOD-ECE	Member
Dr. Aveesh, HOD-Maths	Member
Dr. PramodPai, HOD-Physics	Member
Mrs. Yagnodbhavi H M, Dept. of Civil Engg.	Member
Mr. Ramesh, Resident Warden – Boys Hostel	Member

Mrs. Manjula, Resident Warden – Girls Hostel	Member
Mr. SuhasBharadwaj, Student – ME	Member
Ms.SwathiSarang, Student - ISE	Member
Mr. Abhijith H K, Student – Civil Engg.	Member

- Preventing the menace of ragging in the college and making the campus zerp ragging zone.
- Ensure anti-ragging instructions are displayed at prominent places in college campus and hostels
- To make surprise raids in the college, hostels and other vulnerable places where students generally visit and where either the incidents of ragging have occurred or which are potentially prone to ragging.
- To conduct an on-the-spot enquiry into any incident of ragging referred to it by any member of the committee or any faculty as the case may be.
- If any such above incidents are observed, take immediate action to prevent the same and report the same to the principal without any delay.

Meetings

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY	27/09/2019	18	0
CAI	25/07/2019	14	4
CAYm1	09/08/2018	11	1
CAYm2	09/08/2017	12	0
CAYm3	25/08/2016	10	0

4. Co-curricular and Extra-Curricular Activities Committee

Name	Position
Dr. Prasanna Kumar T M, HOD-MBA	Chairman
Mr. Rakesh M K, Dept. of Civil Engineering	Member
Mrs. Deeksha Kamath, Dept. of Basic Science	Member
Mr. Shivayogappa H. J., Dept. Of ECE	Member
Mr. Puneeth B. H., Dept. of CSE	Member
Mr. Vinay S. K, Dept. of ISE	Member
Mrs. Neetha H. M., Dept. of EEE	Member
Mr. Maltesh Kumar Deshpande, Dept. of M.E	Member
Ms. Divya H. A, Dept. of Civil Engineering	Member

Roles & Responsibilities:

• The Cultural Committee shall be responsible for all intra and inter collegiate cultural events in the Institute.

- To plan and schedule cultural events for the academic year.
- The Convener of the committee shall conduct a meeting of the committee to discuss and delegate tasks.
- To prepare the Annual Budget for various cultural events.
- Motivating students to participate in cultural events organized at College, University, National and International levels.
- Organizing cultural events for staff members

Meetings

Academic Year	Date Meeting	of No. Members Attended	of No. of Members Absent
	17/11/2019	09	0
CAY	17/02/2020	09	0
	24/02/2020	09	0
	17/08/2018	08	0
CAYm1	15/11/2018	07	1
CATIIII	04/02/2019	08	0
	05/04/2019	08	0
	19/08/2017	08	0
	14/11/2017	07	1
CAYm2	03/02/2018	08	0
CAT III2	12/02/2018	07	1
	26/02/2018	08	0
	19/05/2018	08	0
	24/08/2016	08	0
CAYm3	10/11/2016	08	0
	06/02/2017	07	1
	18/02/2017	05	3
	25/02/2017	08	0
	13/05/2017	08	0

5. Sports Committee

Name	Designation
Dr. Shivkumar, Professor, Basic Science	Chairman
Dr. Sendhil, PED	Member Secretary
Mr. Sunil M E, Dept. of CSE	Member
Mr. Shanthaveeresh, Dept. of EEE	Member

Mr. Shashank B, Dept. of ECE	Member
Mr. Arjun U, Dept. of ISE	Member
Mr. Sanjay, Dept. of Civil Engineering	Member
Mr. Ganesh U L, Dept. of M.E	Member
Mr. Praveen Gujjar, Dept. of MBA	Member

- To provide an environment for physical development of the students.
- To develop team spirit among the students.
- To provide opportunity for the students to showcase their talent in sports.
- To promote sportsmanship among students by organizing various sports activities.
- Organizing various indoor and outdoor games during sports week.
- Motivating students to participate in sports events organized at University, national and international levels.
- Organizing sports events for staff members.

Meetings

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY	01/08/2019	09	0
CAI	23/01/2020	09	0
K 'A Y m I	06/08/2018	09	0
	30/01/2019	09	0
CAYm2	02/08/2017	09	0
CAY m2	05/01/2018	09	0
CAYm3	05/08/2016	09	0
	05/01/2017	09	0

6. NSS Committee

Name	Designation
Mr. Prasanna Nayak H, Dept. of ME	NSS Officer
Mr. Ganesh U L, Dept. of ME	Member
Mr. Puneeth B H, Dept. of CSE	Member
Mr. Amshith Kumar, Dept. of Civil Engineering	Member
Mr. Venkatesh, Dept. of ISE	Member
Mr. Shivayogi, Dept. of ECE	Member

Mr. Shantveeresh, Dept. of EEE	Member
Mr. Arjun J, Dept. of MBA	Member
Dr. Chandru K, First Year	Member

- Develop a sense of social and civic responsibility among students.
- Utilize student's knowledge in finding practical solution to individual and community problems.
- Acquire leadership qualities and democratic attitude.
- Develop community service attitude during emergencies and natural disasters.

Meetings

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY	07/08/2019	09	0
CAI	11/02/2020	08	1
CAYm1	08/08/2018	07	0
CATIIII	07/02/2019	08	0
CAYm2	11/08/2017	06	1
CATIIIZ	13/02/2018	07	0
CAYm3	09/08/2016	08	0
	20/02/2017	07	0

7. Grievance Redressal Committee

Grievance Redressal Committee is constituted as per AICTE regulations. The committee shall meet within a week from the date of receipt of any petition/complaint from any student and take necessary action as deem fit and initiate necessary action for solving problem.

Mechanism for redressing grievance.

- The departmental level grievances are attended by the concerned Class Coordinators, Mentors / or Department Heads.
- Unresolved grievances at the departmental level are referred to the Grievance Redressal Committee of the institution.
- The committee shall send report with recommendations to all concerned within 15 days from the date of receipt of the complaint

Note: Student can register complaint through online using college website.

Grievance Redressal Committee: 2019-20

Name	Position
Dr. Chaintanya Kumar M V, Principal	Chairperson
Dr. Prasanna Kumar T M, HOD-MBA	Member

Mrs. Shyamala S. C., Assistant Professor, ECE	Member
Dr. Praveen Kumar C.M., Assistant Professor, Basic Science	Member
Mr. Roshan, Student - CSE	Special Invitee

- To resolve student grievances related to both academic as well as non-academic matters.
- To ensure there is no bias or prejudices while dealing with students
- To promote and establish transparent practices related to students
- To create a conducive environment for learning

Meetings

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY	27/09/2019	05	0
CAYm1	09/08/2018	08	0
CAYm2	09/08/2017	08	0
CAYm3	25/08/2016	08	0

8. Anti-Sexual harassment Committee

Name	Designation
Dr. Sunitha B S, Associate –Professor, CSE	Chairperson
Mrs. Yagnodhbavi H M, Assistant Professor, Civil	Member
Mrs. Shymala S C, Assistant Professor, ECE	Member
Dr. Prasanna Kumar H R, HOD-ISE	Member
Mrs. Vani G S, Assistant Professor, ISE	Member
Mrs. Manjula, Office-Executive	Member

Roles & Responsibilities:

- Prevent discrimination and sexual harassment against women (active and preventive in nature) in the campus, hostel and college premises by promoting gender amity among students.
- Prevention of sexual harassment to ensure safe learning environment for girl students
- To ensure provision of an educational environment that is free from sexual harassment.
- To address any oral, written or online complaint at WECARE about sexual harassment.

Sexual harassment includes oral or written statements of a sexual nature to a person, or in a person's presence.

- Aiming at ensuring support services to the victimized and termination of the harassment.
- If any such incidents occur / found, report the same to the Principal immediately.

Meetings

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY	09/09/2019	7	2
CAI	18/11/2019	6	0
CAYm1	16/08/2018	9	2
CAYMI	14/09/2020	6	0
CAYm2	09/08/2017	9	0
CATIIIZ	23/10/2017	6	0
CAYm3	25/08/2016	9	0

9. Entrepreneur Development Cell (EDC)

,	
Name	Position
Dr. Chandrappa D N, HOD- ECE	Coordinator
Dr. Basavarajappa Y H , HOD- ME	Member
Dr. Pramod S P, CDC	Member
Dr. Nandan N Shenoy, Dept. of Civil Engineering	Member
Mr. Kunja D Shinde, Dept. of ECE	Member
Mr. Santosh M B, Dept. of ME	Member
Mr. Pradeep K. Dept of CSE	Member
Mr. Kiran Kumar G R, Dept. of EEE	Member
Mr. Arjun J, Dept of MBA	Member

Roles & Responsibilities:

- To create an entrepreneurship eco-system in the institute, where students would learn the technicalities of entrepreneurship and become job providers instead of job seekers.
- To be in continuous contact with District Industry Officer, KSFC and other Government and private nodal agencies.
- To arrange lectures on establishment of new start-ups, MSM enterprises.
- Strive to establish an incubation centre with Governmental funding.
- Create a strong network of mentors who would provide sector specific knowledge & real world practical guidance.
- To arrange Entrepreneurship training programs, conduct events and inspirational programs.

• Build a strong team with adequate knowledge and experience in guiding start-ups, building business plans, facilitating investments, building networks, etc.

Meetings

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY	09.01.2020	08	Nil
CAYm1	04.10.2019	08	Nil
CAYm2	06/09/2018	08	Nil
CAYm3	16/04/2018	08	Nil

10. Training & Placement Cell

Name	Designation
Dr. Manoj Kumar, HOD-EEE	Chairman
Mr. Pramod S Prabhudev, Manager – T&P	Member Secretary
Mr. Kalpana S - EEE	Member
Mr. Chethan B R -ECE	Member
Dr. Likewin Thomos - CSE	Member
Mr. Arjun U – ISE	Member
Mr. Vinod Rampur - ME	Member
Mr. Sharath S K - Civil	Member
Mr. Arjun J - MBA	Member

Roles & Responsibilities:

- To review the Training & Placement Performance of every outgoing batch of Graduates.
- To understand the Industry Specific Skills and being aware of trending technologies with respect every specialization.
- To analyze the academic performances of students and orient students about eligibility criteria of Companies.
- To ensure maximum student participation in all Training & development initiatives.
- To facilitate Internships, Guest talks, Industry Specific Workshops, Academic Projects,

Industry initiatives and campus recruitment drives. To maintain connectivity with all campus recruited students for mentoring and training programs.

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY	21 st Sep, 2019	9	0

CAYm1	24 th Jan, 2020	8	1
CAYm2	5th oct, 2018	8	1
CAYm3	11 th Sep, 2017	9	1

11. Purchase Committee

Sl. No.	Designation	Name of the Person	Position
1	CCA, PES Trust (R) &	Dr. Nagaraja R	Chairman (Authorized to sign POs)
2	Principal, PESITM		Member (Authorized to sign POs)
3	Head /Section Head of the concerned Dept		Member
4	Senior Professor, of the concerned Dept		Member
5	Assistant Professor Dept. of Civil Engg.	Mr. Nandan N Shenoy	Member Secretary

Roles & Responsibilities:

- To scrutinize requisitions for equipment of various departments and decide upon the necessity of purchasing the equipment, keeping in view the requirements specified by the University, AICTE, NBA, NAAC, GOI, GOK etc.
- To coordinate all the purchases of various Departments and ensure the procurement of required items as per schedule
- To call and scrutinize tenders/ quotations for items of purchase, with the help of department.
- To ensure that the supplies/services quoted for comply with what was requested.
- To carry out discussions and negotiations with suppliers and procure the best quality items with competitive price.
- To seek clarification from suppliers/service providers wherever necessary.
- To finalize the terms and conditions in the purchase order.
- To forward the negotiated /finalized quote for approval of the management through
- To arrange for sending the purchase order, inspection and acceptance/ rejection of the equipment received, with the help of department.
- To communicate the decision of the Committee to concerned department.
- Normally frequency of the CPC meeting should be once in 15 days; whereas in case of urgency and necessity CPC can meet as and when required.
- If the value of the purchase falls lesser than Rs 10,000/- (Ten Thousand Rupees), Purchase section/Dept with the consent of the chairman may proceed with purchasing the indented items directly without the approval of the Purchase committee.

Meetings

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY	14/02/2020	05	00
CAYm1	23/08/2018	04	00
CAYm2	27/04/2017	04	00
CAYm3	26/08/2016	04	00

12. Budget Committee

Sl. No.	Designation	Name of the Person	Position
1	Governing Council Member	Mrs. Umadevi S Y	Chairperson
2	CCA, PES Trust (R) Dr. Nagaraja R		Member
3	Principal, PESITM		Member
4	All Department HODs		Members
5	Accounts Manager		Member
6	Assistant Professor, Civil Engg	Mr. Nandan N Shenoy	Member Secretary

Roles & Responsibilities:

- Ensuring that the financial elements of the institution are in accordance with its vision, mission, objectives and strategic plan.
- To assist PES Trust in fulfilling its fiduciary responsibility.
- To protect the organization from legal challenges and liabilities.
- To guard the organization against illegal, unethical, or incompetent activities by fiscal managers.
- To protect the organization from actual or apparent conflict of interest.
- To act as an advisory panel to the financial operations.
- To evaluate both the financial operations and the people in charge of it meticulously.
- To be vigilant of illegal, unethical, or incompetent financial dealings engaged in by individuals or groups that the organization deals with, or financial arrangements that may harm the organization.
- Participating in the annual audit and carry out meticulous pre-audit checks.
- Evaluating PESITM's fiscal operations, and those in charge of it.
- Reporting to the board of trustees about the financial conditions of PESITM, and/or any financial irregularities or inefficiencies regularly.
- To evaluate and approve budget of the programmes, activities, conferences, FDPs, SDPs, Workshops, Symposiums and/or any other academic, curricular and co-curricular, any other events of PESITM.
- Examine and scrutinize the annual budget of the Institute prepared by the principal and make suggestions and recommendations.

• To take up any other activity/responsibility as assigned by the Managing Trustee from time to time.

Meetings

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY	09/12/2019	13	00
CAYm1	03/01/2019	13	00
CAYm2	06/12/2017	13	00
CAYm3	05/12/2016	13	00

13. Student Welfare Committee

Name	Designation
Dr. Prasanna Kumar H R, HOD-ISE	Chairman
Mrs. Yajnodhbavi, Dept. of Civil Engineering	Member
Mr. Amruth, Dept. of M.E	Member
Mr. Pradeep, Dept. of CSE	Member
Mrs. Neetha, Dept. of EEE	Member
Dr. Pramod, Dept. of ISE	Member
Mr. Praveen Kumar B H, Dept of MBA	Member
Dr. Chandru, Dept. Of Mathematics	Member

Roles & Responsibilities:

- Addressing the students regarding issues with facilities available in the college.
- Addressing the issues regarding Ragging in the campus.
- Giving awareness to students regarding various scholarship schemes.
- Giving awareness about reporting issues through website link (we care), email to student welfare process, suggestion box
- Conducting the meeting at least two times in a year to resolve the student's issues and taking necessary actions. Meeting can be called as and when required, depending upon the seriousness of the issue.
- If any issues found, immediately report to the Principal.

Meetings

Academic Year	Date of Meeting	No. of Members Attended	No. of Members Absent
CAY	06/08/2019	08	0

	31/10/2019	08	0	
L	27/01/2020	07	1	
	30/08/2018	09	0	
CAYm1	28/11/2018	08	2	
	20/02/2019	09	0	
	31/08/2017	09	0	
CAYm2	28/12/2017	09	0	
	12/02/2018	09	0	
	16/08/2016	08	1	
	30/08/2016	09	0	
CAYm3	30/11/2017	09	0	
	01/02/2017	07	2	
	03/05/2017	09	0	

10.1.4 Delegation of financial powers (10)

Preparation of the budget is very important for running any departments. Every department at PESITM prepares a budget before the commencement of the academic year. Department Heads, with Senior Professors give the requisition to the Principal with regard to stationery, lab requirements, etc, for which budget allocations are approved by the Principal in discussion with the Management. Also, every Department Head is expected to give separate budget for FDPs, SDPs and any other activities planned by the department to Principal for approval.

Institute Marks: 10.00

Institute Marks: 5.00

Key administrative personnel are empowered to take decision with regard to spending money for any important operational purpose and the table given below outline financial powers for these personnel.

Sl.No.	Designation	Financial Power (in Rs.)
1	Chief Coordinator – Administration (CCA)	1,00,000.00
2	Principal	50,000.00
3	All HoDs	25,000.00

10.1.5 Transparency and availability of correct/unambiguous information in public domain (5)

Information of PESITM Policies, Rules, Processes and Dissemination made available to the public on the college website. The URL is http://pestrust.edu.in/pesitm

10.2 Budget Allocation, Utilization, and Public Accounting at Institute level (30)

Total Marks 26.00

Institute Marks: 9.00

Institute Marks: 12.00

10.2.1 Adequacy of budget allocation (10)

Before the commencement of every academic year a meeting of all the Heads of departments is convened and budgetary requirement is taken, which includes procurement of new equipment, maintenance/servicing of existing equipment, consumables required, building space and also books required for the library. For buildings detailed plans and estimates are prepared and approval is taken for the same in the Governing Council meetings. A detailed report of all the development works undertaken and their current status is presented in the Governing Council meeting. The budgetary requirements are met through the admission fees collected from the students and the revenue generated. The budget allocated at the beginning of the financial year is adequate for managing the expenditure during that year. In case of any additional funds required, the management provides the requisite support.

10.2.2 Utilization of allocated funds (15)

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 (including

salaries, lab consumables etc).

TYPAI I	Total budget (in	laks)	Actual Expenditure (in laks)		
	Non recurring	Recurring	Non recurring	Recurring	
2019-20	9644489	76352428	8767717	69411299	
2018-19	10209929	109114409	9281754	99194918	
2017-18	23141443	101139232	21037675	91944757	
2016-17	10299274	82416287	9362976	74923898	

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 2019-20

Total Income 146168166

Actual expenditure(till...): 108179016

Total No. Of Students 2023

Fee	Govt.	Grants	Other sources(specify)	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
115783734	0	0	30384432	69411299	8767717	30000000	53474.55

Table 2 - CFYm1 2018-19

Total Income 184698171			Actual expenditure(till): 128476672			Total No. Of Students 2037	
Fee	Govt.	Grants	Other sources(specify)	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
134562570	0	0	50135601	99194918	9281754	20000000	63071.51

Table 3 - CFYm2 2017-18

Total Income 181	Total Income 181521628			Actual expenditure(till): 132982432			Total No. Of Students 2123
Fee	Govt.	Grants	Other sources(specify)	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
131226010	0	0	50295618	91944757	21037675	20000000	62638.92

Table 4 - CFYm3 2016-17

Total Income 179185454			Actual expenditure(till): 104286874			Total No. Of Students 2197	
Fee	Govt.	Grants	Other sources(specify)	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student

129510935	0	0	49674519	74923898	9362976	20000000	47467.85

Items	Budgeted in 2019-20	Actual Expenses in 2019-20 till	Budgeted in 2018-19	Actual Expenses in 2018-19 till	Budgeted in 2017-18	Actual Expenses in 2017-18 till	Budgeted in 2016- 17	Actual Expenses in 2016-17 till
Infrastructure Built-Up	279066.70	253697.00	4000000	2437173	10000000	10090809	2900000	2480133
Library	576816.00	567376.00	1500000	1249517	1500000	1315139	1100000	973480
Laboratory equipment	6729962	5189351	3620000	3281160	6050000	5133139	4300000	3759356
Laboratory consumables	286472.00	286472.00	900000	786085	1300000	1034857	300000	165886
Teaching and non-teaching staff salary	58138580.00	709336804	70000000	69895181	70000000	62841764	60000000	52735441
Maintenance and spares	971159.00	55742.00	6000000	5677020	6500000	6260659	4000000	3819908
R&D	0	0	50000	46000	0	0	0	0
Training and Travel	1608808	1528697	2800000	02441309	6350000	4790414	2825000	2398296
	2458310.00	721359.00	11000000	10896523	10000000	10139267	8800000	8275427
Others, specify	7556778.36	1410791.00	12000000	11940110	10000000	11668210	10000000	10093122
Total	78605952.06	719350289.00	111870000	108650078	121700000	113274258	94225000	84701049

10.2.3 Availability of the audited statements on the institute's website (5)

PESITM Financial year 2018-19, 2017-18, and 2016-17 Audit Reports made available on the college website. The URL is https://pestrust.edu.in/pesitm/audit-report/ (https://pestrust.edu.in/pesitm/audit-report/)

Institute Marks: 5.00

10.3.2 Utilization of allocated funds (20)

The allocated funds are utilized properly, and adequate as per the Academic requirements.

Year	Approved Budget	Actual Expenditure	Percentage of utilization	
		21220276		92
2018-19	67884000	66453156		98
2017-18	66094000	61755992		93
2016-17	50550000	46322684		92

10.3.1 Adequacy of budget allocation (10)

The Head of the department instructs the concerned lab in charges to provide the budget required for the coming academic year. The Lab in charge provides, both, recurring and non recurring expenditure budget required for the lab. Based on the budget provided by various lab in charges the a final budget proposal will be prepared with the following items Laboratory equipment

- · Laboratory consumables
- Maintenance and spares
- Miscellaneous expenses

The budget provided by the institute to the department is adequate to maintain and procure new items for the departments, to meet the academic requirements. The yearly budget is prepared according to the needs & requirements of the departments taking into consideration of annual intake of students, laboratory & infrastructure developments. The budget allocation and utilization for the last four years is adequate.

Institute Marks:

Institute Marks: 18.00

Institute Marks: 8.00

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 2019-20

23094056		Actual expenditure (till): 21220176		Total No. Of Students 460
Non Recurring Recurring		Non Recurring	Recurring	Expenditure per student
11562028	11532028	10626736	10593440	46130.82

Table 2 :: CFYm1 2018-19

67884000		Actual expenditure (till): 66453156		Total No. Of Students 470
Non Recurring Recurring		Non Recurring	Recurring	Expenditure per student
34512000	33372000	33779255	32673901	141389.69

Table 3 :: CFYm2 2017-18

66094000		Actual expenditure (till): 61755992		Total No. Of Students 453
Non Recurring Recurring		Non Recurring	Recurring	Expenditure per student
33357000	32737000	31133467	30622525	136326.69

Table 4 :: CFYm3 2016-17

50550000		Actual expenditure (till): 46322684	Total No. Of Students 453	
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
25390000	25160000	23215303	23107381	102257.58

Items	Budgeted in 2019- 20	Actual Expenses in 2019-20 till	Budgeted in 2018-19	Actual Expenses in 2018-19 till	Budgeted in 2017-18	Actual Expenses in 2017-18 till	Budgeted in 2016-17	Actual Expenses in 2016-17 till
Laboratory equipment	0	0	1100000	1060000	600000	493417	150000	82728
Software	250000	220000	0	0	0	0	0	0
Laboratory consumable	32028	32028	10000	9750	350000	309320	30000	17060
Maintenance and spares	250000	220500	250000	216457	200000	172967	200000	115064
R&D	48000	48000	48000	48000	48000	48000	48000	48000
Training and Travel	30000	33296	40000	37618	20000	17525.5	30000	25194
	950000	174932	20302000	20050456	21387000	20245919	17125000	15484331
Total	1560028	728756	21750000	21422281	22605000	21287148.5	17583000	15772377

10.4 Library and Internet (20)

Total Marks 18.00

Institute Marks: 8.00

10.4.1 Quality of learning resources (hard/soft) (10)

LIBRARY AND INFORMATION CENTER

The library occupies a place of pride and is most lively place in the campus. It is well-furnished and its pleasant ambience with spacious reading room creates conducive environment to faculty and students and serves as a creative and innovative partner in supporting teaching, learning and research activities of the college.

• Relevance of available learning resources including e-resources

Library is contributing to achieve the goal and mission the institution. The collection of the library is rich and diverse comprising both digital and print form. The collection includes books, e-books, Journals(print and electronic), project reports, Conference proceedings etc., Library gives utmost importance to collection development of learning materials. The department heads in consultation with the department faculties recommend the required learning materials to be added to the library. The number of titles and volumes are added every year in accordance with the norms and standards set by VTU and AICTE.

· Accessibility to students

Library Collection:

The rich collection of the library comprises the following resources:

Sl.	Learning / Reading Materials	Copies
1	Books (Print)	54,641
2	Books (Electronic)	23,629
3	Journals (print)	73
4	Journals (Electronic)	1,113
5	Magazines	15
6	News papers	14
7	CDs/DVDs	469
8	Project reports	315

A campus wide access to various E-resources subscribed to the library through VTU consortium is made through IP enabled access. Any number of users can access to resources at a time. Remote access to the E-resources is provided through KNIMBUS. Users can also access to digital resources through app called mLibrary. Digital library with 16 computers has been established to access E-resources and use NPTEL.

List of Electronic resources subscribed:

Sl.No	ELECTRONIC	TOTAL	URL to access
	RESOURCES	RESOURCES	
1	McGraw Hill	505 E-	http://mcgrawhilleducation.pdn.ipublishcentral.com/
	Education	Books	(http://mcgrawhilleducation.pdn.ipublishcentral.com/)
2	Knimbus	E-Books :	https://pesceb.new.knimbus.com/user#/home
	Open access	10,000+ E-	(https://pesceb.new.knimbus.com/user#/home)
	resouces	Journals :	
		5700+	
3	Taylor and	555	http://www.tandfonline.com/
	francis (E-	Journals +	(http://www.tandfonline.com/)
		4950 E-	
	Journals)	Books	
4	Springer nature	690	https://link.springer.com/ (https://link.springer.com/)
	(E-Books &	Journals+	
	Journals)	13000 E-	
		books	
5	Sententia	ļ	https://sententia.online/ (https://sententia.online/)
	Grammar Tool		

6	Emerald	120	https://www.emeraldinsight.com/
	management	JOURNALS	(https://www.emeraldinsight.com/)
	collection		
	(Journals)		
7	Institution of	10 Journals	https://www.ice.org.uk/ (https://www.ice.org.uk/)
	Civil Engineers	+ 21	
	(ICE Journals)	Conference	
		Proceedings	
8	ELSEVIER –	436 E-	https://www.sciencedirect.com/
	SCIENCEDIRECT	Books	(https://www.sciencedirect.com/)
	(CSE)	(Perpetual	,
		Access)	
9	New Age	220 E-	http://www.newagepublishers.com/servlet/nahome/
	International	Books	(http://www.newagepublishers.com/servlet/nahome/)
		(Prepetual	
		Access)	
10	Packt E-Books	5002 E-	https://prod.packtpub.com/in/
		Books	(https://prod.packtpub.com/in/)
		(Perpetual	
		Access)	

Area and Seating Capacity:

Total area of library is 1171.65 Sq. Mtr.

Seating capacity is 120

Library hours:

Library is functional on all week days and remains open for 12 hours a day.

Working hours of the library

Monday - Friday : 8.00 a.m. to 8.00 p.m.

Saturday: 8.00 a.m. to 5.00p.m. Sunday: 9.00 a.m. to 12.00 p.m.

Library staff:

There are 8 library staff working in library in shifts with 4 staff with professional degree and 4 non professionals

Staff details

Sl. No.	Name	Designation	Qualification
1.	Chandrashekar K. L	Senior Librarian	M.Sc. (lib & Inf science), M.Phil, KSET (PhD)
2.	Raja A	Asst. libn	M.L.I.Sc,
3.	Chandrashekar V. M	Asst. libn	M.L.I.Sc,
4.	Prakash R	Asst. libn	M.L.I.Sc,
5.	Chetan Kumar S. B	Libray Assistant	B.A. (B.L.I. Sc.)
6.	Sunanda M C	Libray Assistant	ITI
7.	Tulasi R	Libray Assistant	PUC
8.	Uday Kumar K	Libraty Attendant	SSLC

Computerisation of library activities :

Computerisation of library activities is done using LIBSOFT software. All the activities of library viz. Acquisition, cataloguing, circulation (Issue/Return), Online public access Catalogue (OPAC). For easy handling of data Barcode technology is also used to barcode learning materials.

Services provided:

Sl. No.	Services	Descriptions
1.	Reference	Separate section is available in the first floor of library with the collection of 3500 reference copies
2.	Circulation service	Issue and return of books on loan for a period of 14 days
3.	Reprography	Photocopy facility is made available inside the library

5.	Information deployment and notification (Current Awareness service)	Newly procured books are displayed at the entrance of the library and also the list is hosted on to the library website. E-mail alerts are also sent.
6.	Internet Access	Digital library with 16 computers with internet at 10mbps is established for the benefit of users in the library.
7.	Bibliography compilation	Bibliographic compilation of Journal articles.
8.	In-house/remote access to e- resources	All the subscribed resources are accessible in house via LAN and remote access is provided through Knimbus.
9.	User Orientation	Orientation is conducted once in every semester compulsorily and as and when demand placed by users.
10.	Assistance in searching database	User will be assisted in searching database in digital library by library staff.
11	Book bank	Book bank facility for all students under which students can borrow 3-4 books for a whole semester and for SC/ST students 2 extra books under SC/ST book bank scheme.
12	Online public Access catalogue(WEB OPAC)	OPAC will provide the bibliographical details of books, Journal articles.
13	Institution Repository	Scholarly publications of faculty members, Old Question papers, Newspaper clippings and other reading materials are also made available for students. Over 6000 items are available.

• Support to students for self-learning activates

The Library provides excellent facilities and academic ambience for its users for self-learning activities with following initiatives

- a. **NPTEL (National programme in Enhanced learning):** Library has established separate NPTEL server to host NPTEL videos which can be accessed via intranet within the campus. One can access the videos in the entire campus without internet. It offers more than 20000 videos of different streams of engineering and Management. These videos serve as a supplement to classroom teaching and learning activities.
- b. **SWAYAM (Study Webs of Active-Learning for Young Aspiring Minds) and MOOC (Massive Open Online Courses)**: Library has made arrangements for the user to access SWAYAM and and MOOC. We encourage students to take online courses.
- c. **e-PG Pathshala**: e-PG Pathshala is an initiative of the MHRD under its National Mission on Education through ICT (NME-ICT). Link to e-PG Pathshala is provided to create awareness and to encourage students to take online courses.
- d. **Shodhganga:** The Shodhganga@INFLIBNET Centre provides a platform for research students to deposit their Ph.D. theses and make it available to the entire scholarly community in open access. Link to Shodhganga is provided to create awareness and to encourage students to use it.
- e. **Open access resources:** Link of many open access resources is provided which helps in self-study of the students.
- f. **National Digital library:** Our library has obtained Institutional membership of NDL. We enroll our students and faculty to NDL and encourage to uses lakhs of resources available freely
- g. **DELNET**: Institution is member of DELNET. DELNET offers across to nearly 1.75 crore records of books, periodicals, articles, thesis and dissertations and other databases. Besides this also provides inter library loan and document delivery services all its member libraries.

10.4.2 Internet (10) Institute Marks : 10.00

Name of the Internet provider	Airtel Touches and BSNL
Available band width	105 Mbps
WiFi availability	Yes, The Campus is Wi-Fi enabled with 24 Access Points
Internet access in labs, classrooms, library and offices of all Departments	Computer labs are enabled with LAN, and on request basis Internet can be accessed in labs through Ethernet. Registered devices allowed to
Security arrangements	அற்று வில்கு வில்களை வில்கள்கள்கள்கள்கள்கள்கள்கள்கள்கள்கள்கள்ளன. Province letter வில்கள்கள்கள்கள்கள்கள்கள்கள்கள்கள்கள்கள்கள்

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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	Ability to interpret the fundamental concepts and methodologies of computer systems.
PSO2	Apply the mathematical concepts to crack problems using suitable mathematical analysis, data structures and algorithms
PSO3	Develop ability to grasp the software development life-cycle and methodologies of software systems. Possess competent skills and knowledge of software design process. Familiarity and practical proficiency with a broad area of programming concepts and provide new ideas and innovations towards research.

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. Chaitanya Kumar M V

Designation: Principal, PES Institute of Technology and Management,

Shivamogga Signature :

Seal of The Institution:

ce:/ 14/3/2020



Place: Shivamogga

Date: 14-03-2020 13:11:15