POORNIMA
COLLEGE OF ENGINEERING

Approved by AICTE
Affiliated to Rajasthan Technical University, Kota
Recognized by UGC under Section 2(f) of the UGC Act, 1956

Curriculum Delivery Plans (CDPs)
Department of Electrical Engineering

(Odd & Even Semester 2021-22 & Odd Semester 2022-23)

ISI-6, RIICO Institutional Area, Sitapura, Jaipur-302022 (Rajasthan)
• Phone: +91-9829255102, +91-9414728922 • E-mail: principal.pce@poornima.org
• Website: www.pce.poornima.org

POORNIMA
COLLEGE OF ENGINEERING

DEPARTMENT OF ELECTRICAL ENGINEERING

CURRICULUM DELIVERY PLAN

OUTLINE-ODD SEM-2021-22

ISI-6, RIICO Institutional Area, Sitapura, Jaipur-302022 (Rajasthan)

• Phone: +91-141-2770790 • E-mail: infor@poornima.org

• Website: www.poornima.org

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

Table of Contents

1 The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of Continuous Internal Assessment (CIA)

PCE is affiliated to RTU, Kota and follows the planned and prescribed curriculum of University. The Internal Quality Assurance Cell (IQAC) of PCE takes the responsibility of monitoring the effective delivery of the curriculum through a well-planned and documented process. To ensure effective curriculum delivery, a Curriculum Delivery Plan (CDP) is prepared by all PAC's of the respective departments. A CDP includes detailed planning for preparation, verification, execution and adherence to all documents related to academic delivery of all courses. As per the directions received from IQAC, the Examination cell plans for the Continuous Internal Assessment. Examination cell then circulate CIA planning to the PAC. Examination cell sends all the CIE Data to Director's Office for the final approval before its submission to RTU. Detail outlines are as follows.

1. Director Office, PCE receives the curriculum from RTU, Kota through university website.
2. IQAC prepares institute academic calendar aligned with RTU academic calendar considering input received in last GC meeting and other stakeholders. IQAC forwards the Institute Academic Calendar to PAC (Program Assessment Committee) for identifying curriculum gaps and examination cell for CIE. PACs then prepares CDPs after consolidating the course specific planning received from the respective faculty members.
3. A CDP includes activities for gap abridgement which are proposed to be carried out by the faculty members.
4. IQAC also instructs PACs to prepare the department activity calendar. PACs receives approval of department activity calendars and CDPs from DABs before its final approval from IQAC.
5. IQAC also reviews the CDPs approved by DABs and gives suggestions/ approvals periodically. All the activities (SPL, Industrial visit, workshop etc.) planned are taken into consideration for the Department activity calendar after the approval from DABs.
6. Subject wise Course files are prepared by respective faculty, comprising of Syllabus, ABC analysis, Blown-Up, Deployment, Lecture notes, Zero Lecture, Tutorial and Assignment sheets, COs Statements, and Mapping with POs and PSOs.
7. Faculty frequently use ICT tools for more effective content delivery using PPTs, video lectures etc.
8. Student attendance is monitored by tutors and chief proctor office with help of SHARP ERP software. Attendance defaulters are regularly counseled through their tutors for improving their attendance.
9. Institute also conducts Annual Internal Academic Audit for the effectiveness of teaching-learning methodologies and the necessary actions are taken as suggested by the audit team.
10. Conferences, seminars, webinars, workshops, expert lectures, STTPs, and FDPs are organized throughout the year on the recent advances in the field of engineering.
11. Continuous Internal Assessment process includes Midterm exam, Tutorials, Assignments, Quizzes, presentation, Class Test, viva-voce etc.
12. As per the RTU examination scheme, mid semester examinations are conducted centrally by examination cell as per the planning & academic calendar and other assessments are conducted at departmental level.
13. All the evaluations are carried out by the faculty members which include COs-POs attainment, Gap identification & action taken for the fulfillment of gap.
14. Student feedback and attainment of COs-POs are reviewed by the PAC for any revision in planning & Delivery.
15. End term semester examinations are conducted by the RTU, Kota.

2 Vision & Mission Statements

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

2.1 Vision & Mission Statements of the Institute

Vision of Institution

To create knowledge based society with scientific temper, team spirit and dignity of labor to face the global competitive challenges

Mission of Institution

To evolve and develop skill based systems for effective delivery of knowledge so as to equip young professionals with dedication & commitment to excellence in all spheres of life

2.2 Vision & Mission Statements of the Programme B. Tech. (Electrical Engineering)

2.2.1 Vision of Department

To be a model of excellence in Professional Education and Research by creating electrical engineers who are prepared for lifelong engagement in the rapidly changing fields and technologies with the ability to work in team.

2.2.2 Mission of Department

- To provide a dynamic environment of technical education wherein students learn in collaboration with others to develop knowledge of basic and engineering sciences.
- To identify and strengthen current thrust areas based upon informed perception of global societal issues in the electrical and allied branches.
- To develop human potential with intellectual capability who can become a good professional, researcher and lifelong learner.

2.2.3 PEO of the Department

Program Educational Objectives (PEOs

- **PEO 1**: Graduates will have the ability to formulate, analyze and apply design process using the basic knowledge of engineering and sciences to solve complex electrical engineering problems.
- **PEO 2**: Graduates will exhibit quality of leadership, teamwork, time management, with a commitment towards addressing societal issues of equity, public and environmental safety using modern engineering tools.
- **PEO 3**: Graduates will possess dynamic communication and have successful transition into a broad range of multi-disciplinary career options in industry, government and research as lifelong learner.

2.2.4 Program Specific Outcome (PSOs)

- ❖ PSO1: Graduate possesses the ability to apply fundamental knowledge of basic sciences, mathematics and computation to solve the problems in the field of electrical engineering for the benefit of society.
- ❖ PSO2: Graduate possesses the ability to professionally communicate and ethically solve complex electrical engineering problems using modern engineering tools.
- ❖ PSO3: Graduate possesses sound fundamental knowledge to be either employable or develop entrepreneurship in the emerging areas of renewable and green energy, electric and hybrid vehicles and smart grids and shall be susceptive to life- long learning.

2.3 Program Outcomes (PO)

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.

3 Department Academic & Administrative Bodies - Structure & Functions

3.1 Department Advisory Board (DAB)

3.1.1 Primary Objective

Department Advisory Board (DAB) of Department of Electrical Engineering, PCE, Jaipur is formed to provide necessary suggestions for developing a structured approach for continuous improvement in curriculum delivery, planning and incorporation of Curricular, Extra and Co-Curricular activities needed to abridge the pre-identified curriculum gaps.

3.1.2 Roles & Responsibilities

1. Suggest improvement in academic plans and recommend standard practices/system for attainment of Program Educational Objectives, Program Outcomes, Program Specific Outcomes and Course Outcomes.
2. Provide guidelines for industry-institute interactions to bridge up curriculum/industry gap and suggest quality improvement initiatives to enhance employability.
3. Develop a structured Curriculum Delivery Plan, Department Academic Calendar and seek approval for them from Internal Quality Assurance Cell.
4. Incorporate suggestions received from Program Assessment Committee (PAC) by including proposed activities for bridging curricular gaps identified.
5. To identify and suggest thrust areas to conduct various activities (final year projects, training courses and additional experiments to meet PEOs, and propose necessary action plan for skill development of students, required for entrepreneurship development and quality improvement.

3.1.3 Department-Wise Composition

Session: 2021-22

S. No.	Category	Nominated by	Name of Members	Address

1	Chairman, DAB-CE	Chairman, IQAC	Dr. Mahesh M. Bundele (Principal & Director, PCE)	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
2	Member Secretary	Chairman, DAB-EE	Dr. PRAVIN MACHHINDRA SONWANE Head, Department of Electrical Engineering	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
3	Faculty representative-1	Chairman, DAB-EE	Dr. Sunil Kumar Gupta Professor, EE, PCE	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
4	Faculty representative-2	Chairman, DAB-EE	Dr. Neeraj Tiwari Professor EE, PCE	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
5	Faculty representative-3	Chairman, DAB-EE	Dr. Deepika Chouhan Professor, PCE	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
6	Faculty representative-4	Chairman, DAB-EE	Dr. Hemant Kaushik Associate Prof., PCE	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
7	Faculty representative-5	Chairman, DAB-EE	Dr. Pankaj Gakhar Associate Professor	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
8	Faculty representative-6	Chairman, DAB-EE	Mr. Ajit Singh Rajawat, Assistant Professor, PCE	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
9	Special Invitee	Chairman, DAB-EE	Dr. Rekha Nair Dean First Year, PCE	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
10	Alumni Representative-1	Chairman, DAB-EE	Mr. Gourabh Gupta	REC, Banglore
11	Alumni Representative-2	Chairman, DAB-EE	Mr. Love Mishra	Sr. Engineer, Ultratech
12	Student Representative	Chairman, DAB-EE	Abhishek Dubey	PCE20EE800, Student PCE
13	Industry Representative	Chairman, DAB-EE	Mr. Jagdish Prasad Meena	Executive Engineer, RVPNL, Jaipur
14	Parents Representative-1	Chairman, DAB-EE	Mr. BHAWANI SHANKAR TIWARI	Housing Business, Bijainagar Dist-Ajmer
15	Parents Representative-2	Chairman, DAB-EE	Mr. RAKESH CHAND MATHUR	Govt. Servant, Jaipur

3.1.4 Meeting Frequency & Objectives

Meeting No.	Meeting Code	Meeting Month-Week	Meeting Objective
1.	DAB-1	July First Week	• Consideration of gaps and proposed activities by PAC last meeting to be implemented in DAC and CDP. • Prepares final draft of CDP and DAC to be proposed in upcoming IQAC meeting
2.	DAB-2	September Second Week	• Approval / Suggestions of proposals from last PAC Meeting. • Revision of DAB Drafts for being proposed in upcoming GC
3	DAB-3	December First Week	• Draft preparation for DAC and CDP for upcoming semester after considering inputs from PAC. • Review Semester closure draft from PAC.

Dr. Mahesh Bundele B.E., M.E., Ph.D. Director Poornima College of Engineering ISI-6, RIICO Institutional Area Sitapura, JAIPUR

4.	DAB-4	April Last Week / May First Week	• Draft of PCE Academic Calendar and CDP proposed • Previous session closure with gaps and feedback. • Completion of ATR-2 for current semester based on last GC sessions and compiling it with ATR-1

3.2 Program Assessment Committee

3.2.1 Primary Objective

The primary objective of Program Assessment Committee (PAC) is to identify, bridge and assess the gaps in Program's Curriculum received from University through attainment calculation.

3.2.2 Roles & Responsibilities

1. Identify gaps in curriculum laid down by University and propose activities for bridging identified gaps.

2. Implement academic plans and standard practices/system for attainment of Program Educational Objectives, Program Outcomes, Program Specific Outcomes and Course Outcomes.

3. Regular Monitoring of curriculum gap abridgement and course deployment practices through pre-defined methods.

4. Execute Industry-Institute Interactions to enhance the employability thereby meeting the industry standards and requirements.

5. Implement Curriculum Delivery Plan & Department Academic Calendar.

3.2.3 Department-Wise Composition

Session: 2021-22

S. No.	Category	Nominated by	Name of Members	Address
1	Chairman, PAC-EE	Chairman, IQAC / Head of Institution	Dr. PRAVIN MACHHINDRA SONWANE Head, Department of Electrical Engineering	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
2	Member Secretary	Chairman, PAC-EE	DR. PANKAJ GAKHAR Associate Professor	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
3	Faculty representative-1	Chairman, PAC-EE	DR. HEMANT KAUSHIK Associate Professor	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
4	Faculty representative-2	Chairman, PAC-EE	MR. AJIT SINGH RAJAWAT, Assistant Professor	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
5	Faculty representative-3	Chairman, PAC-EE	MR. PANKAJ VERMA Assistant Professor	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
6	Faculty representative-4	Chairman, PAC-EE	Dr. GAURAV JAIN Associate Professor	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
7	Faculty representative-5	Chairman, PAC-EE	Dr. MONIKA VARDIA Professor	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
8	Faculty representative-6	Chairman, PAC-EE	Dr. JYOTI SHUKLA Professor	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur

Dr. Mahesh Bundele B.E., M.E., Ph.D. Director Poornima College of Engineering ISI-6, RIICO Institutional Area Sitapura, JAIPUR

3.2.4 Meeting Frequency & Objectives

Meeting No.	Meeting Code	Meeting Month-Week	Meeting Objective
1.	PAC-1	July Last Week	● Execution of Academic, Extra and Co-Curricular activities ● Regular assessment of Academic, Extra and Co-Curricular activities ● Regular calculation of attainments ● Revision of Academics gaps ● Prepared regular report of program for all assessment, attainment & gaps
2.	PAC-2	August Last Week	● Execution of Academic, Extra and Co-Curricular activities ● Regular assessment of Academic, Extra and Co-Curricular activities ● Regular calculation of attainments ● Revision of Academics gaps ● Prepared regular report of program for all assessment, attainment & gaps
3	PAC-3	September Last Week	● Execution of Academic, Extra and Co-Curricular activities ● Regular assessment of Academic, Extra and Co-Curricular activities ● Regular calculation of attainments ● Revision of academics gaps as previous attainment ● Assessment of activities required for being proposed in upcoming GC ● Submit report to Governing Council about previous semester & planning of next semester.
4.	PAC-4	October Last Week	● Inclusion of suggestions for revising gaps ● Execution of Academic, Extra and Co-Curricular activities according to suggestions in GC ● Regular assessment of Academic, Extra and Co-Curricular activities ● Regular calculation of attainments ● Revision of academics gaps as previous attainment
5.	PAC-5	November Third Week	● Revision of academics gaps as previous attainment ● Regular assessment of Academic, Extra and Co-Curricular activities ● Identification and proposal of gaps and activities to be considered by DAB to prepare Department Academic Calendar and CDP for upcoming semester. ● Semester closure report draft to be prepared ● Elective proposals/CBCS
6.	PAC-6	December Third Week	● Incorporation of suggestions from IQAC and DAB meetings in execution of Semester activities ● Execution and assessment of Academic, Extra and Co-Curricular activities ● Revision of academics gaps as previous attainment ● Calculation of attainments
7.	PAC-7	January Last Week	● Execution of Academic, Extra and Co-Curricular activities ● Regular assessment of Academic, Extra and Co-Curricular activities ● Regular calculation of attainments ● Revision of Academics gaps ● Prepared regular report of program for all assessment, attainment & gaps
8.	PAC-8	February Last Week	● Execution of Academic, Extra and Co-Curricular activities ● Regular assessment of Academic, Extra and Co-Curricular activities ● Regular calculation of attainments ● Revision of Academics gaps ● Prepared regular report of program for all assessment, attainment & gaps
9.	PAC-9	March Last Week	● Execution of Academic, Extra and Co-Curricular activities ● Regular assessment of Academic, Extra and Co-Curricular activities

			• Regular calculation of attainments • Revision of Academics gaps • Prepared regular report of program for all assessment, attainment & gaps • Draft preparation of Semester closure
10.	PAC-10	April Second Week	• Execution of Academic, Extra and Co-Curricular activities • Regular assessment of Academic, Extra and Co-Curricular activities • Regular calculation of attainments • Revision of Academics gaps • Prepared regular report of program for all assessment, attainment & gaps
11.	PAC-11	May Last Week	• Execution of Academic, Extra and Co-Curricular activities • Regular assessment of Academic, Extra and Co-Curricular activities • Regular calculation of attainments • Revision of Academics gaps • Prepared regular report of program for all assessment, attainment & gaps • Report submission of Semester closure • Identification and proposal of gaps and activities to be considered by DAB to prepare Department Academic Calendar and CDP for upcoming semester.
12.	PAC-12	June Last Week	• Feedback of last IQAC and suggestions for new semester to be implemented in CDP and DAC • Elective proposals/CBCS

4 List of Faculty Members & Technical Staff

Sr. No.	Faculty Name	Emp.ID	Designation	Email ID	Mobile No.
1	MR. ANMOL CHATURVEDI	3210	ASST PROFESSOR	anmol.chaturvedi@poornima.org	9929013217
2	DR. PANKAJ GAKHAR	3820	ASSOCIATE PROFESSOR	pankaj.gakhar@poornima.org	7737764255
3	MR. MANISH SHARMA	3926	ASST PROFESSOR	manish.sharma@poornima.org	9694522907
4	MR. KAVEENDRA KUMAR	4424	ASST PROFESSOR	kaveendra.kumar@poornima.org	8987474142
5	MR. ARPIT KHANDELWAL	4893	ASST PROFESSOR	arpit.khandelwal@poornima.org	8058227694
6	MR. ABHISHEK SINGH	5353	ASST PROFESSOR	abhishek.singh@poornima.edu.in	9557210581
7	Dr. GAURAV JAIN	6085	ASSOCIATE PROFESSOR	jaingaurav@yahoo.com	9602410960
8	Ms. EKATA SHARMA	6377	ASST PROFESSOR	ekatasharma1975@gmail .com	9530025325
9	Dr. PRAVIN MACHHINDRA SONWANE	6380	PROFESSOR	vapron@rediffmail.com	8805868462
10	MR. AJIT SINGH RAJAWAT	6849	ASST PROFESSOR	ajit.rajawat@poornima.org	7737819353
11	MR. PANKAJ VERMA	6872	ASST PROFESSOR	pankaj.verma@poornima.org	9463970020
12	Dr. MONIKA VARDIA	6926	PROFESSOR	monika.vardia@gmail.com	9461548584
13	Ms. RICHA CHAUDHARY	6931	ASST PROFESSOR	richachaudhary2106@gmail.com	8851096563
14	Dr. JYOTI SHUKLA	6932	PROFESSOR	j.shukla111@gmail.com	6350116578
15	Mr. BHAVANESH CHANDRA SHARMA	7012	ASST PROFESSOR	bhavaneshsharma2009@gmail.com	9772809472
16	Ms. SHEENA TAHIRA KHAN	7020	ASST PROFESSOR	khansheena70@gmail.com	8290616919
17	Dr. NEERAJ TIWARI	5298	PROFESSOR	neerajtiwari.1407@gmail.com	94[illegible]984649

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

18	Dr. DEEPIKA CHAUHAN	1810	PROFESSOR	deepika0501@gmail.com	9252605292
19	Dr. SUNIL KUMAR GUPTA	5553	PROFESSOR	sunilkumar.gupta@poornima.org	9460595513
20	Dr. AMIT SHRIVASTAVA	5970	PROFESSOR	amit.shrivastava@poornima.org	9314860660
21	Mr. ANAND SHARMA	5403	ASST PROFESSOR	12meep39@nirmauni.ac.in	9887733430
22	Mr. ASHISH RAJ	4129	ASST PROFESSOR	ashishraj1987@gmail.com	7821974011
23	Mr. KAPIL SHRIVASTAVA	4462	ASST PROFESSOR	kapilshrivastava.piet@gmail.com	9887942420
24	Mr. SURENDRA SHARMA	1363	ASST PROFESSOR	surendra.sharma@poornima.edu.in	9413968221
25	Dr. RANJEET KUMAR	6098	ASSOCIATE PROFESSOR	rkjha.001@gmail.com	8302201104
26	Dr. VIJAY KUMAR GALI	6096	ASSOCIATE PROFESSOR	vijaykumar209@gmail.com	9928740818
27	Dr. BABITA JAIN	6039	PROFESSOR	babita.jain@poornima.org	9849153624
28	Mr. JALDEEP KUMAR	3832	ASST PROFESSOR	jaldeepkumar@poornima.org	9413004430
29	DR. HEMANT KAUSHIK	6878	ASSOCIATE PROFESSOR	hemant.kaushik@poornima.org	9950937390
30	Mr. SHIVRAJ SHARMA	1698	ASST PROFESSOR	shivrajsharma@poornima.org	9784290681
31	MR. VIKAS KUMAR SHARMA	7399	ASST PROFESSOR	vikas.sharma@poornima.org	9887352062
32	Dr. MEENA TEKRIWAL	2365	ASSOCIATE PROFESSOR	meenatekriwal@poornima.org	9413928194
33	DR. SHUCHI DAVE	3420	PROFESSOR	drshuchidave@gmail.com	9357252185
34	MR. PRINCE DAWAR	3453	ASST PROFESSOR	dawarprince83@gmail.com	8440964941
35	MS. KALPANA SHARMA	6050	ASST PROFESSOR	klpna.sharma88@gmail.com	9413077523
36	MR. MAYANK SHARMA	4846	ASST PROFESSOR	msecajmer@gmail.com	9413040458
37	MR. SITARAM GURJAR	2695	TECHNICAL ASSISTANT	sitaramgurjar@poornima.org	9602335554
38	MR. NEMI CHAND KOLI	1483	TECHNICAL OFFICER	nemichand@poornima.org	9887793801
39	MR. HANUMAN PRASAD KHORAL	4216	TECHNICAL ASSISTANT	hanuman.kharol@poornima.org	9667100385

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

5 Institute Academic Calendar

JULY 2021

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

AUGUST 2021

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

SEPTEMBER 2021

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

OCTOBER 2021

Sun	Mon	Tue	Wed	Thu	Fri	Sat
31					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

NOVEMBER 2021

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

DECEMBER 2021

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

POORNIMA
COLLEGE OF ENGINEERING

Affiliated to RTU, Kota • Approved by AICTE & UGC under 2(f) • Accredited by NBA

ACADEMIC CALENDAR 2021-22*#

ODD SEMESTER

JULY 2021

RTU THEORY EXAMINATION OF FINAL YEAR [EVEN SEM 2021]

AUGUST 2021

Sunday, 01 to Monday 30	Practical Training [After VI Sem.] [Online]
Sunday, 15	Celebration of Independence Day

SEPTEMBER 2021

Wednesday 01 to 15	Practical Training [After II Sem.] [Online]
Wednesday 01 to 15	Practical Training [After IV Sem.] [Online]
Wednesday 01	Commencement of Classes - B. Tech. VII Sem.
Monday 20	Commencement of Classes - B. Tech. V Sem.
Monday 20	Commencement of Classes - B. Tech. III Sem.
Wednesday 01 to Saturday 04	Orientation programme-B. Tech. VII Sem.
Monday 20 to Saturday 25	Orientation programme-B. Tech. V & III Sem.
Sunday 05	Faculty Felicitation Program, Celebration of Teachers' Day, Blood Donation Camp & activities under WISE
Wednesday 15	Engineers' Day • Manthan- Inter-college Debate Competition

OCTOBER 2021

Saturday 02	Annual Day KALANIDHI' 2020 & Prize distribution ceremony
Monday 18 to Thursday 21	Department Day (PCE)
Friday 22 to Saturday 23	Department Day (PIET)
Monday 25 to Saturday 30	I - Mid Term Theory & Practical Exam for B.Tech VII Sem

NOVEMBER 2021

Thursday 11 to Wednesday 17	I - Mid Term Theory & Practical Exam for B.Tech V & III Sem

DECEMBER 2021

Saturday 18 to Friday 24	II - Mid-TermTheory & Practical Exam for B.Tech VII Sem
Saturday 25	Last Teaching Day for B.Tech VII Sem

JANUARY 2022

Monday 03 to Wednesday 05	End-Term Practical Exams for B.Tech VII Sem
Monday 03 to Saturday 08	II - Mid Term Theory & Practical Exam for B.Tech V & III Sem
Saturday 15	Last Teaching Day for B.Tech V & III Sem
Thursday 20 Saturday 22	End-Term Practical Examination for B.Tech V & III Sem

HOLIDAYS IN ODD SEMESTER 2021-22

1	Bakri Id / Eid ul-Adha	Wednesday, July 21, 2021
2	Raksha Bandhan	Sunday, August 22, 2021
		Friday, October 15, 2021
4	Diwali Break	Monday, November 01 to Saturday, 06, 2021

HOLIDAYS IN EVEN SEMESTER 2021-22

1	Winter Break	As per RTU Examination Schedule
2	Makar Sankranti	Friday, January 14, 2022
3	Celebration of Republic Day	Wednesday, January 26, 2022
4	Holi	Saturday, March 19 to Sunday, March 20, 2022
5	Ramzan Id/Eid-ul-Fitar	Tuesday, May 3, 2022
6	Summer Break	As per RTU Examination Schedule

*Subject to revision as per RTU notifications

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

6 Department Activity Calendar

Poornima College of Engineering, Jaipur

Calendar for Electrical Engineering : Odd Semester - Session 2021-22

(A) Academic Processes

S. No.	Activity/ Process	B.Tech. I Sem.	B.Tech. III Sem.	B.Tech. V Sem.	B.Tech. VII Sem.
1	Date of Registration & start of regular classes for students	Yet to be decided as per RTU calendar	Monday 20, September 2021	Monday 20, September 2021	Wednesday 01, September 2021
2	Orientation programme	Yet to be decided as per RTU calendar	Monday 20 to Saturday 25, September 2021	Monday 20 to Saturday 25, September 2021	Wednesday 01 to Saturday 04, September 2021
3	Date of submission of question papers by faculty members to secrecy for 1st Mid-term		Saturday 30, October 2021	Saturday 30, October 2021	Monday 18, October 2021
4	I Mid Term Theory & Practical Exam	Yet to be decided as per RTU calendar	Thursday 11 to Wednesday 17, November 2021	Thursday 11 to Wednesday 17, November 2021	Monday 25 to Saturday 30, October 2021
5	Showing evaluated answer books of 1st Mid-term exam to students in respective classes		Wednesday 24, November 2021	Wednesday 24, November 2021	Wednesday 10, November 2021
6	Last date of submission of Evaluated Answer Books and Mark of First Mid-term Theory & Practical exam to Exam and Secrecy Cell respectively		Monday 29, November 2021	Monday 29, November 2021	Monday 15, November 2021
7	Date of submission of question papers by faculty members to secrecy for 2nd Mid-term		Monday 27, December 2021	Monday 27, December 2021	Saturday 11, December 2021
8	Revision classes	To be declared later according to RTU Exam Schedule			
9	Last Teaching Day	Yet to be decided as per RTU calendar	Saturday 15, January 2022	Saturday 15, January 2022	Saturday 25, December 2021
10	2nd Mid-term theory & Practical Exams	Yet to be decided as per RTU calendar	Monday 03 to Saturday 08, January 2022	Monday 03 to Saturday 08, January 2022	Saturday 18 to Friday 24, December 2021
11	End-Term Practical Exams	Yet to be decided as per RTU calendar	Thursday 20 Saturday 22, January 2022	Thursday 20 Saturday 22, January 2022	Monday 03 to Wednesday 05, January 2022

(B) Events and Activities

12	MATHEMATICAL MODELLING AND DESIGN OPTIMIZATION OF SOLAR PHOTOVOLTAIC SYSTEM AND ELECTRIC VEHICLES	Monday, August 16, 2021 to Tuesday, August 17, 2021
13	Toyota Hybrid System	Tuesday, August 31, 2021
14	Teacher's Day	Monday, September 06, 2021
15	Opportunities of Higher Education in Germany	Tuesday, September 14, 2021
16	ART OF LIVING FOR Engineer's: Engineer's Day Program	Wednesday, September 15, 2021
17	TRENDS IN IOT	Wednesday, October 20, 2021
18	ADVANCES IN POWER GENERATION FROM RENEWABLE ENERGY SOURCES	Monday, December 6, 2021 to Saturday, December 11, 2021

(C) Holidays

19	Eid-ul-Fitar	Wednesday, July 21, 2021
20	Raksha Bandhan	Sunday, August 22, 2021
21	Vijay Dashmi	Friday, October 15, 2021
22	Diwali Break	Monday, November 01 to Saturday, 06, 2021

"स्वच्छ भारत.. सम्पन्न भारत.."

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

7 Teaching Scheme

7.1 RTU Teaching Scheme

Teaching and Examination Scheme

2nd Year: Electrical Engineering
III Semester: B.Tech.

SN	Category	Course Code	Course Title	Hours			Marks			Cr
				L	T	P	IA	ETE	Total	
1	BSC	3EE2-01	Advance Mathematics	3	0	0	30	120	**150**	**3**
2	HSMC	3EE1-02/ 3EE1-03	Technical Communication / Managerial Economics and Financial Accounting	2	0	0	20	80	**100**	**2**
3	ESC	3EE3-04	Power generation Process	2	0	0	20	80	**100**	**2**
4	PCC	3EE4-05	Electrical Circuit Analysis	3	0	0	30	120	**150**	**3**
5		3EE4-06	Analog Electronics	3	0	0	30	120	**150**	**3**
6		3EE4-07	Electrical Machine - I	3	0	0	30	120	**150**	**3**
7		3EE4-08	Electromagnetic Field	2	0	0	20	80	**100**	**2**
8		3EE4-21	Analog Electronics Lab	0	0	2	30	20	**50**	**1**
9		3EE4-22	Electrical Machine-I Lab	0	0	4	60	40	**100**	**2**
10		3EE4-23	Electrical circuit design Lab	0	0	4	60	40	**100**	**2**
11	Training Exam	3EE7-30	Training Seminar	0	0	2			**50**	**1**
12	SODECA	3EE8-00	Social Outreach, Discipline & Extra Curricular Activities						**25**	**0.5**
			Total						**1225**	**24.5**

L = Lecture, **T** = Tutorial, **P** = Practical, **IA**=Internal Assessment,

ETE=End Term Exam, **Cr**=Credits

RAJASTHAN TECHNICAL UNIVERSITY, KOTA

Teaching & Examination Scheme
B.Tech. : Electrical Engineering
3rd Year –V Semester

THEORY												
SN	**Category**	**Course**		**Contact hrs/week**			**Marks**				**Cr**
		Code	**Title**	**L**	**T**	**P**	**Exm Hrs**	**IA**	**ETE**	**Total**	
1	ESC	5EE3-01	Electrical Materials	2	0	0	2	20	80	**100**	**2**
2	PCC/ PEC	5EE4-02	Power System - I	3	0	0	3	30	120	**150**	**3**
3		5EE4-03	Control System	3	0	0	3	30	120	**150**	**3**
4		5EE4-04	Microprocessor	3	0	0	3	30	120	**150**	**3**
5		5EE4-05	Electrical Machine Design	3	0	0	3	30	120	**150**	**3**
6		Professional	Elective I (any one)	2	0	0	2	20	80	**100**	**2**
		5EE5-11	Restructured Power System.								
		5EE5-12	Electromagnetic Wave.								
		5EE5-13	Digital Control System.								
		Sub Total		**16**	**0**	**0**		**160**	**640**	**800**	**16**
PRACTICAL & SESSIONAL											
7	PCC	5EE4-21	Power System - I Lab	0	0	2	2	30	20	**50**	**1**
8		5EE4-22	Control System Lab	0	0	2	2	30	20	**50**	**1**
9		5EE4-23	Microprocessor Lab	0	0	2	2	30	20	**50**	**1**
10		5EE4-24	System Programming Lab	0	0	2	2	30	20	**50**	**1**
11	PSIT	5EE7-30	Industrial Training	0	0	1		75	50	**125**	**2.5**
12	SODECA	5EE8-00	Social Outreach, Discipline & Extra Curricular Activities						25	**25**	**0.5**
		Sub- Total		**0**	**0**	**9**		**195**	**155**	**350**	**7**
		TOTAL OF V SEMESTER		**16**	**0**	**9**		**355**	**795**	**1150**	**23**

L: *Lecture,* ***T:*** *Tutorial,* ***P:*** *Practical,* ***Cr:*** *Credits*
ETE: *End Term Exam,* ***IA:*** *Internal Assessment*

Office of Dean Academic Affairs
Rajasthan Technical University, Kota

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

RAJASTHAN TECHNICAL UNIVERSITY, KOTA

Scheme & Syllabus

IV Year- VII & VIII Semester: B. Tech. (Electrical Engineering)

Teaching & Examination Scheme
B. Tech.: Electrical Engineering
4th Year - VII Semester

SN	Course Type	Course		Hours per Week			Marks				Cr
		Code	Name	L	T	P	Exm Hrs	IA	ETE	Total	
1	PEC	7EE5-11	Wind and Solar Energy Systems.	3	0	0	3	30	120	**150**	**3**
2		7EE5-12	Power Quality and FACTS								
3		7EE5-13	Control System Design.								
4	OE		Open Elective-I	3	0	0	3	30	120	**150**	**3**
			SUB TOTAL	**6**	**0**	**0**		**60**	**240**	**300**	**6**
PRACTICAL & SESSIONAL											
5	PCC	7EE4-21	Embedded Systems Lab	0	0	4	2	60	40	**100**	**2**
6	PCC	7EE4-22	Advance control system lab	0	0	4	2	60	40	**100**	**2**
7	PSIT	7EE7-30	Industrial Training	1	0	0		75	50	**125**	**2.5**
8		7EE7-40	Seminar	2	0	0		60	40	**100**	**2**
9	SODE-CA	7EE8-00	Social Outreach, Discipline & Extra Curricular Activities	0	0	0		0	25	**25**	**0.5**
			SUB TOTAL	**3**	**0**	**8**		**255**	**195**	**450**	**6**
			TOTAL OF VII SEMESTER	**9**	**0**	**8**		**315**	**435**	**750**	**15**

L: *Lecture,* ***T:*** *Tutorial,* ***P:*** *Practical,* ***Cr:*** *Credits*
ETE: *End Term Exam,* ***IA:*** *Internal Assessment*

Office of Dean Academic Affairs
Rajasthan Technical University, Kota

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

8 PCE Teaching Scheme

Poornima Group, Jaipur

Teaching Scheme of Odd Semester 2021-22

Year	Sem	Students	Teaching				Course Name	Subject Code	No. of Sec	No. of Batch	Batch Size (T/H/F)	Total Load (L)	Total Load (T)	Total Load (P)	Total Load (L+T+P)	Teaching Dept.
			L	T	P	Credit										
2	3	13	3	0	0	3	Advance Mathematics	3EE2-01	1	1	F	3	0	0	3	Maths
2	3	13	2	0	0	2	Technical Communication	3EE1-02	1	1	F	2	0	0	2	English
2	3	13	2	0	0	3	Power generation Process	3EE3-04	1	1	F	2	0	0	2	EE
2	3	13	3	0	0	3	Electrical Circuit Analysis	3EE4-05	1	1	F	3	0	0	3	EE
2	3	13	3	0	0	3	Analog Electronics	3EE4-06	1	1	F	3	0	0	3	EE
2	3	13	3	0	0	3	Electrical Machine - I	3EE4-07	1	1	F	3	0	0	3	EE
2	3	13	2	0	0	2	Electromagnetic Field	3EE4-08	1	1	F	2	0	0	2	EE
2	3	13	0	0	2	1	Analog Electronics Lab	3EE4-21	1	1	F	0	0	2	2	EE
2	3	13	0	0	4	2	Electrical Machine-I Lab	3EE4-22	1	1	F	0	0	4	4	EE
2	3	13	0	0	4	2	Electrical circuit design Lab	3EE4-23	1	1	F	0	0	4	4	EE
2	3	13	0	0	2	1	Industrial Training	3EE7-30	1	1	F	0	0	2	2	EE
2	3	13	0	0	1		NSP		1	1	F	0	0	1	1	EE
															31	
3	5	58	2	0	0	2	Electrical Materials	5EE3-01	1	3	F	3	0	0	3	EE
3	5	58	3	0	0	3	Power System - I	5EE4-02	1	3	F	3	0	0	3	EE
3	5	58	3	0	0	3	Control System	5EE4-03	1	3	F	3	0	0	3	EE
3	5	58	3	0	0	3	Microprocessor	5EE4-04	1	3	F	3	0	0	3	EE
3	5	58	3	0	0	3	Electrical Machine Design	5EE4-05	1	3	F	3	0	0	3	EE
3	5	58	2	0	0	2	Restructured Power System.	5EE5-11	1	3	F	3	0	0	3	EE
3	5	58	0	0	2	1	Power System - I Lab	5EE4-21	1	3	H	0	0	6	6	EE
3	5	58	0	0	2	1	Control System Lab	5EE4-22	1	3	H	0	0	6	6	EE
3	5	58	0	0	2	1	Microprocessor Lab	5EE4-23	1	3	H	0	0	6	6	EE
3	5	58	0	0	2	1	System Programming Lab	5EE4-24	1	3	H	0	0	6	6	EE
3	5	58	0	0	1	2.5	Industrial Training	5EE7-30	1	3	F	0	0	2	2	EE
3	5	58			2		NSP		1	3	F	0	0	6	6	EE
															50	
4	7	81	3	0	0	3	Professional Elective-2	7EE5-11/13	2	4	F	6	0	0	6	EE
4	7	81	3	0	0	3	Open Elective - I	7EE6.60.1/2	2	4	F	6	0	0	6	EE
4	7	81	0	0	4	2	Embedded Systems Lab	7EE4-21	1	4	H	0	0	16	16	EE
4	7	81	0	0	4	2	Advance control system lab	7EE4-22	1	4	H	0	0	16	16	EE
4	7	81	1	0	0	2.5	Industrial Training	7EE7-30	1	4	F	1	0	0	1	EE
4	7	81	2	0	0	2	Seminar	7EE7-40	1	4	F	2	0	0	2	EE
4	7	81	0	0	3		Project-1	-	1	4	F	0	0	12	12	EE

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

8.1 Marking Scheme

MARKING SCHEME FOR PRACTICAL EXAM, ODD SEM., 2021-22,		EXAM & SECRECY CELL, PCE									
		I+II Mid Term Exam			Atten & Performance.			End Term Exam			Max.
Code	SUBJECT	Exp.	Viva	Total	Attn.	Perf.	Total	Exp.	Viva	Total	Marks
1FY2-20	Engineering Physics Lab	30	10	40	10	30	40	30	10	40	100
1FY2-21	Engineering Chemistry Lab	30	10	40	10	30	40	30	10	40	100
1FY1-22	Language Lab	30	10	40	10	30	40	30	10	40	100
1FY1-23	Human Values Activities & Sports	30	10	40	10	30	40	30	10	40	100
1FY3-24	Computer Programming Lab	30	10	40	10	30	40	30	10	40	100
1FY3-25	Manufacturing Practices Workshop	30	10	40	10	30	40	30	10	40	100
1FY3-26	Basic Electrical Engineering Lab	30	10	40	10	30	40	30	10	40	100
1FY3-27	Basic Civil Engineering Lab	30	10	40	10	30	40	30	10	40	100
1FY3-28	Computer Aided Engineering Graphics	30	10	40	10	30	40	30	10	40	100
1FY3-29	Computer Aided Machine Drawing	30	10	40	10	30	40	30	10	40	100
3CE4-21	Surveying Lab	30	10	40	10	30	40	30	10	40	100
3CE4-22	Fluid Mechanics Lab	30	10	40	10	30	40	30	10	40	100
3CE4-23	Computer Aided Civil Engineering Drawing	30	10	40	10	30	40	30	10	40	100
3CE4-24	Civil Engineering Maretials Lab	30	10	40	10	30	40	30	10	40	100
3CE4-25	Geology Lab	30	10	40	10	30	40	30	10	40	100
3CE7-30	Training Seminar			60					40		100
3CS4-21	Data Structures and Algorithms Lab	30	10	40	10	30	40	30	10	40	100
3CS4-22	Object Oriented Programming Lab	30	10	40	10	30	40	30	10	40	100
3CS4-23	Software Engineering Lab	30	10	40	10	30	40	30	10	40	100
3CS4-24	Digital Electronics Lab	30	10	40	10	30	40	30	10	40	100
3CS7-30	Training Seminar			60					40		100
3EC4-21	Electronics Devices Lab	30	10	40	10	30	40	30	10	40	100
3EC4-22	Digital System Design Lab	30	10	40	10	30	40	30	10	40	100
3EC4-23	Signal Processing Lab	30	10	40	10	30	40	30	10	40	100
3EC3-24	Computer Programming Lab-I	30	10	40	10	30	40	30	10	40	100
3EC7-30	Training Seminar			60					40		100
3EE4-21	Analog Electronics Lab	30	10	40	10	30	40	30	10	40	100
3EE4-22	Electrical Machine-I Lab	30	10	40	10	30	40	30	10	40	100
3EE4-23	Electrical circuit design Lab	30	10	40	10	30	40	30	10	40	100
3EE7-30	Training Seminar			30					20		100
3IT4-21	Data Structures and Algorithms Lab	30	10	40	10	30	40	30	10	40	100
3IT4-22	Object Oriented Programming Lab	30	10	40	10	30	40	30	10	40	100
3IT4-23	Software Engineering Lab	30	10	40	10	30	40	30	10	40	100
3IT4-24	Digital Electronics Lab	30	10	40	10	30	40	30	10	40	100
3IT7-30	Training Seminar			60					40		100
3ME4-21	Machine drawing practice	30	10	40	10	30	40	30	10	40	100
3ME4-22	Materials Testing Lab	30	10	40	10	30	40	30	10	40	100
3ME4-23	Basic Mechanical Engineering Lab	30	10	40	10	30	40	30	10	40	100
3ME4-24	Programming using MAT LAB	30	10	40	10	30	40	30	10	40	100
3ME7-30	Training Seminar			60					40		100
5CE4-21	Concrete Structures Design	22	8	30	8	22	30	22	8	30	75
5CE4-22	Geotechnical Engineering Lab	22	8	30	8	22	30	22	8	30	75
5CE4-23	Water Resource Engineering Design	15	5	20	5	15	20	15	5	20	50
5CE7-30	Industrial Training			75					50		125
5CS4-21	Computer Graphics & Multimedia Lab	15	5	20	5	15	20	15	5	20	50
5CS4-22	Compiler Design Lab	15	5	20	5	15	20	15	5	20	50
5CS4-23	Analysis of Algorithms Lab	15	5	20	5	15	20	15	5	20	50
5CS4-24	Advance Java Lab	15	5	20	5	15	20	15	5	20	50
5CS7-30	Industrial Training			75					50		125
5EC4-21	RF Simulation Lab	22	8	30	8	22	30	22	8	30	75
5EC4-22	Digital Signal Processing Lab	22	8	30	8	22	30	22	8	30	75
5EC4-23	Microwave Lab	15	5	20	5	15	20	15	5	20	50
5EC7-30	Industrial Training			75					50		125
5EE4-21	Power System - I Lab	15	5	20	5	15	20	15	5	20	50
5EE4-22	Control System Lab	15	5	20	5	15	20	15	5	20	50
5EE4-23	Microprocessor Lab	15	5	20	5	15	20	15	5	20	50
5EE4-24	System Programming Lab	15	5	20	5	15	20	15	5	20	50
5EE7-30	Industrial Training			75					50		125
5IT4-21	Computer Graphics & Multimedia Lab	15	5	20	5	15	20	15	5	20	50
5IT4-22	Compiler Design Lab	15	5	20	5	15	20	15	5	20	50
5IT4-23	Analysis of Algorithms Lab	15	5	20	5	15	20	15	5	20	50
5IT4-24	Advanced Java Lab	15	5	20	5	15	20	15	5	20	50
5IT7-30	Industrial Training			75					50		125
5ME3-21	Mechatronic Lab	15	5	20	5	15	20	15	5	20	50
5ME4-22	Heat Transfer lab	15	5	20	5	15	20	15	5	20	50
5ME4-23	Production Engineering Lab	15	5	20	5	15	20	15	5	20	50
5ME4-24	Machine Design Practice I	15	5	20	5	15	20	15	5	20	50
5ME7-30	Industrial Training			75					50		125
7CE4-21	Road Material Testing Lab	15	5	20	5	15	20	15	5	20	50
7CE4-22	Professional Practices & Field Engineering	15	5	20	5	15	20	15	5	20	50
7CE4-23	Soft Skills Lab	15	5	20	5	15	20	15	5	20	50
7CE4-24	Environmental Monitoring and Design Lab	15	5	20	5	15	20	15	5	20	50
7CE7-30	Practical Training			75					50		125
7CE7-40	Seminar			60					40		100
7CS4-21	Internet of Things Lab	30	10	40	10	30	40	30	10	40	100
7CS4-22	Cyber Security Lab	30	10	40	10	30	40	30	10	40	100
7CS7-30	Industrial Training			75					50		125
7CS7-40	Seminar			60					40		100
7EC4-21	VLSI Design Lab	30	10	40	10	30	40	30	10	40	100
7EC4-22	Advance communication lab (MATLAB	15	5	20	5	15	20	15	5	20	50
7EC4-23	Optical Communication Lab	15	5	20	5	15	20	15	5	20	50
7EC7-30	Industrial Training			75					50		125
7EC7-40	Seminar			60					40		100
7EE4-21	Embedded Systems Lab	30	10	40	10	30	40	30	10	40	100
7EE4-22	Advance control system lab	30	10	40	10	30	40	30	10	40	100
7EE7-30	Industrial Training			75					50		125
7EE7-40	Seminar			60					40		100
7IT4-21	Big Data Analytics Lab	30	10	40	10	30	40	30	10	40	100
7IT4-22	Cyber Security Lab	30	10	40	10	30	40	30	10	40	100
7IT7-30	Industrial Training			75					50		125
7IT7-40	Seminar			60					40		100
7ME4-21	FEA Lab	22	8	30	8	22	30	22	8	30	75
7ME4-22	Thermal Engineering Lab II	22	8	30	8	22	30	22	8	30	75
7ME4-23	Quality Control Lab	15	5	20	5	15	20	15	5	20	50
7ME7-30	Industrial Training *			75					50		125
7ME7-40	Seminar *			60					40		100

NOTE: - (1) In Attendance & Performance marks should be given on the basis of student overall performance in semester i. e. continuous evaluation.
(2) In Common Pool marks should be given by HOD on the basis of student Assignment,Non Syllabus Activity,Online Exam Exam,Application/Survey / Case Study based Learning, Pre-Placement Activity, Department Level Career Oriented Activities through out the semester.

9 Department Load Allocation

POORNIMA COLLEGE OF ENGINEERING, JAIPUR									
Department of Electrical Engineering									
Load Sheet of Session 2021-22(odd Semester)									
Sr. No.	Faculty Name	Subject(s)	Subject Code	Section	L	T	P	Load Per Week	Total Load
1	Dr. PRAVIN MACHHINDRA SONWANE	Restructured Power System	5EE5-11	A	3	0	0	3	3
2	Dr. BABITA JAIN	Seminar	7EE7-40	A2	0	0	2	2	2
3	DR. PANKAJ GAKHAR	Electrical Machine - I	3EE4-07	A	3	0	0	3	6
		Wind and Solar Energy system	7EE5-11	A,B	3	0	0	3	
4	Dr. GAURAV JAIN	Electromagnetic Field	3EE4-08	A	3	0	0	3	7
		Electrical Materials	5EE3-01	A	4	0	0	4	
5	Dr. MONIKA VARDIA	Electrical Machine Design	5EE4-05	A	3	0	0	3	6
		Power Generation Sources.	7EE6-60.2	A	3	0	0	3	
6	Dr. JYOTI SHUKLA	Control System	5EE4-03	A	3	0	0	3	6
		Electrical Machines and Drives	7EE6-60.1	A	3	0	0	3	
7	Dr. NEERAJ TIWARI	Industrial Training	5EE7-30	A	0	0	0	1	5
		Industrial Training	7EE7-30	A3,B3	0	0	4	4	
8	Dr. DEEPIKA CHAUHAN	Analog Electronics	3EE4-06	A	3	0	0	3	5
		Analog Electronics Lab	3EE4-21	A	0	0	2	2	
9	Dr. AMIT SHRIVASTAVA	Industrial Training	3EE4-30	A	0	0	2	2	5
		Seminar	7EE7-40	A1	0	0	2	2	
10	Dr. RANJEET KUMAR								2
		Seminar	7EE7-40	A3	0	0	2	2	
11	DR. HEMANT KAUSHIK	Industrial Training	7EE7-30	A1,B1	0	0	4	4	4
		Power Quality and FACTS	7EE5-12	A,B	3	0	0	3	
12	Ms. RICHA CHAUDHARY	Seminar	7EE7-40	B2	0	0	2	2	4
		Seminar	7EE7-40	B1	0	0	2	2	
13	MR. PANKAJ VERMA	Electrical Circuit Analysis	3EE4-05	A	3	0	0	3	6
		Microprocessor	5EE4-04	A	3	0	0	3	
14	Mr. BHAVANESH CHANDRA SHARMA	Industrial Training	7EE7-30	A2,B2	0	0	4	4	6
		Seminar	7EE7-40	B3	0	0	2	2	
15	Ms. SHEENA TAHIRA KHAN	Embeded System Lab	7EE4-21	A1	0	0	4	4	8
		Advanced Control System Lab	7EE4-22	A1	0	0	4	4	
16	MR. AJIT SINGH RAJAWAT	Power System - I	5EE4-02	A	3	0	0	3	3
		Power Generation Process	3EE3-04	A	2	0	0	2	
17	MR. MANISH SHARMA	Embeded System Lab	7EE4-21	A2	0	0	4	4	8
		Advanced Control System Lab	7EE4-22	A2	0	0	4	4	
18	MR. KAVEENDRA KUMAR	Embeded System Lab	7EE4-21	A3	0	0	4	4	8
		Advanced Control System Lab	7EE4-22	A3	0	0	4	4	
19	MR. ANMOL CHATURVEDI	Embeded System Lab	7EE4-21	B1	0	0	4	4	8
		Advanced Control System Lab	7EE4-22	B1	0	0	4	4	
20	MR. ARPIT KHANDELWAL	Embeded System Lab	7EE4-21	B2	0	0	4	4	8
		Advanced Control System Lab	7EE4-22	B2	0	0	4	4	
21	Ms. EKATA SHARMA								4
		Industrial Training	5EE7-30	A2	0	0	1	1	
22	MR. ABHISHEK SINGH	System Programming Lab	5EE4-24	A1	0	0	2	2	3
		Industrial Training	5EE7-30	A3	0	0	1	1	
23	Mr. ANAND SHARMA	Embeded System Lab	7EE4-21	B3	0	0	4	4	8
		Advanced Control System Lab	7EE4-22	B3	0	0	4	4	
24	Mr. ASHISH RAJ	Power System - I Lab	5EE4-21	A1	0	0	2	2	6
		Control System Lab	5EE4-22	A1	0	0	2	2	
		Microprocessor Lab	5EE4-23	A1	0	0	2	2	
25	Mr. KAPIL SHRIVASTAVA	Power System - I Lab	5EE4-21	A2	0	0	2	2	6
		Control System Lab	5EE4-22	A2	0	0	2	2	
		Microprocessor Lab	5EE4-23	A2	0	0	2	2	
26	Mr. SURENDRA SHARMA	Power System - I Lab	5EE4-21	A3	0	0	2	2	6
		Control System Lab	5EE4-22	A3	0	0	2	2	
		Microprocessor Lab	5EE4-23	A3	0	0	2	2	
27	Mr. JALDEEP KUMAR	System Programming Lab	5EE4-24	A2	0	0	2	2	6
		Electrical Circuit design Lab	3EE4-23	A	0	0	4	4	
28	MR. VIKAS KUMAR SHARMA	System Programming Lab	5EE4-24	A3	0	0	2	2	6
		Electrical Machine-I Lab	3EE4-22	A	0	0	4	4	
29	Dr. SHUCHI DAVE	Advance Mathematics	3EE2-01	3	0	0	3	3	3
30	Mr. PRINCE DAWAR	Technical Communication	3EE1-02	2	0	0	2	2	2

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

10 Time Table

10.1 Orientation Time Table

Poornima College of Engineering						
Department of Electrical Enginering						
Time Table for Orientation Program (ODD Semester, 2021-22)						
II Year						
Day/Time	**9:00 AM - 10:00 AM**	**10:00 AM - 11:00 AM**	**11:00 AM - 12:00 PM**	**12:00 - 12:30 PM**	**12:30 PM - 01:30 PM**	**01:30 PM - 02:30 PM**
Monday 20/09/2021	Tutor Interaction (Mr. Ajit Singh Rajawat)	NAAC/NBA Philosophy (Mr. Mayank Sharma)	Electrical Machine-I Overview (Dr. Pankaj Gakhar)	LUNCH	Electromagnetic Field overview (Dr. Gaurav Jain)	Analog Electronics overview (Mr. Mayank Sharma)
Tuesday 21/09/2021	HOD Interaction (Dr. Pravin Sonwane)	Research Paper Writing (Mr. Mayank Sharma)	Power Generation Process Overview (Mr. Ajit Singh Rajawat)		Industrial Training /Placement overview (Dr. Gaurav Jain)	Electrical Circuit Analysis overview (Mr. Mayank Sharma)
Wednesday 22/09/2021	Technical Communication overview (Mr. Kuldeep Sharma)	Electrical Machine -I Lab Overview (Dr. Pankaj Gakhar)	Project overview (Dr. Gaurav Jain)		Director Interaction (Dr. Mahesh Bundele)	AE & ECD Lab overview (Mr. Mayank Sharma)

Poornima College of Engineering						
Department of Electrical Enginering						
Time Table for Orientation Program (ODD Semester, 2021-22)						
III Year						
Day/Time	**9:00 AM - 10:00 AM**	**10:00 AM - 11:00 AM**	**11:00 AM - 12:00 PM**	**12:00 PM - 12:30 PM**	**12:30 PM - 01:30 PM**	**01:30 PM - 02:30 PM**
Monday 20/09/2021	HOD Interaction (Dr. Pravin Sonwane)	NSP (Dr. Gaurav Jain)	Electrical Materials overview (Dr. Gaurav Jain)	LUNCH	Power System-I overview (Mr. Ajit Singh Rajawat)	System programming Lab Overview (Dr. Pankaj Gakhar)
Tuesday 21/09/2021	Control System overview (Mr. Ajit Singh Rajawat)	Research Paper Writing (Mr. Mayank Sharma)	Restructered Power System overview (Dr. Praveen Sonwane)		Director Interaction (Dr. Mahesh Bundele)	Tutor Interaction (Dr. Gaurav Jain)
Wednesday 22/09/2021	Indutrial Training (Dr. Pravin Sonwane)	NAAC/NBA Philosophy (Mr. Mayank Sharma)	Microprocessor overview (Dr. Pravin Sonwane)		Placement (Dr. Pankaj Gakhar)	Electrical Machine Design overview (Mr. Ajit Singh Rajawat)

POORNIMA COLLEGE OF ENGINEERING						
DEPARTMENT OF ELECTRICAL ENGINEERING						
TIME TABLE FOR ORIENTATION PROGRAM (ODD SEMESTER, 2021-22)						
IV YEAR (A & B)						
Day & Date/Time	**9:00 AM - 10:00 AM**	**10:00 AM - 11:00 AM**	**11:00 AM - 12:00 PM**	**12:00 PM - 12:30 PM**	**1:00 PM - 02:00 PM**	**2:00 PM - 03:00 PM**
Monday, 06/09/2021	HOD Interaction (Dr. Pravin Sonwane)	NAAC/NBA Philosophy (Mr. Mayank Sharma)	Teacher's Day (All Students and Faculties)	LUNCH	Manthon 2021	
Tuesday, 07/09/2021	Project (Dr. Pankaj Gakhar)	Research Paper Writing (Mr. Mayank Sharma)	Director Interaction (Dr. Mahesh Bundele)		ES Lab Overview (Dr. Pravin Sonwane)	Wind & Solar Energy System Overview (Dr. Pankaj Gakhar)
Wednesday, 08/09/2021	Add-On/Skill Development Courses (Dr. Pravin Sonwane)	MOOC (Dr. Gaurav Jain)	Power Quality & Facts Overview Mr. Ajit Singh Rajawat		Subject Overview-Open Elective (Dr. Gaurav Jain/Dr. Pankaj Gakhar)	

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

10.2 Academic Time Table

Poornima College of Engineering

Department of Electrical Enginering

Time Table(III Sem / II Year), Wef:6.9.2021

Day/Time	9:00 AM - 10:00 AM	10:00 AM - 11:00 AM	11:00 AM - 12:00 PM	12:00 PM - 12:30 PM	12:30 PM - 01:30 PM	01:30 PM - 02:30 PM
Monday	ECA	TC	EMFT	LUNCH	EM-I	AE LAB
	Faculty -PV	Faculty - PD	Faculty -GJ		Faculty - PG	Faculty - DC
Tuesday	PGP	EMFT	ECA		EM-I	ECD LAB
	Faculty - ASR	Faculty -GJ	Faculty -PV		Faculty - PG	Faculty - JK
Wednesday	AE	AM	TC		ECA	EM-I LAB
	Faculty - DC	Faculty - SD	Faculty - PD		Faculty -PV	Faculty -VKS
Thursday	EM-I	AM	PGP		AE	NSP
	Faculty - PG	Faculty - SD	Faculty - ASR		Faculty - DC	Faculty - GJ
Friday	EMFT	PGP	AM		AE	IT
	Faculty -GJ	Faculty - ASR	Faculty - SD		Faculty - DC	Faculty - AS
Saturday	I3 Day				I3 Day	

Sub. Code	Subject Name	Name of Faculty	Lab. Code	Lab Name	Name of Faculty
3EE4-05	Electrical Circuit Analysis	MR. PANKAJ VERMA	3EE4-23	Electrical Circuit Design Lab	Mr. JALDEEP KUMAR
3EE4-07	Electrical Machine-I	DR. PANKAJ GAKHAR	3EE4-21	Analog Electronics Lab	Dr. DEEPIKA CHAUHAN
3EE2-01	Advanced Mathematics	DR. SHUCHI DAVE	3EE4-22	Electrical Machine -I Lab	MR. VIKAS KUMAR SHARMA
3EE4-08	Electromagnetic Field Theory	Dr. GAURAV JAIN	3EE4-30	Industrial Training/Project & Seminar	Dr. AMIT SHRIVASTAVA
3EE4-06	Analog Electronics	Dr. DEEPIKA CHAUHAN	3EENSP	NSP	Dr. GAURAV JAIN
3EE3-04	Power Generation Process	MR. AJIT SINGH RAJAWAT			
3EE1-02	Technical Communication	MR. PRINCE DAWAR			

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

Poornima College of Engineering

Department of Electrical Enginering

Time Table (V Sem / III year), Wef:6.9.2021

Day/Time	9:00 AM - 10:00 AM	10:00 AM - 11:00 AM	11:00 AM - 12:00 PM	12:00 PM - 12:30 PM	12:30 PM - 01:30 PM	01:30 PM - 02:30 PM
Monday	MP	EM	EMD	LUNCH	PS-I	SP Lab
	Faculty - PV	Faculty - GJ	Faculty - MV		Faculty - ASR	Faculty - AS/JK/VKS
Tuesday	NSP	MP	EM		RPS	CS Lab
	Faculty - ASR	Faculty - PV	Faculty - GJ		Faculty - PS	Faculty - AR/KS/SS
Wednesday	CS	MP	PS-I		EMD	IT
	Faculty - JS	Faculty - PV	Faculty - ASR		Faculty - MV	Faculty - GJ/ES/AS
Thursday	EMD	CS	RPS		MP	PS-I Lab
	Faculty - MV	Faculty - JS	Faculty - PS		Faculty - PV	Faculty - AR/KS/SS
Friday	PS-I	EMD	RPS		CS	MP Lab
	Faculty - ASR	Faculty - MV	Faculty - PS		Faculty - JS	Faculty - AR/KS/SS
Saturday	I3 Day				I3 Day	

Sub. Code	Subject Name	Name of Faculty	Lab. Code	Lab Name	Name of Faculty
5EE4-02	Power System-I	MR. AJIT SINGH RAJAWAT	5EE4-21	Power System-I Lab	Mr. ASHISH RAJ(A1),Mr. KAPIL SHRIVASTAVA(A2),Mr. SURENDRA SHARMA(A3)
5EE4-04	Microprocessor	MR. PANKAJ VERMA	5EE4-22	Control System Lab	Mr. ASHISH RAJ(A1),Mr. KAPIL SHRIVASTAVA(A2),Mr. SURENDRA SHARMA(A3)
5EE3-01	Electrical Materials	Dr. GAURAV JAIN	5EE4-23	Microprocessor Lab	Mr. ASHISH RAJ(A1),Mr. KAPIL SHRIVASTAVA(A2),Mr. SURENDRA SHARMA(A3)
5EE4-03	Control System	Dr. JYOTI SHUKLA	5EE4-24	System programming Lab	MR. ABHISHEK SINGH(A1),Mr. JALDEEP KUMAR(A2),MR. VIKAS KUMAR SHARMA(A3)
5EE4-05	Electrical Machine Design	Dr. MONIKA VARDIA	5EE7-30	Industrial Training/Project & Seminar	Dr. GAURAV JAIN(A1),Ms. EKATA SHARMA(A2),MR. ABHISHEK SINGH(A3)
5EE4-11	Restructured Power System	Dr. PRAVIN MACHHINDRA SONWANE	5EENSP	NSP	MR. AJIT SINGH RAJAWAT

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

Poornima College of Engineering

Department of Electrical Enginering

Time Table(VII Sem. Sec. A / IVYr), Wef:6.9.2021

Day/Time	9:00 AM - 10:00 AM	10:00 AM - 11:00 AM	11:00 AM - 12:00 PM	12:00 PM - 12:30 PM	12:30 PM - 01:30 PM	01:30 PM - 02:30 PM	02:30 PM - 03:30 PM	03:30 PM - 04:30 PM
Monday	Open Elective	PQAF/WSES	Seminar-A	LUNCH	ES Lab-A			
	Faculty - MV/JS	Faculty - HK/PG	Faculty - AS/BJ/RK		Faculty - SK/MS/KK			
Tuesday	Open Elective	PQAF/WSES	NSP		ACS Lab-A			
	Faculty - MV/JS	Faculty - HK/PG	Faculty - BJ		Faculty - SK/MS/KK			
Wednesday	Open Elective	ITPS-A	PQAF/WSES		Seminar-A	ITPS-A		
	Faculty - MV/JS	Faculty - HK/BCS/NT	Faculty - HK/PG		Faculty - AS/BJ/RK	Faculty - HK/BCS/NT		
Thursday	MOOC DAY				MOOC DAY			
Friday	Add-On/Skill development Course				Add-On/Skill development Course			
Saturday	I3 Day				I3 Day			

Sub. Code	Subject Name	Name of Faculty	Abb.	Lab. Code	Lab Name	Name of Faculty	Abb.
7EE5-11	Wind and solar Energy System	DR. PANKAJ GAKHAR	GS	7EE4-21	Embedded System Lab	Ms. SHEENA TAHIRA KHAN(A1),MR. MANISH SHARMA(A2),MR. KAVEENDRA KUMAR(A3)	SK/MS/KK
7EE5-12	Power Quality and FACTS	DR. HEMANT KAUSHIK	HK	7EE4-22	Advanced Control System Lab	Ms. SHEENA TAHIRA KHAN(A1),MR. MANISH SHARMA(A2),MR. KAVEENDRA KUMAR(A3)	SK/MS/KK
7EE6-60.1	Electrical Machines and Drives	Dr. JYOTI SHUKLA	JS	7EE7-30	Industrial Training	DR. HEMANT KAUSHIK(A1),Mr. BHAVANESH CHANDRA SHARMA(A2),Dr. NEERAJ TIWARI(A3)	HK/BCS/NT
7EE6-60.2	Power Generation Sources.	Dr. MONIKA VARDIA	MV	7EE7-40	Seminar	Dr. AMIT SHRIVASTAVA(A1),Dr. BABITA JAIN(A2),Dr. RANJEET KUMAR(A3)	AS/BJ/RK
				7NSPEE	NSP	Dr. BABITA JAIN	BJ

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

Poornima College of Engineering

Department of Electrical Enginering

Time Table(VII Sem. Sec. B / IVYr),Wef:6.9.2021

Day/Time	9:00 AM - 10:00 AM	10:00 AM - 11:00 AM	11:00 AM - 12:00 PM	12:00 PM - 12:30 PM	12:30 PM - 01:30 PM	01:30 PM - 02:30 PM	02:30 PM - 03:30 PM	03:30 PM - 04:30 PM
Monday	Open Elective	PQAF/WSES	NSP	LUNCH	Seminar-B	ITPS-B		
	Faculty - MV/JS	Faculty - HK/PG	Faculty - AS		Faculty - RC/BCS	Faculty - HK/BCS/NT		
Tuesday	Open Elective	PQAF/WSES	Seminar-B		ES Lab-B			
	Faculty - MV/JS	Faculty - HK/PG	Faculty - RC/BCS		Faculty - AC/AK/AS			
Wednesday	Open Elective	ITPS-B	PQAF/WSES		ACS Lab-B			
	Faculty - MV/JS	Faculty - HK/BCS/NT	Faculty - HK/PG		Faculty - AC/AK/AS			
Thursday	MOOC DAY				MOOC DAY			
Friday	Add-On/Skill development Course				Add-On/Skill development Course			
Saturday	I3 Day				I3 Day			

Sub. Code	Subject Name	Name of Faculty	Abb.	Lab. Code	Lab Name	Name of Faculty	Abb.
7EE5-11	Wind and solar Energy System	DR. PANKAJ GAKHAR	GS	7EE4-21	Embedded System Lab	MR. ANMOL CHATURVEDI(B1),MR. ARPIT KHANDELWAL(B2),Mr. ANAND SHARMA(B3)	AC/AK/AS
7EE5-12	Power Quality and FACTS	DR. HEMANT KAUSHIK	HK	7EE4-22	Advanced Control System Lab	MR. ANMOL CHATURVEDI(B1),MR. ARPIT KHANDELWAL(B2),Mr. ANAND SHARMA(B3)	AC/AK/AS
7EE6-60.1	Electrical Machines and Drives	Dr. JYOTI SHUKLA	JS	7EE7-30	Industrial Training	DR. HEMANT KAUSHIK(B1),Mr. BHAVANESH CHANDRA SHARMA(B2),Dr. NEERAJ TIWARI(B3)	HK/BCS/NT
7EE6-60.2	Power Generation Sources.	Dr. MONIKA VARDIA	MV	7EE7-40	Seminar	Ms. RICHA CHAUDHARY(B1 & B2),Mr. BHAVANESH CHANDRA SHARMA(B3)	RC/BCS
				7NSPEE	NSP	Dr. AMIT SHRIVASTAVA	AS

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

Poornima College of Engineering

Department of Electrical Enginering

Time Table(III Sem / II Year) wef-04.10.2021

Day/Time	9:00 AM - 10:00 AM	10:00 AM - 11:00 AM	11:00 AM - 12:00 PM	12:00 PM- 12:30 PM	12:30 PM - 1:30 PM	1:30 PM - 02:30 PM	02:30 PM - 03:30 PM
Monday	AE LAB		NSP	Lunch	EM-I LAB		
	Faculty - Dr. DEEPIKA CHAUHAN		Faculty - GJ		Faculty - MR. VIKAS KUMAR SHARMA		
Tuesday	AM(Tut.)	Industrial Training			ECD LAB		
	Faculty - SD	Faculty - Dr. AMIT SHRIVASTAVA			Faculty - Mr. JALDEEP KUMAR		
Wednesday	AE	EMFT	TC		ECA	PGP	ECA
	Faculty - DC	Faculty - GJ	Faculty - PD		Faculty - PV	Faculty - ASR	Faculty - PV
Thursday	EM-I	AM	PGP		EMFT	PGP	AE
	Faculty - PG	Faculty - SD	Faculty - ASR		Faculty - GJ	Faculty - ASR	Faculty - DC
Friday	EMFT	TC	AM		AE	EM-I	ECA
	Faculty - GJ	Faculty - PD	Faculty - SD		Faculty - DC	Faculty - PG	Faculty - PV
Saturday	I3 Day				I3 Day		

Sub. Code	Subject Name	Name of Faculty	Lab. Code	Lab Name	Name of Faculty
3EE4-05	Electrical Circuit Analysis	MR. PANKAJ VERMA	3EE4-23	Electrical Circuit Design Lab	Mr. JALDEEP KUMAR
3EE4-07	Electrical Machine-I	DR. PANKAJ GAKHAR	3EE4-21	Analog Electronics Lab	Dr. DEEPIKA CHAUHAN
3EE2-01	Advanced Mathematics	DR. SHUCHI DAVE	3EE4-22	Electrical Machine -I Lab	MR. VIKAS KUMAR SHARMA
3EE4-08	Electromagnetic Field Theory	Dr. GAURAV JAIN	3EE4-30	Industrial Training	Dr. AMIT SHRIVASTAVA
3EE4-06	Analog Electronics	Dr. DEEPIKA CHAUHAN	3EENSP	NSP	Dr. GAURAV JAIN
3EE3-04	Power Generation Process	MR. AJIT SINGH RAJAWAT			
3EE1-02	Technical Communication	MR. PRINCE DAWAR			

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

Poornima College of Engineering

Department of Electrical Enginering

Time Table (V Sem / III year) Wef. 04.10.2021

Day/Time	9:00 AM - 10:00 AM	10:00 AM - 11:00 AM	11:00 AM - 12:00 PM	12:00 PM-12:30 PM	12:30 PM - 1:30 PM	01:30 PM - 02:30 PM	02:30 PM - 03:30 PM
Monday	PS-I	MP	EMD		CS	RPS	EMD
	Faculty - ASR	Faculty - PV	Faculty - MV		Faculty - JS	Faculty - PS	Faculty - MV
Tuesday	PS-I	MP	EMD		CS	EM	RPS
	Faculty - ASR	Faculty - PV	Faculty - MV		Faculty - JS	Faculty - GJ	Faculty - PS
Wednesday	PS-I LAB,5EE4-21, AR,A1, AT-15		Industrial Training		PS-I LAB,5EE4-21, KS,A2, AT-15		NSP
	SP LAB, 5EE4-24, JK, A2, AT-20A		CT-05		MP LAB, 5EE4-23,SS,A3, AT-01		CT-17
	CS LAB, 5EE4-22,SS,A3, AT-20B		Faculty - GJ/ES/AS	LUNCH	SP LAB, 5EE4-24, AS, A1, AT-20A		Faculty - ASR
Thursday	MP LAB, 5EE4-23,AR,A1, AT-01		Industrial Training		CS LAB, 5EE4-22,AR,A1, AT-20B		NSP
	CS LAB, 5EE4-22,KS,A2, AT-20B		CT-05		PS-I LAB,5EE4-21, SS,A3, AT-15		CT-17
	SP LAB, 5EE4-24,VKS, A3, AT-20A		Faculty - GJ/ES/AS		MP LAB, 5EE4-23,KS,A2, AT-01		Faculty - ASR
Friday	PS-I	RPS	EM		EMD	MP	CS
	Faculty - ASR	Faculty - PS	Faculty - GJ		Faculty - MV	Faculty - PV	Faculty - JS
Saturday	I3 Day				I3 Day		

Sub. Code	Subject Name	Name of Faculty	Lab. Code	Lab Name	Name of Faculty
5EE4-02	Power System-I	MR. AJIT SINGH RAJAWAT	5EE4-21	Power System-I Lab	Mr. ASHISH RAJ(A1),Mr. KAPIL SHRIVASTAVA(A2),Mr. SURENDRA SHARMA(A3)
5EE4-04	Microprocessor	MR. PANKAJ VERMA	5EE4-22	Control System Lab	Mr. ASHISH RAJ(A1),Mr. KAPIL SHRIVASTAVA(A2),Mr. SURENDRA SHARMA(A3)
5EE3-01	Electrical Materials	Dr. GAURAV JAIN	5EE4-23	Microprocessor Lab	Mr. ASHISH RAJ(A1),Mr. KAPIL SHRIVASTAVA(A2),Mr. SURENDRA SHARMA(A3)
5EE4-03	Control System	Dr. JYOTI SHUKLA	5EE4-24	System programming Lab	MR. ABHISHEK SINGH(A1),Mr. JALDEEP KUMAR(A2),MR. VIKAS KUMAR SHARMA(A3)
5EE4-05	Electrical Machine Design	Dr. MONIKA VARDIA	5EE7-30	Industrial Training	Dr. GAURAV JAIN(A1),Ms. EKATA SHARMA(A2),MR. ABHISHEK SINGH(A3)
5EE4-11	Restructured Power System	Dr. PRAVIN MACHHINDRA SONWANE	5EENSP	NSP	MR. AJIT SINGH RAJAWAT

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

Poornima College of Engineering

Department of Electrical Enginering

Time Table (VII Sem. Sec. A / IVYr) Wef- 04.10.2021

Day/Time	9:00 AM - 10:00 AM	10:00 AM - 11:00 AM	11:00 AM - 12:00 PM	12:00 PM - 12:30 PM	1:30 PM - 2:30 PM	1:30 PM - 02:30 PM	02:30 PM - 03:30 PM
Monday	OE	PE		L U N C H			
	Faculty - MV/JS	Faculty - HK/PG					
Tuesday	OE	PE					
	Faculty - MV/JS	Faculty - HK/PG					
Wednesday	OE	PE					
	Faculty - MV/JS	Faculty - HK/PG					
Thursday							
Friday	ES Lab(A1)-Ms. SHEENA TAHIRA KHAN				Seminar(A1)-Dr. AMIT SHRIVASTAVA		
	ACS Lab(A2)-MR. MANISH SHARMA				ACS Lab(A3)-MR. KAVEENDRA KUMAR		
	Seminar(A3)-Dr. RANJEET KUMAR				Industrial Training(A2)-Mr. BHAVANESH CHANDRA SHARMA		
Saturday	ES Lab(A2)-MR. MANISH SHARMA				Industrial Training(A1)-DR. HEMANT KAUSHIK		
	Industrial Training(A3)-Dr. NEERAJ TIWARI				ES Lab(A3)-MR. KAVEENDRA KUMAR		
	ACS Lab(A1)-Ms. SHEENA TAHIRA KHAN				Seminar(A2)-Dr. BABITA JAIN		

Sub. Code	Subject Name	Name of Faculty	Abb.
7EE5-11	Wind and solar Energy System	DR.PANKAJ GAKHAR	PG
7EE5-12	Power Quality and FACTS	DR. HEMANT KAUSHIK	HK
7EE6-60.1	Electrical Machines and Drives	Dr. JYOTI SHUKLA	JS
7EE6-60.2	Power Generation Sources.	Dr. MONIKA VARDIA	MV
7EE4-21	Embedded System Lab	Ms. SHEENA TAHIRA KHAN(A1),MR. MANISH SHARMA(A2),MR. KAVEENDRA KUMAR(A3)	SK/MS/KS
7EE4-22	Advanced Control System Lab	Ms. SHEENA TAHIRA KHAN(A1),MR. MANISH SHARMA(A2),MR. KAVEENDRA KUMAR(A3)	SK/MS/KS
7EE7-30	Industrial Training	DR. HEMANT KAUSHIK(A1),Mr. BHAVANESH CHANDRA SHARMA(A2),Dr. NEERAJ TIWARI(A3)	HK/BCS/NT
7EE7-40	Seminar	Dr. AMIT SHRIVASTAVA(A1),Dr. BABITA JAIN(A2),Dr. RANJEET KUMAR(A3)	AS/BJ/RK

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

Poornima College of Engineering

Department of Electrical Enginering

Time Table(VII Sem. Sec. B / IVYr) Wef- 04.10.2021

Day/Time	9:00 AM - 10:00 AM	10:00 AM - 11:00 AM	11:00 AM - 12:00 PM	12:00 PM - 12:30 PM	12:30 PM - 01:30 PM	01:30 PM - 02:30 PM	02:30 PM - 03:30 PM
Monday	OE	PE		LUNCH			
	Faculty - MV/JS	Faculty - HK/PG					
Tuesday	OE	PE					
	Faculty - MV/JS	Faculty - HK/PG					
Wednesday	OE	PE					
	Faculty - MV/JS	Faculty - HK/PG					
Thursday							
Friday	ES Lab(B1)-MR. ANMOL CHATURVEDI				Seminar(B1)-Ms. RICHA CHAUDHARY		
	ACS Lab(B2)-MR. ARPIT KHANDELWAL				ACS Lab(B3)-Mr. ANAND SHARMA		
	Seminar(B3)-Mr. BHAVANESH CHANDRA SHARMA				Industrial Training(B2)-Mr. BHAVANESH CHANDRA SHARMA		
Saturday	ES Lab(B2)-MR. ARPIT KHANDELWAL				Industrial Training(B1)-DR. HEMANT KAUSHIK		
	Industrial Training(B3)-Dr. NEERAJ TIWARI				ES Lab(B3)-Mr. ANAND SHARMA		
	ACS Lab(B1)-MR. ANMOL CHATURVEDI				Seminar(B2)-Ms. RICHA CHAUDHARY		

Sub. Code	Subject Name	Name of Faculty	Abb.
7EE5-11	Wind and solar Energy System	Dr. Pankaj Gakhar	GS
7EE5-12	Power Quality and FACTS	Dr. Pravin M. Sanwane	PS
7EE6-60.1	Electrical Machines and Drives	Dr. JYOTI SHUKLA	JS
7EE6-60.2	Power Generation Sources.	Dr. MONIKA VARDIA	MV
7EE4-21	Embedded System Lab	MR. ANMOL CHATURVEDI(B1),MR. ARPIT KHANDELWAL(B2),Mr. ANAND SHARMA(B3)	AC/AK/AS
7EE4-22	Advanced Control System Lab	MR. ANMOL CHATURVEDI(B1),MR. ARPIT KHANDELWAL(B2),Mr. ANAND SHARMA(B3)	AC/AK/AS
7EE7-30	Industrial Training	DR. HEMANT KAUSHIK(B1),Mr. BHAVANESH CHANDRA SHARMA(B2),Dr. NEERAJ TIWARI(B3)	HK/BCS/NT
7EE7-40	Seminar	Ms. RICHA CHAUDHARY(B1 & B2),Mr. BHAVANESH CHANDRA SHARMA(B3)	RC/BCS

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

Poornima College of Engineering

Department of Electrical Enginering

Time Table(III Sem/IIYr)(17) Location: CT-23,Wef:8.11.2021

Day/Time	8:30-9:30	9:30-10:30	10:30-11:30	11:30-12:10	12:10-1:10	1:10-2:10	2:10-3:10	3:10-4:00
Monday	EM/C,3EE4-07,PKG	AM,3EE4-01,SD	TC,3EE1-02, PD	L U N C H	EMFT, 3EE4-08,GJ	AE,3EE4-06,DC	AM,3EE4-01,SD (Tut.)	NSP Guide Interaction
Tuesday	EM/C,3EE4-07,PKG	AE LAB, 3EE4-21, DC, AT-02			ECA,3EE4-05,PV	EMFT, 3EE4-08,GJ	AM,3EE4-01,SD	Add on-2
Wednesday	EM/C,3EE4-07,PKG	AE,3EE4-06,DC	TC,3EE1-02, PD		ECA,3EE4-05,PV	AM,3EE4-01,SD	AE,3EE4-06,DC	Industrial training Guide interaction
Thursday	PGP,3EE3-04,ASR	ECA,3EE4-05,PV	EMFT, 3EE4-08,GJ		AM,3EE4-01,SD	ITPS,3EE4-30, AS	PGP,3EE3-04,ASR	Add on-2
Friday	EMC-I LAB, 3EE4-22, VKS, AT-08				ECD LAB, 3EE4-23, JK, AT-20A		PGP,3EE3-04,ASR	Add on-2
Saturday	I3 Day				I3 Day			

Sub. Code	Subject Name	Name of Faculty	Abb.	Lab. Code	Lab Name	Name of Faculty	Abb.
3EE4-05	Electrical Circuit Analysis	Mr. Pankaj Verma	PV	3EE4-23	Electrical Circuit Design Lab	Mr. JALDEEP KUMAR	JK
3EE4-07	Electrical Machine-I	Dr. Pankaj Gakhar	PKG	3EE4-21	Analog Electronics Lab	Dr. DEEPIKA CHAUHAN	DC
3EE2-01	Advanced Mathematics	Dr. Shuchi Dave	SD	3EE4-22	Electrical Machine -I Lab	MR. VIKAS KUMAR SHARMA	VKS
3EE4-08	Electromagnetic Field	Dr. Gaurav Jain	GJ	3EE7-30	Industrial Training	Dr. AMIT SHRIVASTAVA	AS
3EE4-06	Analog Electronics	Dr. Deepika Chauhan	DC	3EENSP	NSP	Dr. GAURAV JAIN	GJ
3EE3-04	Power Generation Process	Mr. Ajit Singh Rajawat	ASR				
3EE1-02	Technical Communication	Mr. Prince Dawar	PD				

Time Table Co-ordinator
Dr. Pankaj Gakhar

Tutor
Mr. Ajit Singh Rajawat

HOD(EE)
Dr. Pravin Sonwane

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

Poornima College of Engineering

Department of Electrical Enginering

Time Table(V Sem. Sec. A / IIIYr)(58) Location: CT-13,Wef:8.11.2021

Day/Time	8:30-9:30	9:30-10:30	10:30-11:30	11:30-12:10	12:10-1:10	1:10-2:10	2:10-3:10	3:10-4:00
Monday	PS-I,5EE4-02, ASR	EMD, 5EE4-05, MV	RPS, 5EE5-11, PS	LUNCH	MP, 5EE4-04,PV	EM, 5EE3-01, GJ	RPS, 5EE5-11, PS	NSP, 5EENSP, GJ
Tuesday	PS-I,5EE4-02, ASR	MP, 5EE4-04,PV	EMD, 5EE4-05, MV		CS,5EE4-03, JS	EMD, 5EE4-05, MV	NSP, 5EENSP, ASR	Add on-2
Wednesday	PS-I,5EE4-02, ASR	CS,5EE4-03, JS	EMD, 5EE4-05, MV		CS,5EE4-03, JS	ITPS, 5EE7-30, GJ,A1, CT-13 MP LAB, 5EE4-23,KS,A2, AT-01 PS-I LAB,5EE4-21, SS,A3, AT-15		Industrial training Guide interaction
Thursday	EM, 5EE3-01, GJ	PS-I LAB,5EE4-21, AR,A1, AT-15 SP LAB, 5EE4-24, JK, A2, AT-20A CS LAB, 5EE4-22,SS,A3, AT-20B			ITPS, 5EE7-30, ES,A2 MP LAB, 5EE4-23,SS,A3, AT-01 SP LAB, 5EE4-24, AS, A1, AT-20A		MP, 5EE4-04,PV	Add on-2
Friday	MP, 5EE4-04,PV	MP LAB, 5EE4-23,AR,A1, AT-01 CS LAB, 5EE4-22,KS,A2, AT-20B SP LAB, 5EE4-24, VKS, A3, AT-20A			CS LAB, 5EE4-22,AR,A1, AT-20B PS-I LAB,5EE4-21, KS,A2, AT-15 ITPS,AS,5EE7-30, A3		RPS, 5EE5-11, PS	Add on-2
Saturday	I3 Day				I3 Day			

Sub. Code	Subject Name	Name of Faculty	Abb.	Lab. Code	Lab Name	Name of Faculty
5EE4-02	Power System-I	MR. AJIT SINGH RAJAWAT	ASR	5EE4-21	Power System-I Lab	Mr. ASHISH RAJ(A1),Mr. KAPIL SHRIVASTAVA(A2),Mr. SURENDRA SHARMA(A3)
5EE4-04	Microprocessor	MR. PANKAJ VERMA	PV	5EE4-22	Control System Lab	Mr. ASHISH RAJ(A1),Mr. KAPIL SHRIVASTAVA(A2),Mr. SURENDRA SHARMA(A3)
5EE3-01	Electrical Materials	Dr. GAURAV JAIN	GJ	5EE4-23	Microprocessor Lab	Mr. ASHISH RAJ(A1),Mr. KAPIL SHRIVASTAVA(A2),Mr. SURENDRA SHARMA(A3)
5EE4-03	Control System	Dr. JYOTI SHUKLA	JS	5EE4-24	System programming Lab	MR. ABHISHEK SINGH(A1),Mr. JALDEEP KUMAR(A2),MR. VIKAS KUMAR SHARMA(A3)
5EE4-05	Electrical Machine Design	Dr. MONIKA VARDIA	MV	5EE7-30	Industrial Training	Dr. GAURAV JAIN(A1),Ms. EKATA SHARMA(A2),MR. ABHISHEK SINGH(A3)
5EE5-11	Restructured Power System	Dr. PRAVIN MACHHINDRA SONWANE	PMS	5EENSP	NSP	MR. AJIT SINGH RAJAWAT

Time Table Co-ordinator
Dr. Pankaj Gakhar

Tutor
Dr. Gaurav Jain

HOD(EE)
Dr. Pravin Sonwane

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

Poornima College of Engineering

Department of Electrical Enginering

Time Table(VII Sem. Sec. A / IVYr)(41) Location: CT-03,Wef:8.11.2021

Day/Time	8:30-9:30	9:30-10:30	10:30-11:30	11:30-12:10	12:10-1:10	1:10-2:10	2:10-3:10	3:10-4:00
Monday	O.E.	ES Lab(A1)-Ms. SHEENA TAHIRA KHAN		L U N C H	PE	Seminar(A1)-Dr. AMIT SHRIVASTAVA		Add-on-1
		ACS Lab(A2)-MR. MANISH SHARMA				ACS Lab(A3)-MR. KAVEENDRA KUMAR		
		Seminar(A3)-Dr. RANJEET KUMAR				Industrial Training(A2)-Mr. BHAVANESH CHANDRA SHARMA		
Tuesday	O.E.	ES Lab(A2)-MR. MANISH SHARMA			PE	Industrial Training(A1)-DR. HEMANT KAUSHIK		Add-on-1
		Industrial Training(A3)-Dr. NEERAJ TIWARI				ES Lab(A3)-MR. KAVEENDRA KUMAR		
		ACS Lab(A1)-Ms. SHEENA TAHIRA KHAN				Seminar(A2)-Dr. BABITA JAIN		
Wednesday	O.E.	ES Lab(A1)-Ms. SHEENA TAHIRA KHAN			PE	ACS Lab(A1)-Ms. SHEENA TAHIRA KHAN		Add-on-1
		ACS Lab(A2)-MR. MANISH SHARMA				ES Lab(A2)-MR. MANISH SHARMA		
		ES Lab(A3)-MR. KAVEENDRA KUMAR				ACS Lab(A3)-MR. KAVEENDRA KUMAR		
Thursday								
Friday								
Saturday								

Sub. Code	Subject Name	Name of Faculty	Abb.	Lab. Code	Lab Name	Name of Faculty	Abb.
7EE5-11	Wind and solar Energy System	DR. PANKAJ GAKHAR	GS	7EE4-21	Embedded System Lab	Ms. SHEENA TAHIRA KHAN(A1),MR. MANISH SHARMA(A2),MR. KAVEENDRA KUMAR(A3)	SK/MS/KK
7EE5-12	Power Quality and FACTS	DR. HEMANT KAUSHIK	AS	7EE4-22	Advanced Control System Lab	Ms. SHEENA TAHIRA KHAN(A1),MR. MANISH SHARMA(A2),MR. KAVEENDRA KUMAR(A3)	SK/MS/KK
7EE6-60.1	Electrical Machines and Drives	Dr. JYOTI SHUKLA	JS	7EE7-30	Industrial Training	DR. HEMANT KAUSHIK(A1),Mr. BHAVANESH CHANDRA SHARMA(A2),Dr. NEERAJ TIWARI(A3)	HK/BCS/NT
7EE6-60.2	Power Generation Sources.	Dr. MONIKA VARDIA	MV	7EE7-40	Seminar	Dr. AMIT SHRIVASTAVA(A1),Dr. BABITA JAIN(A2),Dr. RANJEET KUMAR(A3)	AS/BJ/RK
				7NSPEE	NSP	Dr. BABITA JAIN	BJ

Time Table Co-ordinator
Dr. Pankaj Gakhar

Tutor
Mr. Pankaj Verma

HOD(EE)
Dr. Pravin Sonwane

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

Poornima College of Engineering

Department of Electrical Enginering

Time Table(VII Sem. Sec. B / IVYr)(38) Loaction:CT-04,Wef:8.11.2021

Day/Time	8:30-9:30	9:30-10:30	10:30-11:30	11:30-12:10	12:10-1:10	1:10-2:10	2:10-3:10	3:10-4:00
Monday	O.E.	ES Lab(B1)-MR. ANMOL CHATURVEDI ACS Lab(B2)-MR. ARPIT KHANDELWAL Seminar(B3)-Mr. BHAVANESH CHANDRA SHARMA		L U N C H	PE	Seminar(B1)-Ms. RICHA CHAUDHARY ACS Lab(B3)-Mr. ANAND SHARMA Industrial Training(B2)-Mr. BHAVANESH CHANDRA SHARMA		Add-on-1
Tuesday	O.E.	ES Lab(B2)-MR. ARPIT KHANDELWAL Industrial Training(B3)-Dr. NEERAJ TIWARI ACS Lab(B1)-MR. ANMOL CHATURVEDI			PE	Industrial Training(B1)-DR. HEMANT KAUSHIK ES Lab(B3)-Mr. ANAND SHARMA Seminar(B2)-Ms. RICHA CHAUDHARY		Add-on-1
Wednesday	O.E.	ES Lab(B1)-MR. ANMOL CHATURVEDI ACS Lab(B2)-MR. ARPIT KHANDELWAL ES Lab(B3)-Mr. ANAND SHARMA			PE	ACS Lab(B1)-MR. ANMOL CHATURVEDI ES Lab(B2)-MR. ARPIT KHANDELWAL ACS Lab(B3)-Mr. ANAND SHARMA		Add-on-1
Thursday								
Friday								
Saturday								

Sub. Code	Subject Name	Name of Faculty	Abb.	Lab. Code	Lab Name	Name of Faculty	Abb.
7EE5-11	Wind and solar Energy System	DR. PANKAJ GAKHAR	GS	7EE4-21	Embedded System Lab	MR. ANMOL CHATURVEDI(B1),MR. ARPIT KHANDELWAL(B2),Mr. ANAND SHARMA(B3)	AC/AK/AS
7EE5-12	Power Quality and FACTS	DR. HEMANT KAUSHIK	AS	7EE4-22	Advanced Control System Lab	MR. ANMOL CHATURVEDI(B1),MR. ARPIT KHANDELWAL(B2),Mr. ANAND SHARMA(B3)	AC/AK/AS
7EE6-60.1	Electrical Machines and Drives	Dr. JYOTI SHUKLA	JS	7EE7-30	Industrial Training	DR. HEMANT KAUSHIK(B1),Mr. BHAVANESH CHANDRA SHARMA(B2),Dr. NEERAJ TIWARI(B3)	HK/BCS/NT
7EE6-60.2	Power Generation Sources.	Dr. MONIKA VARDIA	MV	7EE7-40	Seminar	Ms. RICHA CHAUDHARY(B1 & B2),Mr. BHAVANESH CHANDRA SHARMA(B3)	RC/BCS
				7NSPEE	NSP	Dr. AMIT SHRIVASTAVA	AS

Time Table Co-ordinator
Dr. Pankaj Gakhar

Tutor
Dr. Pankaj Gakhar

HOD(EE)
Dr. Pravin Sonune

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

11 Course Outcome Attainment Process:

11.1 Course Outcome Attainment Process

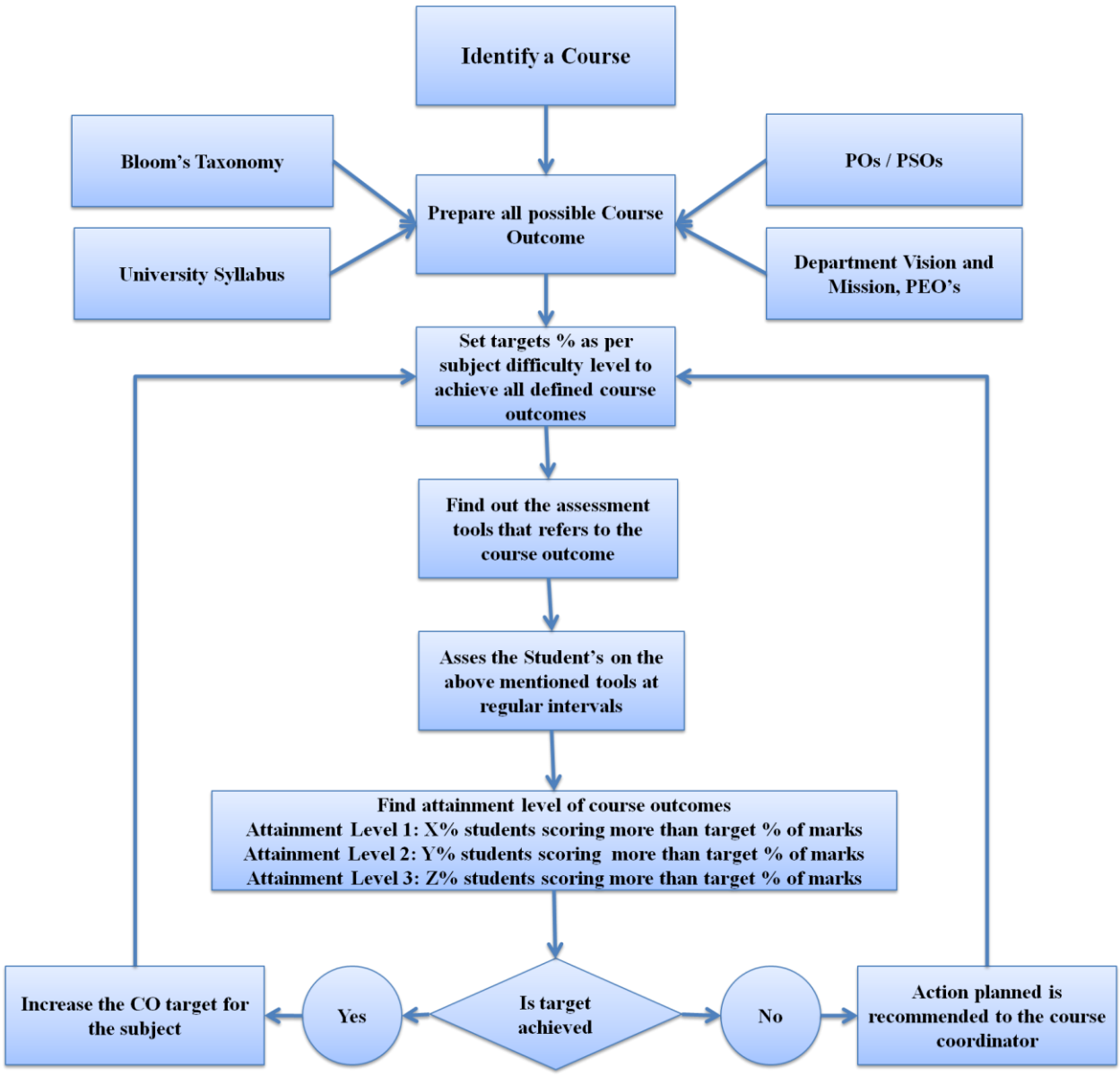


Figure. Course Outcome Attainment Process

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

11.2 List of CO & CO mapping with PO

Department of Electrical Engineering																	
Curriculum Mapping with PO-PSO																	
S.No.	**Code**	**Course Name**	**COs**	**Course Outcomes**	**PO:1**	**PO:2**	**PO:3**	**PO:4**	**PO:5**	**PO:6**	**PO:7**	**PO:8**	**PO:9**	**PO:10**	**PO:11**	**PO:12**	**PSO:1**	**PSO:2**	**PSO:3**
1	3EE2-01	Advance Mathematics	CO 1	Explain the Laplace transform, Fourier transform ,Z transform ,Numerical methods to find unknown values with help of known values , Roots finding techniques, solution of differential equations like ordinary differential equation, Partial differential equation & simultaneous differential equation.	3	3											2	1	
			CO 2	Apply the appropriate technology, and Compare the viability of different approaches to the numerical solution of problems	3	3											2	1	
			CO 3	Analyze the Fundamentals of the Fourier, Laplace, and Z-Transforms These systems can be carried out in terms of either a time domain or a transform domain formulation	3	2											2	1	
			CO 4	Evaluate complex contour integrals directly and by the fundamental theorem, apply the Cauchy integral theorem in its various versions	3	3											2	1	
			CO 5	Design of electrical circuits such as filters and networks, and is ideally suited for the analysis of transient response phenomena Similarly the z-transform is an indispensable tool for the design and analysis of digital filters, especially infinite impulse response (IIR) filters, Spatial filter, Adaptive filter, Inverse and Wiener filter for specific application.	3	2											2	1	
2	3EE1-02	Technical Communication	CO 1	Discuss and understand the process of technical communication in terms of LSRW.					2			2		3				1	
			CO 2	Use of Materials/Texts along with the understanding to prepare technical documents.					3			3		3				2	
			CO 3	Write and prepare various professional corresponding documents along with the knowledge of basics of grammar					3			3		3				2	
			CO 4	Restate and outline the basic concepts of Technical Reports, articles and their formats.					3			3		3				2	

3	3EE3-04	Power Generation Process	CO 1	explain the electricity generation based on conventional and non conventional energy sources and also their impact on environment.	3	2				1	3						2	1	
			CO 2	analyze different load curves, load and demand factors and methods of power factor improvement.	3	2				2	3						2	1	
			CO 3	differentiate types of tariffs in electrical engineering in real time situations.	3	3	3	2	2								2	2	1
			CO 4	compare different conventional power plants along with its selection and location	3	2											2	1	
			CO 5	investigate the power plant economics and evaluate most economic power factor at various conditions	3	3	3										2	1	1
4	3EE4-05	Electrical circuit analysis	CO 1	explain the selection of proper network reduction techniques, circuital laws and theorems in magnetic/electric circuit solution.	3	1											1		
			CO 2	analyze circuits by their standard electrical and non electrical parameters to identify their characteristics.	3	3											2	1	
			CO 3	develop strategies for time and frequency domain analysis for R-L, R-C, RLC circuits to evaluate performance characteristics of electrical networks.	3	3	3	2	2								2	2	1
			CO 4	estimate and synthesize parameters for attenuators and filters.	2	3											2	1	
5	3EE4-06	Analog Electronics	CO 1	explain and apply concepts of I-V characteristics of diodes, their applications and use as BJT circuits.	3	2											2	1	
			CO 2	analyze proportional relationship between signal and voltage or current that reprints a signal in diodes, BJT circuits, MOSFET circuits, differential amplifier and Op-AMPS and their use in linear and Nonlinear applications.	3	2	2										2	1	1
			CO 3	evaluate and apply the function of basic components in linear and nonlinear circuits of diodes, BJT, MOSFET, OP-AMPS .	3	2	2	3	2								2	2	1
			CO 4	realize and design various switching and amplifying circuits by using BJT, FET, Diode and IC-741C	3	2	3	3	2								2	2	1
6	3EE4-07	Electrical Machine-I	CO 1	explain basic principles and laws pertaining to the magnetic circuits of DC machines and Transformers.	3	2											2	1	
			CO 2	demonstrate the construction, working principles and different aspects of DC machines and Transformers.	3	2	1										2	1	
			CO 3	analyze the control practices and characteristics of DC Machines and Transformers.	3	3											2	1	

			CO 4	investigate the performance, different types of connections and testing of various types of DC machines and Transformers under different loading conditions.	3	3	2	2									2	1	1
			CO 5	evaluate scope of applicability of DC machines and Transformers in real-life multidisciplinary usages.	3	3	2										2	1	1
7	3EE4-08	Electromagnetic field	CO 1	explain the laws and theorems of static electric, static magnetic and time varying fields.	3	2											2	1	
			CO 2	apply the Vector Calculus, Laplace, Poisson and Maxwell's equations in search of a solution.	3	2	1										2	1	
			CO 3	investigate the behaviour of dielectric and conductive material in electromagnetic fields by using appropriate boundary conditions.	3	3	2	2									2	1	1
			CO 4	calculate capacitance, inductance, mutual inductance, electric potential, electric field intensity, electric flux density, magnetic flux density and magnetic forces to find a solution to a real world problem.	3	2	1										2	1	
8	3EE4-21	Analog Electronics Lab	CO 1	describe characteristics of BJT amplifier, Push-Pull amplifier, FET and UJT.	3							2	2	2	2	2	1		1
			CO 2	measure variation of output power, distortion in load, ripple factor, line and load regulation in given analog circuits.	3	2						2	2	3	2	2	2	1	1
			CO 3	apply the knowledge to compare and use wein bridge oscillator and phase shift oscillator.	3	3						3	2	3	3	1	2	2	1
			CO 4	investigate and observe the effect of variation in R & C oscillator frequency.	3	3	1	3				3	2	2	3	2	2	2	2
9	3EE4-22	Electrical Machine-I Lab	CO 1	demonstrate the understanding of dc machines and transformers on latest tool related to subject	2					2		3		2	2	1	1		1
			CO 2	explain the construction and working of different dc machines, transformers and their selection based on the application.	2	3				2		3		2	2	1	2	2	1
			CO 3	Perform various test on transformer and dc machines	2	3				1	2	3	3	2	2	2	2	2	1
			CO 4	analyze parallel operation of DC Generators, single phase and three phase transformers	3	3				3	3	3	3	3	2	3	3	2	2
			CO 5	evaluate performance and efficiency of DC machines and transformers	3	3	2	2		2		3	3	3	2	3	3	2	2
10	3EE4-23		CO 1	describe the datasheet reading, soldering-de-soldering process, tools and sensors used in circuit design.	1							3		2	2	2			1

		Electrical circuit Design Lab	CO 2	simulate bridge rectifier circuit , regulated power supply , multivibrator circuit using IC 555 and BJT separately in addition to buck, boost, buck-boost circuit	3	2						3	3	2	3	2	2	1	1
			CO 3	design and develop hardware with thermister for temperature control and 6/12 v dc power supply for dc motor speed control.	3	3	3		2	2		3	3	3	2	3	3	2	2
			CO 4	construct and demonstrate frequency divider circuit and battery voltage level indicator	3	3	2	2	2	3		2	3	3	3	3	3	2	2
11	3EE7-30	Industrial Training	CO 1	select appropriate industry for his/her training.				2		3	3	3	2	3	3	3	1	1	2
			CO 2	learn industrial managerial structure and manufacturing process.				3		3	3	3	3	3	3	3	1	1	2
			CO 3	identify real time problem in selected industry for his internship or project if any.				3		3	3	3	2	3	3	3	1	1	2
			CO 4	draft the training report on industrial training and learning inside the industry premises.				3		3	3	3	2	3	3	2	1	1	2
			CO 5	enhance their communication skills and confidence level through presentation.				2		3	3	3	2	3	3	3	1	1	2
	SEM III Target				**2.85**	**2.51**	**2.06**	**2.42**	**2.3**	**2.35**	**2.88**	**2.81**	**2.46**	**2.68**	**2.5**	**2.27**	**1.90**	**1.33**	**1.37**
1	5EE3-01	Electrical Materials	CO 1	explain electrical properties, characteristics of various materials, magnetic properties and superconductivity along with conductivity of metals and semiconductors materials.	3	1											1		
			CO 2	analyze the physics behind the electrical materials.	3	3											2	1	
			CO 3	evaluate electrical materials science essential in different industries.	3	3	3			2							3	1	1
			CO 4	apply electric and magnetic properties of various materials.	3	2				2							2	1	
2	5EE4-02	Power System - I	CO 1	explain general structure of power transmission and distribution with consideration of different faults and their protection methods.	3	2											2	1	
			CO 2	solve problems of parameter measurements, fault calculations and inductance & capacitance of transmission lines.	3	3	1										2	1	
			CO 3	analyze the mechanical and electrical design aspects of the AC & DC transmission systems	3	3	2										2	1	1

			CO 4	implement renewable energy sources and distributed generation with consideration of the protection system in real time projects.	3	2	1	2	3	2							2	2	
3	5EE4-03	Control System	CO 1	explain the fundamentals of open and closed loop control systems along with applications.	3	2											2	1	
			CO 2	solve analytical and design problems in time and frequency domain.	3	3											2	1	
			CO 3	examine the stability using Routh-Hurwitz criteria, Root-Locus, Nyquist stability criteria, Bode plot, polar plot	3	3	3										2	1	1
			CO 4	analyze the response and state equation for stabilizing the analog and digital control systems.	3	3											2	1	
			CO 5	design the stable closed loop control systems using different stability condition.	3	3											2	1	
4	5EE4-04	Microprocessor	CO 1	explain the general architecture, organization, instruction sets and operations of 8051 microcontroller along with memory and peripheral interfacing.	3	2	3										2	1	1
			CO 2	code and debug assembly language programs for applications including 8051 micro-controller, I/O and other peripheral devices	3	3	2		3								2	2	1
			CO 3	develop interfaces of ADC, DAC, counters, timers and general purpose I/O with 8051 micro-controller.	3	2	3	2	3								2	2	1
			CO 4	design real time applications for peripheral interfacing using various communication interfaces.	3	2	3		3								2	2	1
5	5EE4-05	Electrical Machine Design	CO 1	explain the basic principles of design and magnetic circuit calculation of electrical machines.	3	3											2	1	
			CO 2	Analyze the physical dimensions of different parts of the transformer and synchronous generator with respect to the rating.	3	3	3	1	3								2	3	1
			CO 3	examine the computer aided design of electrical machines along with its flow charts.	3	3	3	2	3								2	3	1
			CO 4	Apply optimization in design of different static and rotating machines.	3	3	2	3	2								2	2	1
6	5EE5-11	Restructured Power System	CO 1	explain the need of restructuring of power system as well as technological and economic reforms required in regulated monopoly system to implement the same.	3	2											2	1	
			CO 2	analyze and identify issues of transmission congestion, ancillary services management and market design	3	3	2										2	1	1

				that can be faced while restructuring a power system.															
			CO 3	compare methods of congestion management, market models and pricing schemes and identify the best suitable solution for its problem.	3	1	3	2							2		1	1	1
			CO 4	create a restructured model for any existing power system in transforming various activities of a power system as well as electricity market offering social welfare and improved efficiency of power system.	2	2	2	3	1								1	2	1
7	5EE4-21	Power System - I Lab	CO 1	discuss the basic schemes of hydro, thermal, nuclear and gas power plants.	3									3			1		
			CO 2	compute the feeders, distributors and EHV transmission line parameters.	3	2						3	3	2	2	2	2	1	1
			CO 3	apply probability tool to find load forecasting for short term, medium term and long term planning.	3	2				3		3	3	2	1	2	3	1	1
			CO 4	evaluate dielectric strength of electrical power equipments, transformer oil and flash over voltage of insulators.	3	3			2	3		3	3	3	2	3	3	2	2
			CO 5	differentiate the types of substations, substation equipments and filtration and Treatment of transformer oil.	3	1	1	2	3			3	3	3	2	3	1	2	2
8	5EE4-22	Control System Lab	CO 1	analyze the output response for different control inputs.	3	2			3			3	3	2	2	3	2	2	1
			CO 2	design the 1st order and 2nd order circuits and observe its response with various types of input	2	2			3			3	3	2	2		1	2	1
			CO 3	identify the frequency response of various compensating networks.	1	2			3			3	3	2	1	2	1	2	1
			CO 4	inspect the use of optimization algorithm for finding parameters of controller.	2	3	1	1	3			3	3	3	3	3	2	3	2
			CO 5	examine the stability of control system using Bode plots.	1	2	1	1	3			3	3	3	2		1	2	1
9	5EE4-23	Microprocessor Lab	CO 1	List the functions, operations, memory structure and hardware units of 8085 microprocessor kit.	2							3	3	3	2	3	1		2
			CO 2	Develop programs to perform addition, subtraction, division, block transfer, searching, sorting, etc using assembly language.	2	2			2			3	3	2	3	2	1	2	1
			CO 3	Build and demonstrate assembly level programs for transferring data to specified output ports in serial and parallel fashion	2	2	2		2			3	3	2	3	3	1	2	2
			CO 4	Fabricate 8 bit LED/LCD interface to 8085 microprocessor kit using 8155 and 8255	2	2	2	2	3			3	3	3	2				2

			CO 5	Examine different waveforms using 8253 / 8254 programmable timer	2	2	2	2	3			3	3	3	3	3	1	3	2
10	5EE4-24	System Programming Lab	CO 1	understand features and importance of MATLAB in mathematical Programming environment.					3			2	2		2	2		1	1
			CO 2	write electrical and electronic problems in MATLAB	2				3			2	3	2	3	3	1	1	2
			CO 3	solve problems related to Electrical and Electronic circuit applications in simulation tool.	2	2			3			2	2	2	3	2	1	2	1
			CO 4	simulate basic electrical and electronics circuits .	2	2			3			2	3	3	2	3	1	2	2
			CO 5	articulate the importance of MATLAB in research by simulation work	2	2			3			3	2	3	3	2	1	2	1
11	5EE7-30	Industrial Training	CO 1	select appropriate industry for his/her training.				2				3	2	3	3	3		1	2
			CO 2	learn industrial managerial structure and manufacturing process.				3		2	1	3	3	3	3	3	1	1	2
			CO 3	identify real time problem in selected industry for his internship or project if any.				3		3	2	3	2	3	3	3	1	1	2
			CO 4	draft the training report on industrial training and learning inside the industry premises.				3			3	3	2	3	3	2		1	2
			CO 5	enhance their communication skills and confidence level through presentation.				2		3	3	3	2	3	3	3	1	1	2
	SEM V Target				**2.63**	**2.31**	**2.14**	**2.11**	**2.75**	**2.5**	**2.25**	**2.83**	**2.70**	**2.62**	**2.4**	**2.59**	**1.63**	**1.57**	**1.37**
1	7EE5-11	Wind and Solar Energy Systems.	CO 1	demonstrate wind and solar photovo;taic	3														2
			CO 2	apply different topologies of wind generator and solar thermal power generation	3	2	1												3
			CO 3	analyse and estimate solar energy availability as well as wind energy through appropriate methods.	3	3	2												3
			CO 4	resolve the complex engineering issues in so;ar and wind integration with grid.	3	2	2	2											3
	7EE4-12	Power Quality and Facts	CO 1	Understand and analyze compensated and uncompensated transmission line and compare the series and shunt compensation.	3													2	2
			CO 2	describe the FACTs equipment's with their working principles and their applications in electrical systems.	3	1											1	2	2

			CO 3	identify the power quality problems in distribution systems along with harmonics.	3	2												
			CO 4	mitigate the PQ problems with various Power Quality equipment's	3	3												
2	7EE6-60.1	Electrical Machines and Drives	CO 1	Understand the constructional details and principle of operation of rotating electrical machines	3	3	2											
			CO 2	Acquire knowledge about the working principle and various aspects of electric drives.	3	3	2	2	1	1	2							
			CO 3	To study and analyze the various control techniques for speed control on various electric drives .	3	3	2	2										
			CO 4	Develop design knowledge on how to design the speed control and current control loops of an electric drive	2	2	2	2	2									
3	7EE6-60.2	Power Generation Sources	CO 1	classify and describe various renewable energy sources.	2											1		
			CO 2	predict possible renewable energy sources.	3	1										2	1	1
			CO 3	illustrate the renewable energy sources.	3	2	1									2		
			CO 4	re-organize energy sources.	3	3	2	1								2	1	
			CO 5	prioritize all other renewable energy sources as needed by societal application.	3	1	1									1	1	
4	7EE4-21	Embedded Systems Lab	CO 1	develop arithmatic programs using microcontroller kit	2				3			3	3	2	1	3		
			CO 2	use ADC/DAC for import or export data from peripheral devices	2				3			3	3	2	1	3		
			CO 3	interface circuit using IO devices for external communication	2			2	3			3	3	2	1	3		
			CO 4	resolve issues in controller software programming	2			3	3			3	3	2	1	3		
5	7EE4-22	Advance control system lab	CO 1	Examine the control system using DC and AC servo motor.	3			3	3						3			
			CO 2	Identify the time response of rotary and linear servo system.	3			2	3						2			
			CO 3	Analyze the basic theory of DC motor in the control system.	2			3	3						3			
			CO 4	design and implementation of P, PI and PID Controllers for different control systems	3			3	2						3			

			CO 5	Inspect the use of controller for practical systems – pendulum and inverted pendulum system.	2			2	3						2				
6	7EE7-30	Industrial Training	CO 1	monitor and understand industry processes.	3	1	1	3		3	2	3	3	3	3	3			
			CO 2	demonstrate various industrial equipment.				2		3	3	2		3		3			
			CO 3	develop his/her report writing skill.				3	2			3		3		2			
			CO 4	enhance their communication skills and confidence level through presentation.				3	2			3		3		3			
7	7EE7-40	Seminar	CO 1	investigate various reported solution of engineering problems throughout the corner of society.						3	3	3			3	3			
			CO 2	argue and judge his/her findings in the selected area				2		3	3	3		3	3	3			
			CO 3	prepare a good professional document with his concluding remarks					2	3	3	3		3	3	3			
			CO 4	enhance their communication skills and confidence level through presentation.					2	3	3	3		3	3	3			
8	7EE8-00	Social Outreach, Discipline & Extra Curricular Activitie	CO 1	identify appropriate social activity for his/her knowledge enhancement in domain area.				1		3	3	3	3		2	3			
			CO 2	maintain discipline and decorum in all extracurricular activities						3	3	3	3		2	3			
			CO 3	find the thrust area for his/her internship and communicable.						3	3	3	3	2	2	3			2
			CO 4	conduct events such as clean India, blood donation camp etc.						3	3	3	3		2	3			
	SEM VII Target				**2.70**	**2.13**	**1.63**	**2.35**	**2.46**	**2.81**	**2.81**	**2.93**	**3**	**2.58**	**2.22**	**2.93**	**1.5**	**1.4**	**2.6**

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

12 Course File Sample

Outcome Based Process Implementation Guidelines for Faculty

12.1 Labelling your course file

- **Name of faculty:**
- **Class- SEM:**
- **Branch:**
- **Course Code:**
- **Course Name:**
- **Session:**

12.2 List of Documents:

1. **Vision & Mission Statements of the Institute**
2. **Vision & Mission Statements of the Department**
3. **List of PEO, PSO and PO of department**
4. **Personal Time Table**
5. **RTU Syllabus**
6. **Document as per point no. 1-4 in guidelines**
7. **Course Plan**
8. **Document as per point no 6-12 in guidelines**
9. **Document for CO Assessment Stage 1: As per point no 13, up to 13.2.5**
10. **Document for CO Assessment Stage 2: As per point no 13, up to 13.2.5, with comparison to previous**
11. **Document for CO Assessment Stage 3: As per point no 13, up to 13.2.5, with comparison to previous**
12. **Document for CO Attainment through RTU Component: Previous RTU Result: point no. 13.3 upto 13.3.2**
13. **Document for PO attainment through RTU Component: Previous RTU Result: point no. 13.4 upto 13.4.2**
14. **Document for Overall Attainment of PO through CO: As per point no 13.5**
15. **Document for last three years (Repeat process from 6-14 above): Comparative data should be included in course file**
16. **Lecture Notes**
17. **Copy of Assignments questions given from time to time**
18. **Copy of Tutorial Sheets given (if applicable)**
19. **RTU Question Papers with answer**
20. **Internal Assessment Question Papers with answer from time to time**
21. **Topics covered beyond syllabus- References**
22. **Details of any other activity and its assessment through rubric be included**
23. **Mapping department level/ focus activities with your COs**

13 Outcome Based Process Implementation Guidelines for Faculty

Course CO-PO, Preparation, Assessment Formats

Academic Session: 2021-2022 **Class:** **Semester:**

Name of the Faculty:

Subject: **Subject Code:**

This document is meant as guidelines for implementing Outcome based education system as a part of accreditation process.

1. **Vision & Mission of Department: Statement and Mapping with Institute Mission** **Here you have to include department mission & vision statements and show mapping of keywords with institute mission.**
2. **Program Educational Objectives (PEOs): Statement and Mapping with Department Vision & Mission**
   Here you have to include department PEO statements and show mapping of keywords with department vision & mission.
3. **Program Specific Outcome (PSOs): Statement and Mapping with Department Vision & Mission**
   Here you have to include department PSO statements and show mapping of keywords with department vision & mission.
4. **Program Outcome (POs): Statement and Mapping with PEO and PSO**
   Here you have to include PO statements and show mapping of keywords with department PEOs & PSOs.
5. **Course Plan (Deployment):**

(Please write how you intend to cover the contents: i.e., coverage of Units by lectures, guest lectures, design exercises, solving numerical problems, demonstration of models, model preparation, or by assignments, etc.), **for example**

- **coverage of Units by lectures**
- **design exercises**
- **demonstration of models**
- **by assignments**

Lecture No.	Lect. No.	Topics, Problems, Applications	CO/LO	Target Date of Coverage	Actual Date of Coverage	Ref. Book/Journal with Page No.
1.	1	Introduction of Machine	CO1	12/07/2019	12/07/2019	T1 Page 11 - 16
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						

Example T1: Principles of Machine, By P.S.Bhimra, Khanna Publication, Edition 2019

6. **Course Outcomes:** Look for strong mapping of course with specific PO (2-3). Define Generic Course Outcomes (max 4 to 6) using Blooms Taxonomy. (In case of Lab Course define generic Lab Outcomes LO and refer CO as LO in this document).

i. **3EEA101.1(CO1)-**
ii. **3EEA101.2(CO2)-**
iii. **3EEA101.3(CO3)-**
iv. **3EEA101.4(CO4)-**
v. **3EEA101.5(CO5)-**

7. **CO-PO-PSO Mapping: Mapping Levels: 1- Low, 2- Moderate, 3-Strong**
   First try to find out 2-3 PO those are strongly related to your subject contents. Go through the contents and try to formulate 4-5 Course Outcome as per bloom taxonomy. Map each CO with PO and PSO as above. While mapping please rethink if you map any PO with 3, it means you are planning to deliver the contents of that
   level and you will also examine the students at that level.

CO	PO												PSO		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1															
CO2															
CO3															
CO4															
CO5															

7.1 PO Strongly Mapped: (Example):

O **PO2: Write full statement with keywords highlighted** o **PO3: Write full statement with keywords highlighted** o **PO4: Write full statement with keywords highlighted**

7.2 PO Moderately Mapped: (Example)

O **PO1: Write full statement with keywords highlighted**

O **PO11: Write full statement with keywords highlighted**

7.3 PO Low Mapped: (Example)

O **PO12: Write full statement with keywords highlighted**

7.4 PSO Strongly Mapped: (Example)

O **PSO 1 : Write full statement with keywords highlighted**

7.5 P S O Moderately Mapped: (Example)

O **PSO 2: Write full statement with keywords highlighted**

6.6 PSO Low Mapped: (Example)

O **PSO 3: Write full statement with keywords highlighted**

8. **Rules for CO/LO Attainment Levels: (Targets)**

All the courses of your department should be divided into three categories A-Most Difficult course, B-Medium level of Difficulty, C- Low level of Difficulty –(Easy)
According to difficulty level, you can decide specific range for CO attainment targets for Continuous assessment from the following table.
Remember that targets for internal assessment should be higher.

Course Category	Level 3	Level 2	Level 1
A	**60 % of students getting > 60% marks**	**50-60 % of students getting > 60% marks**	**40-50 % of students getting > 60% marks**
B	**80 % of students getting > 60% marks**	**60-80 % of students getting > 60% marks**	**40-60 % of students getting > 60% marks**
C	**90 % of students getting > 60% marks**	**70-90 % of students getting > 60% marks**	**40-70 % of students getting > 60% marks**

9. End Term RTU Component: CO Attainment Levels

All the courses of your department should be divided into three categories A-Most Difficult course, B-Medium level of Difficulty, C- Low level of Difficulty –(Easy)
According to difficulty level and the results of past 3-5 years, you can decide specific range for CO attainment targets for RTU component from the following table.

Course Category	Level 3	Level 2	Level 1
A	**50 % of students getting > 60% marks**	**40-50 % of students getting > 60% marks**	**30-40 % of students getting > 60% marks**
B	**60 % of students getting > 60% marks**	**40-60 % of students getting > 60% marks**	**30-40 % of students getting > 60% marks**
C	**80 % of students getting > 60% marks**	**60-80 % of students getting > 60% marks**	**40-60 % of students getting > 60% marks**

For the specific CO/LO attainment levels of your respective course please use the above tables as reference according your subject difficulty level and prepare following table.

S. No.	Course Type	Attainment Level=1	Attainment Level=2	Attainment Level=3
1	**Theory Courses** Mid Semester Exams			
2	**Theory Courses** University Exam			
4	**Practical Courses** – Internal Exams			
5	**Practical Courses** - University Exam			
6	**Assignments/Unit Test**			
7.	**Any other**			

10. CO wise Assessment Activities (as Mentioned in Session Plan):
You can plan for each CO, activities/ assessment tools to be conducted/ used for its achievement.
Use X to those you select for specific CO. Remove all unused columns.

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

	Activities															
CO	**Pre Mid I Test**	**Post Mid I Test**	**Quiz 1**	**Quiz 2**	**Pre Mid II Test**	**Post Mid II Test**	**Assignment 1**	**Assignment 2**	**Workshop**	**Seminar**	**Project**	**Training**	**Discussion**	**Mid 1**	**Mid 2**	**Ind. visit**
CO1																
CO2																
CO3																
CO4																
CO5																
CO6																

In case of Lab course some activities are as follows:

LO	Internal Practical exams	Laboratory Tests	Viva	Records	Project Presentation	Project Evaluation	External practical exams
LO1							
LO2							
LO3							
LO4							

11. CO wise Assessment Activities:

Based on CO-PO mapping, determine targets for each CO as average of targets of all relevant POs.

CO	PO												Avg.	PSO		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	CO Targets	PSO1	PSO2	PSO3
CO1																
CO2																
CO3																
CO4																
CO5																

12. Activity wise Assessment Tools:

This gives you generalized view of different direct and indirect tools those can be used for assessment / achievement of CO/PO. (Decide which tools are required for assessing a particular CO/LO and in reference to Course A, B, C difficulty level).

Sr. No.	Activity	Assessment Method	Tools	Weightage Marks	Recommendation
1.	Pre-Mid Term 1	Direct	Marks	10	For CO
2.	Post-Mid Term 1	Direct	Marks	10	For CO
3.	Quiz 1	Direct	Marks	10	For CO
4.	Quiz 2	Direct	Marks	10	For CO
5.	Pre Mid Term 2	Direct	Marks	10	For CO
6.	Post Mid Term 2	Direct	Marks	10	For CO
7.	Mid Term 1	Direct	Marks	20	For CO
8.	Mid Term 2	Direct	Marks	20	For CO
9.	Assignment 1	Direct	Marks	10	For CO
10.	Assignment 2	Direct	Marks	10	For CO
11.	Workshop	Indirect	Rubrics	5	For LO
12.	Seminar/ SPL	Indirect	Rubrics	5	For CO/LO
13.	Project (Mini or NSP)	Indirect	Rubrics	20	For LO
14.	Discussion	Indirect	Rubrics	5	For LO
15.	Training	Indirect	Rubrics	20	For LO
16.	Industrial Visit	Indirect	Rubrics	20	For LO
17.	Or any other activity	Direct/ Indirect	Marks/ Rubrics	any	For LO
18.					
Note that for every rubrics you need to decide assessment criteria, range of marks or weightage – above values are indicative					

13. CO Assessment Process:

After every activity (Ideally as per above table): (Frequency of Assessment- Can be taken as monthly). So the assessment can be for all activities held during the month. Do the following.

13.1 Attainment of COs

13.1.1 Attainment Table for CO1: 3EEA101.1

CO1: 3EEA101.1: Attainment Table (Columns) As Applicable CO wise-Monthly									
Student	**Pre Mid I Test 10**	**Quiz 1 10**	**Assignment 10**	**Quiz 1 10**	**WS 10**	**Training 10**	**Total (60)**	**% 0f Marks**	**Level of Attainment**
Name1									**3**
Name2									**2**
Name 3									**1**
Name 4									**2**
Name 5									**1**
Name 6									**2**
----									**--**
------									**--**
	No. of Students attained level 3=					**% of Students Attained Level 3=**			
	No. of Students attained level 2=					**% of Students Attained Level 2=**			
	No. of Students attained level 1=					**% of Students Attained Level 1=**			
	Target Achieved= ? (Check Level 3 % attainment -If No Find Gap)								
	Mark X for absent- Take avg. of all present								

(Repeat it for all other COs, (CO2 – CO5))

13.1.2 CO-Gap Identifications

COs	CO 1	CO 2	CO 3	CO4	CO5
Target					
Achieved					
Gap					

13.1.3 Gaps Identified:

Describe what the reasons for gaps are

i.

ii.

Overall CO Attainment Table: Example

COs	CO 1	CO 2	CO 3	CO4	CO5	Co6
Attainment level as per rules set	3	1	3	3	3	3
Average CO attainment through internal assessment	**2.67**					

13.1.4: Activities Decided to bridge the gap

Please do analyze whether you could get improvement through activities decided and conducted for improvements. Reason should be noted why / how it is improved or not.

13.2 Attainment of POs & PSO:

13.2.1 Target-Expected Attainment of PO by attainment of CO- Put all mappings of 3, 2 and 1. Based on CO-PO mapping, determine targets for each PO as average of targets of all relevant COs.

CO	PO												PSO		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
3EEA101.1															
3EEA101.2															
3EEA101.3															
3EEA101.4															
3EEA101.5															
Obtain Average-PO/PSO Targets	Targets	Targets	Targets	Targets	Targets	Targets	Targets	Targets	Targets	Targets	Targets	Targets	Targets	Targets	Targets

13.2.2 Attainment of POs & PSO through CO as Continuous Evaluation:

Put all attainment values of CO as per mappings with 3, 2, 1 as evaluated in 13.1.1 (Frequency- Monthly)

CO	PO												PSO		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
3EEA101.1															
3EEA101.2															
3EEA101.3															
3EEA101.4															
3EEA101.5															
Obtain Avg. PO/PSO Attainment	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved

13.2.3 PO Gap Identification:

	PO												PSO		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
Targets															
Achieved															
Gap															

13.2.4 Gaps Identified:

Describe what the reasons for gap (for PO) are.

i.

ii.

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

13.2.5 Activities Decided to bridge the gap

Please do analyze whether you could get improvement through activities decided and conducted for improvements. Reason should be noted why / how it is improved or not.

Repeat whole process after one month, Two months, and three months. Plot bar chart for improvement in CO, PO & PSO. (Every month)

13.3 Attainment of CO through RTU Exam:

This may be possible for previous semester results so overall attainment. If faculty is changed, data will be evaluated by concerned faculty who taught and handed over to current faculty. If faculty not available, then current faculty will do the same.

Attainment of CO: 3EEA101: Subject:			
Student	**RTU Marks (80)**	**% 0f Marks**	**Level of Attainment**
Name1			**3**
Name2			**2**
Name 3			**1**
Name 4			**2**
Name 5			**1**
Name 6			**2**
----			**--**
------			**--**
No. of Students attained level 3=		**% of Students Attained Level 3=**	
No. of Students attained level 2=		**% of Students Attained Level 2=**	
No. of Students attained level 1=		**% of Students Attained Level 1=**	
CO Attainment = ? (Check Level 3 % attainment -If No Find Gap)			
Mark X for absent- Take avg. of all present			

13.3.1 Attainment of CO through RTU Component:

CO: Course Code: Course Name					
Target					
Achieved					
Gap					

13.3.1 Gaps for CO attainment through RTU Component:

Analyze RTU Question paper with respect to COs formulated, contents delivered and students examined, find out reasons for gaps

i.

ii.

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

13.3.2 Action to be taken:

Prepare recommendations for improvement in planning & teaching for gaps identified.

13.4 Attainment of PO through CO (RTU) Component

Put RTU Results as per target achieved only and mapping level, in following table

Attainment of PO through CO (RTU) Component															
CO	**PO**												**PSO**		
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**
3EEA101															

Attainment of PO through CO (RTU) Component															
3EEA101	**PO**												**PSO**		
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**
Targets															
Achieved															
Gap															

13.4.1 Gaps in PO through CO from RTU component:

Analyze RTU Question paper with respect to COs formulated & mapped, contents delivered and students examined, find out reasons for gaps

Describe what are the reasons for gap

i.

ii.

13.4.2 Action to be taken:

Prepare recommendations for improvement in planning & teaching for gaps identified.

13.5 Overall Attainment of PO & PSO: Through Continuous Assessment & RTU

While combining attainment through Continuous evaluation and RTU component, following weightage be considered.

1. **Internal Assessment – Total weightage- 40 %**
2. **RTU Component ------- Weightage – 60 %**

Put all attainments in the following table and compute.

13.5.1: Table 1

	RTU Component			Internal Assessment				
Student	**RTU Marks (80)**	**% of Marks**	**60% Weightage X6/100 (A)**	**Overall CO (-----)**	**% of Marks**	**Weightage X4/100 (B)**	**Total (A+B)**	**Level of Attainment**
Name1								**3**
Name2								**2**
Name 3								**1**
Name 4								**2**
Name 5								**1**
Name 6								**2**
----								**--**
------								**--**
No. of Students attained level 3=					**% of Students Attained Level 3=**			
No. of Students attained level 2=					**% of Students Attained Level 2=**			
No. of Students attained level 1=					**% of Students Attained Level 1=**			
PO Attainment = ? (Check Level 3 % attainment -If No Find Gap)								
Mark X for absent- Take avg. of all present								

OR

13.5.2: Table 2

	RTU			Internal CO1/ Activity 1 (Weightage %)			Internal CO2/ Activity 2 (Weightage			Internal CO3/ Activity 3 (Weightage %)				
Student	**RTU Marks (80)**	**% 0f Marks**	**60% Weightage X-----/100 A**	**Overall CO (-----)**	**% 0f Marks**	**Weightage X--/100 B**	**Overall CO (-----)**	**% 0f Marks**	**Weightage X--/100 C**	**Overall CO (-----)**	**% 0f Marks**	**Weightage X--/100 D**	**Total (A+B+C+D)**	**Level of Attainment**
Name1														**3**
Name2														**2**
Name 3														**1**
Name 4														**2**
Name 5														**1**
Name 6														**2**
----														**--**
------														**--**

No. of Students attained level 3= Attained Level 3=	**% of Students**
No. of Students attained level 2= Attained Level 2=	**% of Students**
No. of Students attained level 1= Attained Level 1=	**% of Students**
PO Attainment = ? (Check Level 3 % attainment -If No Find Gap)	
Mark X for absent- Take avg. of all present	

13.5.3: Overall PO & PSO Attainment through Course:
Put Overall PO & PSO attainment as per mapping 3,2,1 above:

Attainment of Overall PO for Session 2021-2022															
CO	**PO**												**PSO**		
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**
3CSA101															
PO Attainment															

13.5.4: Overall Gaps for Attainment of PO and PSO from the Course
Put Overall PO & PSO targets & attainment as per mapping 3,2,1 above:

Attainment & Gap of Overall PO Session ----------															
3CSA101	**PO**												**PSO**		
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**
Targets															
Achieved															
Gap															

13.5.5. Overall Gaps for Course taught:
Go through all gaps identified above and summarize. Describe what the reasons are.
i.
ii.

13.5.6 Action to be taken:
Prepare recommendations for improvement in planning & teaching (Internal & RTU) for gaps identified. Decide Activities to be conducted to bridge the gaps in COs.

Repeat whole process after One year before, Two year before, and three year before. Plot bar charts for Continuous improvements check in CO, PO & PSO. (Every Year).

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14 File Formats

14.1 List of File Formats

i. Front Page of Course File
ii. ABC Analysis Format
iii. Blown-up Format
iv. Deployment Format
v. Zero Lecture Format
vi. Tutorial Format
vii. Assignment Format
viii. Lecture Note Format
ix. Mid Term Question Paper Format
x. Mid Term Practical Exam Format
xi. Evaluation Sheets Format
xii. Activity Report Format

14.2 Front Page of Course File

POORNIMA
COLLEGE OF ENGINEERING

TEACHING MANUAL

COURSE: _____

SEMESTER: _____

SUBJECT: _____

SUB. CODE: _____

CONTENT: PGC Syllabus, Blown-up, Deployment, Zero Lectures, Detailed lecture notes with cover page, Tutorial/Home-Assignment Sheets

_____

SESSION: 20___-___

NAME OF FACULTY: _____

DEPARTMENT: _____

CAMPUS: _____

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.3 ABC Analysis Format

POORNIMA
COLLEGE OF ENGINEERING

DEPARTMENT OF ELECTRICAL ENGINEERING

ODD SEMESTER 2021-22

ABC Analysis

Course: B. Tech. **Class/Section: III SEM** **Date: 01.08.2021**
Name of Faculty: XYZ **Name of Subject: EMFT** **Subject Code: 3EE4-08**

Module	(Category A) Hard	(Category B) Medium	(Category C) Easy	Preparedness of "A" topics
MODULE 1: Review of Vector Calculus	Vector calculus differentiation, partial differentiation, integration, vector operator del, Gradient, divergence and curl; integral theorems of vectors.	Three orthogonal coordinate systems rectangular, cylindrical and spherical), Conversion of a vector from one coordinate system to another.	Vector algebra-addition, subtraction, components of vectors, scalar and vector multiplications, triple products	PPT and Notes
MODULE 2: Static Electric Field	Electric dipole, Electrostatic Energy and Energy density.	Gauss law and its applications. Absolute Electric potential, Potential difference, Calculation of potential differences for different configurations.	Coulomb's law, Electric field intensity, Electrical field due to point charges. Line, Surface and Volume charge distributions.	PPT and Notes
MODULE 3: Conductors, Dielectrics and Capacitance	Poisson's equation, Laplace's equation, Solution of Laplace and Poisson's equation, Application of Laplace's and Poisson's equations.	Boundary conditions of perfect dielectric materials. Permittivity of dielectric materials, Capacitance, Capacitance of a two wire line,	Current and current density, Ohms Law in Point form, Continuity of current,	SPL and PPT
MODULE 4: Static Magnetic Fields	Steady magnetic fields produced by current carrying conductors.	Magnetic flux and magnetic flux density, Scalar and Vector Magnetic potentials.	Biot-Savart Law, Ampere Law,	SPL
MODULE 5: Magnetic Forces, Materials and Inductance	Nature of magnetic materials, Magnetization and permeability, Magnetic boundary conditions,	Force on a moving charge, Force on a differential current element, Force between differential current elements,	Magnetic circuits, inductances and mutual inductances.	PPT
MODULE 6: Time Varying Fields and Maxwell's Equations	Motional Electromotive forces. Boundary Conditions.	Faraday's law for Electromagnetic induction, Displacement current,	Point form of Maxwell's equation, Integral form of Maxwell's equations,	PPT and Notes
MODULE 7: Electromagnetic Waves	Maxwell's equation in Phasor form, Wave equation in Phasor form, Plane waves in free space and in a homogenous material.	Wave equation for a conducting medium, Plane waves in lossy dielectrics, Propagation in good conductors, Skin effect. Poynting theorem.	Derivation of Wave Equation, Uniform Plane Waves,	SPL and PPT

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.4 Blown-up Format

POORNIMA
COLLEGE OF ENGINEERING

DEPARTMENT OF ELECTRICAL ENGINEERING

Campus: PCE Course: B.Tech.-EE Class/Section: 2nd year/ Sec-A Date: 01 Aug 2021
Name of Faculty: XYZ Name of Subject: EMFT Code: 3EE4-08

COURSE PLAN –BLOWN UP

S.NO	SYLLABUS TOPIC AS PER UNIVERSITY	BLOWN UP TOPICS
0.	Zero Lecture	(1) Introduction of self. (2) Introduction of subject and its significance (3) Introduction of student
1.	**MODULE- 1** **Review of Vector Calculus**	
1.1	Vector Algebra	1.1.1 Scalar and vector quantities 1..1.2 Vector addition & subtraction 1.1.3 Position & distance vector 1.1.4 Vector Multiplication 1.1.5 Component of a vector 1.1.6 Triple products 1.1.7 Numericals
1.2	Coordinate system & Transformation	1.2.1 Cartesian coordinate system 1.2.1 Cylindrical coordinate system 1.2.3 Spherical coordinate system 1.2.4 Conversion of a vector from one coordinate system to another. 1.2.5 Numericals
1.3	Line, surface & volume integral & Differential	1.3.1 Differential elements for Cartesian coordinate system 1.3.2 Differential elements for Cylindrical coordinate system 1.3.3 Differential elements for Spherical coordinate system 1.3.4 Numericals
1.4	Del operator	1.4.1 Concept of del operator 1.4.2 Relation for Cartesian coordinate system

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.5 Deployment Format

POORNIMA
COLLEGE OF ENGINEERING

DEPARTMENT OF ELECTRICAL ENGINEERING

Campus: PCE Course: B.Tech.-EE | **Class/Section: 2nd year/ Sec-A** | **Date: 01 Aug 2021**
Name of Faculty: XYZ | **Name of Subject: EMFT** | **Code: 3EE4-08**

COURSE PLAN (Deployment)

S.No.	TOPIC AS PER BLOWNUP SYLLABUS	LECT. NO.	Target Date of Coverage	ACTUAL DEL. DATE	CO/LO	Teaching Methods	REF. / TEXT BOOK WITH PAGE NO.
1	**ZERO LECTURE** • Introduction • Basic knowledge about subject • Syllabus, REF. / TEXT BOOKS • RTU Question Paper • Conclusion	L-0	14/07/2021	14/07/2021	CO1	PPT	
2	**UNIT-I** **MODULE- 1** **Review of Vector Calculus** Vector Algebra 1.1.1 Scalar and vector quantities 1..1.2 Vector addition & subtraction 1.1.3 Position & distance vector 1.1.4 Numericals	L-1	14/07/2021	14/07/2021	CO1	Chalk/ Board	PRINCIPLES OF ELECTROMAGNETICS by MATTHEW N.O. SADIKU
3	**Vector Algebra** 1.2.1 Vector Multiplication 1.2.2 Component of a vector 1.2.3 Triple products 1.2.4 Numericals	L-2	16/07/2021	16/07/2021	CO1	Chalk/ Board	PRINCIPLES OF ELECTROMAGNETICS by MATTHEW N.O. SADIKU
4	**Coordinate system** 1.3.1 Cartesian coordinate system 1.3.2 Cylindrical coordinate system 1.3.3 Spherical coordinate system 1.3.4 Numericals	L-3	18/07/2021	18/07/2021	CO1	Chalk/ Board	PRINCIPLES OF ELECTROMAGNETICS by MATTHEW N.O. SADIKU
5	**Coordinate System**						

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.6 Zero Lecture Format

POORNIMA
COLLEGE OF ENGINEERING

ZERO LECTURE

Session: 20 - (Sem.)

Campus: …… Course: …… Class/Section: ……

Name of Faculty: ……

Zero Lecture

1). Name of Subject: …… Code: ……

2). Self-Introduction:

a). Name:
b). Qualification:
c). Designation:
d). Research Area:
e). E-mail Id: ……@poornima.org
f). Other details: Information about areas of proficiency/ expertise such as subject taught, laboratory taken, Member of Professional body, Academic Proficiency, Book Authored, Paper published in National and International Conference/Journals etc.

3). Introduction of Students:

a*). Records of students in 12th*

Sr. No.	Average result of 12th	Name of student scored highest marks	Marks 60% above (No. of students)	Marks between 40%-60% (No. of students)	English Medium Students (No.)	Hindi Medium Students (No.)	No. of Hostellers	No. of Day Scholar

b*). Name of 05 best students based on previous results: ……, ……, ……, ……, ……*

4). Instructional Language: - ……%English; ……..% Hindi (English not less than 60%)

5). Introduction to subject: - (Pl. separate out subject specific matter and general matter valid for all subjects and group/place them appropriately)

a). Relevance to Branch:
b). Relevance to Society:
c). Relevance to Self:
d). Relation with laboratory:
e). Connection with previous year and next year:

6). Syllabus of Poornima Group of Colleges, Jaipur

a). Unit Name:
b). ABC analysis (RGB method) of unit & topics

7). Books/ Website/Journals & Handbooks/ Association & Institution:

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

a). Recommended Text & Reference Books and Websites:

S. No.	Title of Book	Authors	Publisher	Cost (Rs.)	No. of books in Library
Text Books					
T1					
T2					
T3					
Reference Books					
R1					
R2					
R3					
Websites related to subject					
1					
2					

b). Journals & Handbooks: - To give information about different Journals & Handbooks available in library related to the subject and branch.

c). Associations and Institutions: - To give information about different Associations and Institutions related to the subject and branch.

8). Syllabus Deployment: -

a). Total weeks available for academics (excluding holidays) as per Poornima Foundation calendar-

Semester	
No. of Working days available(Approx.)	
No. of Weeks (Approx.)	

- Total weeks available for special activities (as mentioned below)- 02 weeks (Approx.)

Note: Individual faculty must calculate the exact no. of lectures available according to time table etc. after consultation with HOD.

b). Special Activities (To be approved by HOD & Dean & must be mentioned in deployment):

- Open Book Test- Once in a semester
- Quiz - Once in a semester
- Special Lectures (SPL)- Minimum 10% of total no. of lectures including following
  - i. Smart Class by the faculty, who is teaching the subject
  - ii. SPL by expert faculty
  - iii. SPL by expert from industry/academia (other institution)
- Revision classes (Solving Important Question Bank):- 1 class before Mid Term and 2 classes before End Term Exam

c). Lecture schedule per week

i). University scheme (L+T+P) = ...+....+.....

Sr. No.	Name of Unit	No. of lectures	Broad Area	Degree of difficulty (High/Medium/Low)	Text/ Reference books
1.					
2.					
3.					
4.					
5.					

d). Introduction & Conclusion: Each subject, unit and topic shall start with introduction & close with conclusion. In case of the subject, it is Zero lecture.

e). Time Distribution in lecture class: - Time allotted: 60 min.

i. First 5 min. should be utilized for paying attention towards students who were absent for last lecture or continuously absent for many days + taking attendance by calling the names of the students and also sharing any new/relevant information.

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

ii. Actual lecture delivery should be of 50 min.
iii. Last 5 min. should be utilized by recapping/ conclusion of the topic. Providing brief introduction of the coming up lecture and suggesting portion to read.
iv. After completion of any Unit/Chapter a short quiz should be organized.
v. During lecture student should be encouraged to ask questions.

Note: Pl. ensure that each student is having Lecture Note Book. Also, write on the black board day and date, name of the teacher, name of subject with code, unit and lecture no. and topics to be covered at the beginning of each lecture and ensure that students write in lecture note book. Ask students to leave 4/5 pages blank for copying the note from fellow students in case of their absenteeism.

9). Tutorial: - An essential component of Teaching- Learning process in Professional Education.

Objective: - To enhance the recall mechanism.
To promote logical reasoning and thinking of the students.
To interact personally to the students for improve numerical solving ability.

a). *Tutorial processing:* - Tutorial sheet shall be provided to each students

I[st] Phase: - It is consisting of questions to be solved in the class assignment session in test mode on perforated sheet given in tutorial notebook and to be collected & kept by respective faculty for review & analysis (20 minutes).

II[nd] Phase: - Indicating/Initializing the weak issues/ drawback and Evaluating and providing the grade. Making a group with good student for assisting the weak students to explain/solve questions by every student on plain papers given in tutorial note book (20 minutes).

III[rd] Phase: - Solving/ explaining difficulties of lecture class and providing the new home assignment (20 minutes). To be done in tutorial note book.

b). *Home assignment shall comprise of two parts:*

Part (i) Minimum essential questions, which are to be solved and submitted by all with in specified due date.

Part (ii) Other important questions, which may also be solved and submitted for examining and guidance by teacher.

10). Examination Systems:

A. FOR ALL THEORY COURSES:-

a. Continuous Internal Evaluation (CIE)	**20%**
-Assignment / Project / Papers / Essays / Class Participation	10%
-Quiz / Class Test (Announced / Unannounced)	5%
- Attendance and Discipline	5%
b. Mid Semester Exams (MSE) – Two	**20%**
c. End Semester Exam (ESE) - One	**60%**
TOTAL	**100 %**

B. FOR ALL PRACTICAL (LABORATORY) COURSES:-

a. Continuous Internal Evaluation (CIE)	**40%**
-Performance (Lab Record, Viva,)	30%
-Attendance and Participation in laboratory work	10%
b. Mid Semester Exam (MSE)– Two	**20 %**
c. End Semester Exam (ESE) - One	**40%**
TOTAL	**100 %**

11). Any other important point:

Place & Date:

Name of Faculty with Designation

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.7 Lecture Note Front page Format

POORNIMA
COLLEGE OF ENGINEERING

LECTURE NOTES

Campus: ……………. **Course:** ……………… **Class/Section:** …………………………… **Date:** ……………
Name of Faculty: ……………………………… **Name of Subject:** ………………………… **Code:** ……………
Date (Prep.): …………………….. **Date (Del.):** ………………… **Unit No.:**……………… **Lect. No:** ……………

OBJECTIVE: To be written before taking the lecture (Pl. write in bullet points the main topics/concepts etc., which will be taught in this lecture)

____

____

____

____

IMPORTANT & RELEVANT QUESTIONS:

____

____

____

____

FEED BACK QUESTIONS (AFTER 20 MINUTES):

____

____

____

____

OUTCOME OF THE DELIVERED LECTURE: To be written after taking the lecture (Pl. write in bullet points about students' feedback on this lecture, level of understanding of this lecture by students etc.)

____

____

____

REFERENCES: Text/Ref. Book with Page No. and relevant Internet Websites:

____

____

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.7.1 Detailed Lecture Note Format-1

POORNIMA
COLLEGE OF ENGINEERING

DETAILED LECTURE NOTES

Campus: ……	**Course: ……**	**Class/Section: ……**	**Date: ……**
Name of Faculty: ……		**Name of Subject: ……**	**Code: ……**

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.7.2 Detailed Lecture Note Format-2

POORNIMA
COLLEGE OF ENGINEERING

DETAILED LECTURE NOTES

PAGE NO. .....

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.8 Assignment Format

POORNIMA
COLLEGE OF ENGINEERING

DEPARTMENT OF ELECTRICAL ENGINEERING

Assignment Sheet 1

Campus: Poornima College of Engg. **Class/Section: 2nd Year/ Section - A** **Date: 31 Aug 2021**
Course: B.Tech.
Name of Faculty: XYZ **Name of Subject: EMFT** **Code: 3EE4-08**

		CO	PO	PSO
Q.1	Evaluate the mathematical expression of the gradient of a Scalar?	1	2	1
Q.2	Write the mathematical expression of the Curl of a Vector?	2	2	2
Q.3	Define permittivity of dielectric material?	2	2	2
Q.4	Write Statement of Vector addition and Vector Subtraction?	1	3	1
Q.5	Define Statement of Poisson's equation and Laplace's equation?	2	2	1
Q.6	Drive the Mathematical expression of Circular Cylindrical Coordinates in detail?	1	1	1
Q.7	Express the following points in cylindrical and spherical coordinates using transformation technique? a) P (1,-4,-3) b) (3, 0, 5)	2	2	3
Q.8	State and Prove divergence theorem. (1) Draw the pattern of magnetic field in which the divergence zero and (2) Draw the pattern of electric field in which divergence non-zero	4	1	1
Q.9	Define Coulomb's law? Also explain the mathematical expression of the Volume charge distribution?	1	2	1
Q.10	Drive the Mathematical transformation between Cartesian to cylindrical Coordinates in detail?	2	1	1

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.9 Tutorial Format

POORNIMA
COLLEGE OF ENGINEERING

TUTORIAL SHEET

TUTORIAL SHEET SHEET No.....

Campus: ..... Course: ..... Class/Section: ..... Date: .....

Name of Faculty: ..... Name of Subject: ..... Code: .....

Date of Tut. Sheet Preparation:..... Scheduled Date of Tut.:.....Actual Date of Tut. :.....

Name of Student:.....Scheduled & Actual Date of H.A. Submission:.....&.....

	Questions	CO	PO
FIRST 20 MT. CLASS QUESTIONS			
2 HRS. SOLVABLE HOME ASSIGNMENT (H.A.) QUESTIONS			
OTHER IMPORTANT QUESTIONS			

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.10 Mid Term/ End Term Practical Question Paper Format

R.

POORNIMA COLLEGE OF ENGINEERING, JAIPUR

III B.TECH. (V Sem.) **SET- A**

FIRST MID TERM PRACTICAL EXAMINATION 2021-22

Code 3EE4-23 Category: PCC Subject Name: MACHINE DESIGN PRACTICE-II

(BRANCH – ELECTRICAL ENGINEERING)

Max. Time: 60 Minutes **Max. Marks: 22 + 8 (Viva) = 30**

NOTE: - All questions are compulsory. Use of Design Data Book is allowed.

Q. No.	Question	Marks	LO	PO
Q.1				
Q.2				
Q.3				

POORNIMA COLLEGE OF ENGINEERING, JAIPUR

III B.TECH. (V Sem.) **SET- B**

FIRST MID TERM PRACTICAL EXAMINATION 2021-22

Code 3EE4-23 Category: PCC Subject Name: MACHINE DESIGN PRACTICE-II

(BRANCH – ELECTRICAL ENGINEERING)

Max. Time: 60 Minutes **Max. Marks: 22 + 8 (Viva) = 30**

NOTE: - All questions are compulsory. Use of Design Data Book is allowed.

Q. No.	Question	Marks	LO	PO
Q.1				
Q.2				
Q.3				

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.11 Mid Term Theory Question Paper Format

POORNIMA COLLEGE OF ENGINEERING, JAIPUR

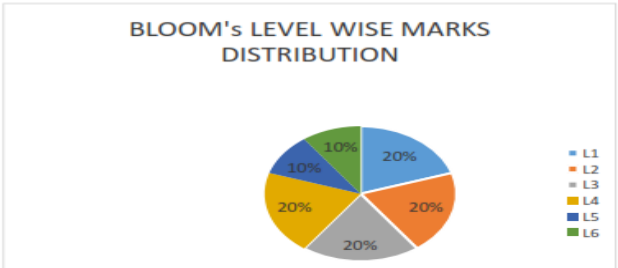
II B.TECH. (III Sem.) **Roll No. _____**

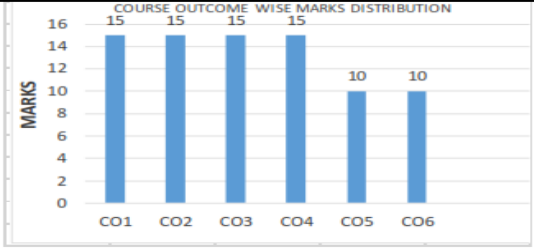
SECOND MID TERM EXAMINATION 2021-22
Code: 3EE4-08 Category: PCC Subject Name–EMF
(BRANCH – ELECTRICAL ENGINEERING)

Course Credit: ___
Max. Time: 2 hrs. **Max. Marks: 60**
NOTE:- Read the guidelines given with each part carefully.

Course Outcomes (CO):
At the end of the course the student should be able to:
CO1:
CO2:
CO3:
CO4:
CO5:
CO6:

	PART - A: (All questions are compulsory) Max. Marks (10)				
		Marks	**CO**	**BL**	**PO**
Q.1		**2**			
Q.2		**2**			
Q.3		**2**			
Q.4		**2**			
Q.5		**2**			
	PART - B: (Attempt 4 questions out of 6) Max. Marks (20)				
Q.6		**5**			
Q.7		**5**			
Q.8		**5**			
Q.9		**5**			
Q.10		**5**			
Q.11		**5**			
	PART - C: (Attempt 3 questions out of 4) Max. Marks (30)				
Q.12		**10**			
Q.13		**10**			
Q.14		**10**			
Q. 15		**10**			





BL – Bloom's Taxonomy Levels (1- Remembering, 2- Understanding, 3 – Applying, 4 – Analyzing, 5 – Evaluating, 6 - Creating)
CO – Course Outcomes; PO – Program Outcomes

13. List of Important Links

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

List of Important Links		
Sr. No.	**Link**	**Particulars**
1	https://www.rtu.ac.in/index/	Rajasthan Technical University
2	http://www.pce.poornima.org	Institute Website
3	http://www.pce.poornima.org/Downloads.html	Format of Students & Employees
4	https://www.turnitin.com/login_page.asp?lang=en_us	Plagiarism Checker
5	http://pcelibrary.poornima.org/	PCE Digital Library
6	https://ndl.iitkgp.ac.in/	National Digital Library of India (NDLI)
7	https://swayam.gov.in/	SWAYAM MOOCs platform
8	https://www.vlab.co.in/	Virtual Labs
9	https://spoken-tutorial.org/	Spoken Tutorial
10	https://fossee.in/	FOSSEE (Free/Libre and Open Source Software for Education)
11	https://www.sih.gov.in/	Smart India Hackathon
12	https://www.swayamprabha.gov.in/	32 high quality educational channels through DTH on 24X7 basis.
13	https://ieeexplore.ieee.org/Xplore/home.jsp.You	IEEE All Society Periodicals Package
14	https://booksc.org/	Link for Free for book and articles
15	https://jgateplus.com/home/	J-gate Plus (JOURNALS -GATE) subscriptions
16	http://www.delnet.nic.in/	Developing Library Network
17	https://dst.rajasthan.gov.in/content/dst-gov/en/home.html	Department of Science & Technology, Government of Rajasthan
18	https://ipindia.gov.in/index.htm	Official website of Intellectual Property India
19	http://pce.poornima.org/Downloads.html	Academic Formats Word File
Note:- Required Credentials can be taken from Respective Department Heads		

POORNIMA
COLLEGE OF ENGINEERING

DEPARTMENT OF ELECTRICAL ENGINEERING

CURRICULUM DELIVERY PLAN

OUTLINE-EVEN SEM-2021-22

ISI-6, RIICO Institutional Area, Sitapura, Jaipur-302022 (Rajasthan)

• Phone: +91-141-2770790 • E-mail: infor@poornima.org

• Website: www.poornima.org

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

Table of Contents

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

1 The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of Continuous Internal Assessment (CIA)

PCE is affiliated to RTU, Kota and follows the planned and prescribed curriculum of University. The Internal Quality Assurance Cell (IQAC) of PCE takes the responsibility of monitoring the effective delivery of the curriculum through a well-planned and documented process. To ensure effective curriculum delivery, a Curriculum Delivery Plan (CDP) is prepared by all PAC's of the respective departments. A CDP includes detailed planning for preparation, verification, execution and adherence to all documents related to academic delivery of all courses. As per the directions received from IQAC, the Examination cell plans for the Continuous Internal Assessment. Examination cell then circulate CIA planning to the PAC. Examination cell sends all the CIE Data to Director's Office for the final approval before its submission to RTU. Detail outlines are as follows.

1. Director Office, PCE receives the curriculum from RTU, Kota through university website.
2. IQAC prepares institute academic calendar aligned with RTU academic calendar considering input received in last GC meeting and other stakeholders. IQAC forwards the Institute Academic Calendar to PAC (Program Assessment Committee) for identifying curriculum gaps and examination cell for CIE. PACs then prepares CDPs after consolidating the course specific planning received from the respective faculty members.
3. A CDP includes activities for gap abridgement which are proposed to be carried out by the faculty members.
4. IQAC also instructs PACs to prepare the department activity calendar. PACs receives approval of department activity calendars and CDPs from DABs before its final approval from IQAC.
5. IQAC also reviews the CDPs approved by DABs and gives suggestions/ approvals periodically. All the activities (SPL, Industrial visit, workshop etc.) planned are taken into consideration for the Department activity calendar after the approval from DABs.
6. Subject wise Course files are prepared by respective faculty, comprising of Syllabus, ABC analysis, Blown-Up, Deployment, Lecture notes, Zero Lecture, Tutorial and Assignment sheets, COs Statements, and Mapping with POs and PSOs.
7. Faculty frequently use ICT tools for more effective content delivery using PPTs, video lectures etc.
8. Student attendance is monitored by tutors and chief proctor office with help of SHARP ERP software. Attendance defaulters are regularly counseled through their tutors for improving their attendance.
9. Institute also conducts Annual Internal Academic Audit for the effectiveness of teaching-learning methodologies and the necessary actions are taken as suggested by the audit team.
10. Conferences, seminars, webinars, workshops, expert lectures, STTPs, and FDPs are organized throughout the year on the recent advances in the field of engineering.
11. Continuous Internal Assessment process includes Midterm exam, Tutorials, Assignments, Quizzes, presentation, Class Test, viva-voce etc.
12. As per the RTU examination scheme, mid semester examinations are conducted centrally by examination cell as per the planning & academic calendar and other assessments are conducted at departmental level.
13. All the evaluations are carried out by the faculty members which include COs-POs attainment, Gap identification & action taken for the fulfillment of gap.
14. Student feedback and attainment of COs-POs are reviewed by the PAC for any revision in planning & Delivery.
15. End term semester examinations are conducted by the RTU, Kota.

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

2 Vision & Mission Statements

2.1 Vision & Mission Statements of the Institute

Vision of Institution

To create knowledge based society with scientific temper, team spirit and dignity of labor to face the global competitive challenges

Mission of Institution

To evolve and develop skill based systems for effective delivery of knowledge so as to equip young professionals with dedication & commitment to excellence in all spheres of life

2.2 Vision & Mission Statements of the Programme B. Tech. (Electrical Engineering)

2.2.1 Vision of Department

To be a model of excellence in Professional Education and Research by creating electrical engineers who are prepared for lifelong engagement in the rapidly changing fields and technologies with the ability to work in team.

2.2.2 Mission of Department

- To provide a dynamic environment of technical education wherein students learn in collaboration with others to develop knowledge of basic and engineering sciences.
- To identify and strengthen current thrust areas based upon informed perception of global societal issues in the electrical and allied branches.
- To develop human potential with intellectual capability who can become a good professional, researcher and lifelong learner.

2.2.3 PEO of the Department

Program Educational Objectives (PEOs

- **PEO 1**: Graduates will have the ability to formulate, analyze and apply design process using the basic knowledge of engineering and sciences to solve complex electrical engineering problems.
- **PEO 2**: Graduates will exhibit quality of leadership, teamwork, time management, with a commitment towards addressing societal issues of equity, public and environmental safety using modern engineering tools.
- **PEO 3**: Graduates will possess dynamic communication and have successful transition into a broad range of multi-disciplinary career options in industry, government and research as lifelong learner.

2.2.4 Program Specific Outcome (PSOs)

- PSO1: Graduate possesses the ability to apply fundamental knowledge of basic sciences, mathematics and computation to solve the problems in the field of electrical engineering for the benefit of society.
- PSO2: Graduate possesses the ability to professionally communicate and ethically solve complex electrical engineering problems using modern engineering tools.
- PSO3: Graduate possesses sound fundamental knowledge to be either employable or develop entrepreneurship in the emerging areas of renewable and green energy, electric and hybrid vehicles and smart grids and shall be susceptive to life- long learning.

2.3 Program Outcomes (PO)

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.

3 Department Academic & Administrative Bodies - Structure & Functions

3.1 Department Advisory Board (DAB)

3.1.1 Primary Objective

Department Advisory Board (DAB) of Department of Electrical Engineering, PCE, Jaipur is formed to provide necessary suggestions for developing a structured approach for continuous improvement in curriculum delivery, planning and incorporation of Curricular, Extra and Co-Curricular activities needed to abridge the pre-identified curriculum gaps.

3.1.2 Roles & Responsibilities

1. Suggest improvement in academic plans and recommend standard practices/system for attainment of Program Educational Objectives, Program Outcomes, Program Specific Outcomes and Course Outcomes.
2. Provide guidelines for industry-institute interactions to bridge up curriculum/industry gap and suggest quality improvement initiatives to enhance employability.
3. Develop a structured Curriculum Delivery Plan, Department Academic Calendar and seek approval for them from Internal Quality Assurance Cell.
4. Incorporate suggestions received from Program Assessment Committee (PAC) by including proposed activities for bridging curricular gaps identified.
5. To identify and suggest thrust areas to conduct various activities (final year projects, training courses and additional experiments to meet PEOs, and propose necessary action plan for skill development of students, required for entrepreneurship development and quality improvement.

3.1.3 Department-Wise Composition

Session: 2021-22

S. No.	Category	Nominated by	Name of Members	Address

1	Chairman, DAB-CE	Chairman, IQAC	Dr. Mahesh M. Bundele (Principal & Director, PCE)	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
2	Member Secretary	Chairman, DAB-EE	Dr. PRAVIN MACHHINDRA SONWANE Head, Department of Electrical Engineering	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
3	Faculty representative-1	Chairman, DAB-EE	Dr. Sunil Kumar Gupta Professor, EE, PCE	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
4	Faculty representative-2	Chairman, DAB-EE	Dr. Neeraj Tiwari Professor EE, PCE	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
5	Faculty representative-3	Chairman, DAB-EE	Dr. Deepika Chouhan Professor, PCE	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
6	Faculty representative-4	Chairman, DAB-EE	Dr. Hemant Kaushik Associate Prof., PCE	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
7	Faculty representative-5	Chairman, DAB-EE	Dr. Pankaj Gakhar Associate Professor	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
8	Faculty representative-6	Chairman, DAB-EE	Mr. Ajit Singh Rajawat, Assistant Professor, PCE	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
9	Special Invitee	Chairman, DAB-EE	Dr. Rekha Nair Dean First Year, PCE	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
10	Alumni Representative-1	Chairman, DAB-EE	Mr. Gourabh Gupta	REC, Banglore
11	Alumni Representative-2	Chairman, DAB-EE	Mr. Love Mishra	Sr. Engineer, Ultratech
12	Student Representative	Chairman, DAB-EE	Abhishek Dubey	PCE20EE800, Student PCE
13	Industry Representative	Chairman, DAB-EE	Mr. Jagdish Prasad Meena	Executive Engineer, RVPNL, Jaipur
14	Parents Representative-1	Chairman, DAB-EE	Mr. BHAWANI SHANKAR TIWARI	Housing Business, Bijainagar Dist-Ajmer
15	Parents Representative-2	Chairman, DAB-EE	Mr. RAKESH CHAND MATHUR	Govt. Servant, Jaipur

3.1.4 Meeting Frequency & Objectives

Meeting No.	Meeting Code	Meeting Month-Week	Meeting Objective
1.	DAB-1	July First Week	● Consideration of gaps and proposed activities by PAC last meeting to be implemented in DAC and CDP. ● Prepares final draft of CDP and DAC to be proposed in upcoming IQAC meeting
2.	DAB-2	September Second Week	● Approval / Suggestions of proposals from last PAC Meeting. ● Revision of DAB Drafts for being proposed in upcoming GC
3	DAB-3	December First Week	● Draft preparation for DAC and CDP for upcoming semester after considering inputs from PAC. ● Review Semester closure draft from PAC.

Dr. Mahesh Bundele B.E., M.E., Ph.D. Director Poornima College of Engineering ISI-6, RIICO Institutional Area Sitapura, JAIPUR

4.	DAB-4	April Last Week / May First Week	• Draft of PCE Academic Calendar and CDP proposed • Previous session closure with gaps and feedback. • Completion of ATR-2 for current semester based on last GC sessions and compiling it with ATR-1

3.2 Program Assessment Committee

3.2.1 Primary Objective

The primary objective of Program Assessment Committee (PAC) is to identify, bridge and assess the gaps in Program's Curriculum received from University through attainment calculation.

3.2.2 Roles & Responsibilities

1. Identify gaps in curriculum laid down by University and propose activities for bridging identified gaps.

2. Implement academic plans and standard practices/system for attainment of Program Educational Objectives, Program Outcomes, Program Specific Outcomes and Course Outcomes.

3. Regular Monitoring of curriculum gap abridgement and course deployment practices through pre-defined methods.

4. Execute Industry-Institute Interactions to enhance the employability thereby meeting the industry standards and requirements.

5. Implement Curriculum Delivery Plan & Department Academic Calendar.

3.2.3 Department-Wise Composition

Session: 2021-22

S. No.	Category	Nominated by	Name of Members	Address
1	Chairman, PAC-EE	Chairman, IQAC / Head of Institution	Dr. PRAVIN MACHHINDRA SONWANE Head, Department of Electrical Engineering	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
2	Member Secretary	Chairman, PAC-EE	DR. PANKAJ GAKHAR Associate Professor	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
3	Faculty representative-1	Chairman, PAC-EE	DR. HEMANT KAUSHIK Associate Professor	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
4	Faculty representative-2	Chairman, PAC-EE	MR. AJIT SINGH RAJAWAT, Assistant Professor	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
5	Faculty representative-3	Chairman, PAC-EE	MR. PANKAJ VERMA Assistant Professor	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
6	Faculty representative-4	Chairman, PAC-EE	Dr. GAURAV JAIN Associate Professor	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
7	Faculty representative-5	Chairman, PAC-EE	Dr. MONIKA VARDIA Professor	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
8	Faculty representative-6	Chairman, PAC-EE	Dr. JYOTI SHUKLA Professor	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

3.2.4 Meeting Frequency & Objectives

Meeting No.	Meeting Code	Meeting Month-Week	Meeting Objective
1.	PAC-1	July Last Week	● Execution of Academic, Extra and Co-Curricular activities ● Regular assessment of Academic, Extra and Co-Curricular activities ● Regular calculation of attainments ● Revision of Academics gaps ● Prepared regular report of program for all assessment, attainment & gaps
2.	PAC-2	August Last Week	● Execution of Academic, Extra and Co-Curricular activities ● Regular assessment of Academic, Extra and Co-Curricular activities ● Regular calculation of attainments ● Revision of Academics gaps ● Prepared regular report of program for all assessment, attainment & gaps
3	PAC-3	September Last Week	● Execution of Academic, Extra and Co-Curricular activities ● Regular assessment of Academic, Extra and Co-Curricular activities ● Regular calculation of attainments ● Revision of academics gaps as previous attainment ● Assessment of activities required for being proposed in upcoming GC ● Submit report to Governing Council about previous semester & planning of next semester.
4.	PAC-4	October Last Week	● Inclusion of suggestions for revising gaps ● Execution of Academic, Extra and Co-Curricular activities according to suggestions in GC ● Regular assessment of Academic, Extra and Co-Curricular activities ● Regular calculation of attainments ● Revision of academics gaps as previous attainment
5.	PAC-5	November Third Week	● Revision of academics gaps as previous attainment ● Regular assessment of Academic, Extra and Co-Curricular activities ● Identification and proposal of gaps and activities to be considered by DAB to prepare Department Academic Calendar and CDP for upcoming semester. ● Semester closure report draft to be prepared ● Elective proposals/CBCS
6.	PAC-6	December Third Week	● Incorporation of suggestions from IQAC and DAB meetings in execution of Semester activities ● Execution and assessment of Academic, Extra and Co-Curricular activities ● Revision of academics gaps as previous attainment ● Calculation of attainments
7.	PAC-7	January Last Week	● Execution of Academic, Extra and Co-Curricular activities ● Regular assessment of Academic, Extra and Co-Curricular activities ● Regular calculation of attainments ● Revision of Academics gaps ● Prepared regular report of program for all assessment, attainment & gaps
8.	PAC-8	February Last Week	● Execution of Academic, Extra and Co-Curricular activities ● Regular assessment of Academic, Extra and Co-Curricular activities ● Regular calculation of attainments ● Revision of Academics gaps ● Prepared regular report of program for all assessment, attainment & gaps
9.	PAC-9	March Last Week	● Execution of Academic, Extra and Co-Curricular activities ● Regular assessment of Academic, Extra and Co-Curricular activities

			● Regular calculation of attainments ● Revision of Academics gaps ● Prepared regular report of program for all assessment, attainment & gaps ● Draft preparation of Semester closure
10.	PAC-10	April Second Week	● Execution of Academic, Extra and Co-Curricular activities ● Regular assessment of Academic, Extra and Co-Curricular activities ● Regular calculation of attainments ● Revision of Academics gaps ● Prepared regular report of program for all assessment, attainment & gaps
11.	PAC-11	May Last Week	● Execution of Academic, Extra and Co-Curricular activities ● Regular assessment of Academic, Extra and Co-Curricular activities ● Regular calculation of attainments ● Revision of Academics gaps ● Prepared regular report of program for all assessment, attainment & gaps ● Report submission of Semester closure ● Identification and proposal of gaps and activities to be considered by DAB to prepare Department Academic Calendar and CDP for upcoming semester.
12.	PAC-12	June Last Week	● Feedback of last IQAC and suggestions for new semester to be implemented in CDP and DAC ● Elective proposals/CBCS

4 List of Faculty Members & Technical Staff

Sr. No.	Faculty Name	Emp.ID	Designation	Email ID	Mobile No.
1	MR. ANMOL CHATURVEDI	3210	ASST PROFESSOR	anmol.chaturvedi@poornima.org	9929013217
2	DR. PANKAJ GAKHAR	3820	ASSOCIATE PROFESSOR	pankaj.gakhar@poornima.org	7737764255
3	MR. MANISH SHARMA	3926	ASST PROFESSOR	manish.sharma@poornima.org	9694522907
4	MR. KAVEENDRA KUMAR	4424	ASST PROFESSOR	kaveendra.kumar@poornima.org	8987474142
5	MR. ARPIT KHANDELWAL	4893	ASST PROFESSOR	arpit.khandelwal@poornima.org	8058227694
6	MR. ABHISHEK SINGH	5353	ASST PROFESSOR	abhishek.singh@poornima.edu.in	9557210581
7	Dr. GAURAV JAIN	6085	ASSOCIATE PROFESSOR	jaingaurav@yahoo.com	9602410960
8	Ms. EKATA SHARMA	6377	ASST PROFESSOR	ekatasharma1975@gmail .com	9530025325
9	Dr. PRAVIN MACHHINDRA SONWANE	6380	PROFESSOR	vapron@rediffmail.com	8805868462
10	MR. AJIT SINGH RAJAWAT	6849	ASST PROFESSOR	ajit.rajawat@poornima.org	7737819353
11	MR. PANKAJ VERMA	6872	ASST PROFESSOR	pankaj.verma@poornima.org	9463970020
12	Dr. MONIKA VARDIA	6926	PROFESSOR	monika.vardia@gmail.com	9461548584
13	Ms. RICHA CHAUDHARY	6931	ASST PROFESSOR	richachaudhary2106@gmail.com	8851096563
14	Dr. JYOTI SHUKLA	6932	PROFESSOR	j.shukla111@gmail.com	6350116578
15	Mr. BHAVANESH CHANDRA SHARMA	7012	ASST PROFESSOR	bhavaneshsharma2009@gmail.com	9772809472
16	Ms. SHEENA TAHIRA KHAN	7020	ASST PROFESSOR	khansheena70@gmail.com	8290616919
17	Dr. NEERAJ TIWARI	5298	PROFESSOR	neerajtiwari.1407@gmail.com	9411984649
18	Dr. DEEPIKA CHAUHAN	1810	PROFESSOR	deepika0501@gmail.com	9252605292

Dr. Mahesh Bundele B.E., M.E., Ph.D. Director Poornima College of Engineering ISI-6, RIICO Institutional Area Sitapura, JAIPUR

19	Dr. SUNIL KUMAR GUPTA	5553	PROFESSOR	sunilkumar.gupta@poornima.org	9460595513
20	Dr. AMIT SHRIVASTAVA	5970	PROFESSOR	amit.shrivastava@poornima.org	9314860660
21	Mr. ANAND SHARMA	5403	ASST PROFESSOR	12meep39@nirmauni.ac.in	9887733430
22	Mr. ASHISH RAJ	4129	ASST PROFESSOR	ashishraj1987@gmail.com	7821974011
23	Mr. KAPIL SHRIVASTAVA	4462	ASST PROFESSOR	kapilshrivastava.piet@gmail.com	9887942420
24	Mr. SURENDRA SHARMA	1363	ASST PROFESSOR	surendra.sharma@poornima.edu.in	9413968221
25	Dr. RANJEET KUMAR	6098	ASSOCIATE PROFESSOR	rkjha.001@gmail.com	8302201104
26	Dr. VIJAY KUMAR GALI	6096	ASSOCIATE PROFESSOR	vijaykumar209@gmail.com	9928740818
27	Dr. BABITA JAIN	6039	PROFESSOR	babita.jain@poornima.org	9849153624
28	Mr. JALDEEP KUMAR	3832	ASST PROFESSOR	jaldeepkumar@poornima.org	9413004430
29	DR. HEMANT KAUSHIK	6878	ASSOCIATE PROFESSOR	hemant.kaushik@poornima.org	9950937390
30	Mr. SHIVRAJ SHARMA	1698	ASST PROFESSOR	shivrajsharma@poornima.org	9784290681
31	MR. VIKAS KUMAR SHARMA	7399	ASST PROFESSOR	vikas.sharma@poornima.org	9887352062
32	Dr. MEENA TEKRIWAL	2365	ASSOCIATE PROFESSOR	meenatekriwal@poornima.org	9413928194
33	DR. SHUCHI DAVE	3420	PROFESSOR	drshuchidave@gmail.com	9357252185
34	MR. PRINCE DAWAR	3453	ASST PROFESSOR	dawarprince83@gmail.com	8440964941
35	MS. KALPANA SHARMA	6050	ASST PROFESSOR	klpna.sharma88@gmail.com	9413077523
36	MR. MAYANK SHARMA	4846	ASST PROFESSOR	msecajmer@gmail.com	9413040458
37	MR. SITARAM GURJAR	2695	TECHNICAL ASSISTANT	sitaramgurjar@poornima.org	9602335554
38	MR. NEMI CHAND KOLI	1483	TECHNICAL OFFICER	nemichand@poornima.org	9887793801
39	MR. HANUMAN PRASAD KHORAL	4216	TECHNICAL ASSISTANT	hanuman.kharol@poornima.org	9667100385

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

5 Institute Academic Calendar

JANUARY 2022

Sun	Mon	Tue	Wed	Thu	Fri	Sat
30	31					1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

FEBRUARY 2022

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28					

MARCH 2022

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

APRIL 2022

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

MAY 2022

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

JUNE 2022

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

JULY 2022

Sun	Mon	Tue	Wed	Thu	Fri	Sat
31					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

POORNIMA
COLLEGE OF ENGINEERING

Affiliated to RTU, Kota • Approved by AICTE & UGC under 2(f) • Accredited by NBA

ACADEMIC CALENDAR 2021-22*#

EVEN SEMESTER

January 2022

Saturday, 08	Annual Alumni Meet [VIRTUAL MODE]
Thursday, 20	First Day, B. Tech. VI and VIII Sem.
Thursday, 27	First Day, B. Tech. IV Sem.
Wednesday, 26	Republic Day Celebration

February 2022

Wednesday, 23 to Saturday, 26	Aarohan -2022

March 2022

Friday, 11 to Saturday, 12	Wise Activity
Friday, 25 to Sunday, 27	Hostel Fest (AAYAM, TATVA TORQUE,PARAM, AADHYAY)

April 2022

Friday,01	First Day, B. Tech. II Sem.
Monday, 04 to Saturday, 09	First Mid Term Examination for B.Tech VI & VIII Sem
Monday, 25 to Saturday, 30	First Mid Term Examination for B.Tech IV Sem

May 2022

Friday, 06 to Sunday, 08	Mentorship Summit / Students' Council Meet
Saturday, 14	Last Teaching Day for B.Tech VI & VIII Sem
Monday, 16 to Saturday, 21	Second Mid-Term Examination for B.Tech VI & VIII Sem
Monday, 23 to Saturday, 28	First Mid Term Examination for B.Tech II Sem
Monday, 23 to Wednesday, 25	End-Term Practical Exams for B.Tech VI & VIII Sem

June 2022

Monday, 06 to Saturday, 11	Second Mid-Term Examination for B.Tech IV Sem
Monday, 13 to Wednesday, 15	End-Term Practical Examination for B.Tech IV Sem

July 2022

Monday, 04 to Saturday, 09	Second Mid-Term Examination for B.Tech II Sem
Monday, 11 to Wednesday, 13	End-Term Practical Examination for B.Tech II Sem

HOLIDAYS IN EVEN SEMESTER 2021-22

1	Winter Break	As per RTU Examination Schedule
2	Makar Sankranti	Friday, January 14 to Saturday, January 15, 2022
3	Celebration of Republic Day	Wednesday, January 26, 2022
4	Holi	Friday, March 18 to Saturday, March 19, 2022
5	Ramzan Id/Eid-ul-Fitar	Tuesday, May 03, 2022
6	Summer Break	As per RTU Examination Schedule

*Subject to revision as per RTU notifications
#For all Engineering Faculty and Students of PCE

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

6 Department Activity Calendar

Poornima College of Engineering, Jaipur

Calendar for Electrical Engineering : EVEN Semester - Session 2021-22

S. No.	Activity/ Process	B.Tech. II Sem.	B.Tech. IV Sem.	B.Tech. VI Sem.	B.Tech. VIII Sem.
	(A) Academic Processes				
1	Date of Registration & start of regular classes for students	Friday,01, April 2022	Thursday, 27, January 2022	Thursday, 20, January 2022	Thursday, 20, January 2022
2	Orientation programme	Friday, 01 to Thursday, 07, April 2022	Thursday, 27 January to 04 February, 2022	Thursday, 27 January to 04 February, 2022	Thursday, 27 January to 04 February, 2022
3	Date of submission of question papers by faculty members to secrecy for 1st Mid-term	Monday 9, May 2022	Monday 11, April 2022	Monday 11, April 2022	Monday 11, April 2022
4	I Mid Term Theory & Practical Exam	Monday, 23 to Saturday, 28, May 2022	Monday, 25 to Saturday, 30, April 2022	Monday, 04 to Saturday, 09, April 2022	Monday, 04 to Saturday, 09, April 2022
5	Showing evaluated answer books of 1st Mid-term exam to students in respective classes	Monday, 06/06/2022	Saturday, 07/05/2022	Saturday, 16-04-2022	Saturday, 16-04-2022
6	Last date of submission of Evaluated Answer Books and Mark of First Mid-term Theory & Practical exam to Exam and Secrecy Cell respectively	Saturday, 4 June 2022	Thursady, 5 May 2022	Saturday, 16 April 2022	Saturday, 16 April 2022
7	Date of submission of question papers by faculty members to secrecy for 2nd Mid-term	Monday, 27 June 2022	Monday, 30 May 2022	Monday, 2 May 2022	Monday, 2 May 2022
8	Revision classes				
9	Last Teaching Day*	Thursday, 30 June 2022	Friday 3 June 2022	Saturday, 14, May 2022	Saturday, 14, May 2022
10	2nd Mid-term theory & Practical Exams*	Monday, 04 to Saturday, 09, July 2022	Monday, 06 to Saturday, 11, June 2022	Monday, 16 to Saturday, 21, May 2022	Monday, 16 to Saturday, 21, May 2022
11	End-Term Practical Exams	Monday, 11 to Wednesday, 13, July 2022	Monday, 13 to Wednesday, 15, June 2022	Monday, 23 to Wednesday, 25, May 2022	Monday, 23 to Wednesday, 25, May 2022
	(B) Events and Activities				
12	Technovation-2021	Friday, January 21,2022 to Saturday, January 22,2022			
13	Higher Education: Challenges and Opportunities	Saturday, February 05, 2022			
	(C) Holidays				
14	Makar Sankranti	Friday, January 14 to Saturday, January 15, 2022			
15	Celebration of Republic Day	Wednesday, January 26, 2022			
16	Holi	Friday, March 18 to Saturday, March 19, 2022			
17	Ramzan Id/Eid-ul-Fitar	Tuesday, May 03, 2022			
	"स्वच्छ भारत.. सम्पन्न भारत.."				

***Subject to change as per RTU Exam Schedule**

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

7 Teaching Scheme

7.1 RTU Teaching Scheme

Teaching and Examination Scheme
2nd Year: Electrical Engineering
IV Semester: B.Tech.

SN	Category	Course Code	Course Title	Hours			Marks			Cr
				L	T	P	IA	ETE	Total	
1	BSC	4EE2-01	Biology	2	0	0	20	80	100	2
2	HSMC	4EE1-02/ 4EE1-03	Technical Communication / Managerial Economics and Financial Accounting	2	0	0	20	80	100	2
3	ESC	4EE3-04	Electronic Measurement & Instrumentation	2	0	0	20	80	100	2
4	PCC	4EE4-05	Electrical Machine - II	3	0	0	30	120	150	3
5		4EE4-06	Power Electronics	3	0	0	30	120	150	3
6		4EE4-07	Signals & Systems	3	0	0	30	120	150	3
7		4EE4-08	Digital Electronics	2	0	0	20	80	100	2
8		4EE4-21	Electrical Machine - II Lab	0	0	4	60	40	100	2
9		4EE4-22	Power Electronics Lab	0	0	4	60	40	100	2
10		4EE4-23	Digital Electronics Lab	0	0	2	30	20	50	1
11		4EE3-24	Measurement Lab	0	0	2	30	20	50	1
12	SODECA	4EE8-00	Social Outreach, Discipline & Extra Curricular Activities						25	0.5
			Total						1175	23.5

RAJASTHAN TECHNICAL UNIVERSITY, KOTA

Teaching & Examination Scheme
B. Tech.: Electrical Engineering
3rd Year – VI Semester

THEORY												
SN	Category	Course		Contact hrs/week			Marks				Cr
		Code	Title	L	T	P	Exm Hrs	IA	ETE	Total	
1	ESC	6EE3-01	Computer Architecture	2	0	0	2	20	80	**100**	**2**
2	PCC/ PEC	6EE4-02	Power System - II	3	0	0	3	30	120	**150**	**3**
3		6EE4-03	Power System Protection	3	0	0	3	30	120	**150**	**3**
4		6EE4-04	Electrical Energy Conversion and Auditing	3	0	0	3	120	120	**150**	**3**
5		6EE4-05	Electric Drives	3	0	0	3	30	120	**150**	**3**
6		Professional	Elective II (any one)	3	0	0	3	30	120	**150**	**3**
		6EE5-11	Power System Planning.								
		6EE5-12	Digital Signal Processing.								
		6EE5-13	Electrical and Hybrid Vehicles.								
			Sub Total	**17**	**0**	**0**	**17**	**260**	**680**	**850**	**17**
PRACTICAL & SESSIONAL											
7	PCC	6EE4-21	Power System - II Lab	0	0	4	3	60	40	**100**	**2**
8		6EE4-22	Electric Drives Lab	0	0	4	3	60	40	**100**	**2**
9		6EE4-23	Power System Protection Lab	0	0	2	2	30	20	**50**	**1**
10		6EE4-24	Modelling and simulation lab	0	0	2	2	30	20	**50**	**1**
11	SODECA	6EE8-00	Social Outreach, Discipline & Extra Curricular Activities	0	0	0			25	**25**	**0.5**
			Sub- Total	**0**	**0**	**12**		**180**	**145**	**325**	**6.5**
			TOTAL OF VI SEMESTER	**17**	**0**	**12**		**350**	**825**	**1175**	**23.5**

L: *Lecture,* ***T:*** *Tutorial,* ***P:*** *Practical,* ***Cr:*** *Credits*

ETE: *End Term Exam,* ***IA:*** *Internal Assessment*

Office of Dean Academic Affairs
Rajasthan Technical University, Kota

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

RAJASTHAN TECHNICAL UNIVERSITY, KOTA

Scheme & Syllabus

IV Year- VII & VIII Semester: B. Tech. (Electrical Engineering)

Teaching & Examination Scheme
B. Tech. : Electrical Engineering
4th Year - VIII Semester

THEORY												
SN	**Course Type**	**Course**		**Hours per Week**			**Marks**				**Cr**
		Course Code	**Course Name**	**L**	**T**	**P**	**Exm Hrs**	**IA**	**ETE**	**Total**	
1	PEC	8EE4-11	HVDC Transmission System.	3	0	0	3	30	120	**150**	**3**
2		8EE4-12	Line Commutated and active rectifiers.								
3		8EE4-13	Advanced Electric Drives.								
4	OE		Open Elective-II	3	0	0	3	30	120	**150**	**3**
				6	**0**	**0**		**60**	**240**	**300**	**6**
PRACTICAL & SESSIONAL											
			SUB TOTAL	**6**	**0**	**0**		**60**	**240**	**300**	**6**
5	PCC	8EE4-21	Energy Systems Lab	0	0	4	3	60	40	**100**	**2**
6	PSIT	8EE7-50	Project	3	0	0		210	140	**350**	**7**
7	SODE-CA	8EE8-00	SODECA	0	0	0			25	**25**	**0.5**
			SUB TOTAL	**3**	**0**	**4**		**270**	**205**	**475**	**9.5**
			TOTAL OF VIII SEMESTER	**9**	**0**	**4**		**330**	**445**	**775**	**15.5**

L: *Lecture,* ***T:*** *Tutorial,* ***P:*** *Practical,* ***Cr:*** *Credits*
ETE: *End Term Exam,* ***IA:*** *Internal Assessment*

Office of Dean Academic Affairs
Rajasthan Technical University, Kota

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

8 PCE Teaching Scheme

Year	Sem	No. of Students	Teaching Scheme				Course Name	Subject Code	No. of Sec	No. of Batches	Batch Size (T/H/F)	Total Load (L)	Total Load (T)	Total Load (P)	Total Load (L+T+P)	Teaching Dept.
			L	T	P	Credit										
2	4	13	2	0	0	2	Biology	4EE2-01	1	1	F	2	0	0	2	Biology
2	4	13	2	0	0	2	Managerial Economics and Financial Accounting	4EE1-03	1	1	F	2	0	0	2	Humanities
2	4	13	3	0	0	2	Electronic Measurement & Instrumentation	4EE3-04	1	1	F	3	0	0	3	EE
2	4	13	4	0	0	3	Electrical Machine - II	4EE4-05	1	1	F	4	0	0	4	EE
2	4	13	4	0	0	3	Power Electronics	4EE4-06	1	1	F	3	0	0	3	EE
2	4	13	4	0	0	3	Signals & Systems	4EE4-07	1	1	F	4	0	0	4	ECE
2	4	13	3	0	0	2	Digital Electronics	4EE4-08	1	1	F	3	0	0	3	ECE
2	4	13	0	0	2	2	Electrical Machine - II Lab	4EE4-21	1	1	T	0	0	2	2	EE
2	4	13	0	0	2	2	Power Electronics Lab	4EE4-22	1	1	T	0	0	2	2	EE
2	4	13	0	0	2	1	Digital Electronics Lab	4EE4-23	1	1	T	0	0	2	2	ECE
2	4	13	0	0	2	1	Measurement Lab	4EE3-24	1	1	T	0	0	2	2	EE
2	4	13	1	0	0	NA	Non Syllabus Project	4NSPEE	1	1	F	1	0	0	1	EE
3	6	58	4	0	0	2	Computer Architecture	6EE3-01	1	3	F	4	0	0	4	EE
3	6	58	4	0	0	3	Power System - II	6EE4-02	1	3	F	4	0	0	4	EE
3	6	58	4	0	0	3	Power System Protection	6EE4-03	1	3	F	3	0	0	3	EE
3	6	58	3	0	0	3	Electrical Energy Conversion and Auditing	6EE4-04	1	3	F	3	0	0	3	EE
3	6	58	4	0	0	3	Electric Drives	6EE4-05	1	3	F	4	0	0	4	EE
3	6	58	3	0	0	3	Power System Planning (Elective-1)	6EE5-11	1	3	F	3	0	0	3	EE
3	6	58	3	0	0	3	Electrical and Hybrid Vehicles (Elective-2)	6EE5-13	1	3	F	3	0	0	3	EE
3	6	58	0	0	2	2	Power System - II Lab	6EE4-21	1	3	T	0	0	6	6	EE
3	6	58	0	0	2	2	Electric Drives Lab	6EE4-22	1	3	T	0	0	6	6	EE
3	6	58	0	0	2	1	Power System Protection Lab	6EE4-23	1	3	T	0	0	6	6	EE
3	6	58	0	0	2	1	Modelling and simulation lab	6EE4-24	1	3	T	0	0	6	6	EE
3	6	58		0	2	NA	NSP	6NSPEE	1	3	H	0	0	6	6	EE
4	8	81	3	0	0	3	HVDC Transmission System (Elective-I)	8EE4-11	1	4	F	3	0	0	3	EE
4	8	81	3	0	0	3	Advanced Electric Drives	8EE4-13	1	4	F	3	0	0	3	EE
4	8	81	3	0	0	3	Open Elective-II		1	4	F	3	0	0	3	EE
4	8	81	3	0	0	3	Open Elective-II		1	4	F	3	0	0	3	EE
4	8	81	0	0	4	2	Energy System Lab	8EE4-21	2	4	T	0	0	24	24	EE
4	8	81	0	0	8	7	Project	8EE7-50	2	4	T	0	0	24	24	EE

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

8.1 Marking Scheme

MARKING SCHEME FOR PRACTICAL EXAM, EVEN SEM., 2021-22,		EXAM & SECRECY CELL, PCE									
		I+II Mid Term Exam			Atten & Performance.			End Term Exam			Max.
Code	SUBJECT	Exp.	Viva	Total	Attn.	Perf.	Total	Exp.	Viva	Total	Marks
2FY2-21	Engineering Chemistry Lab	30	10	40	10	30	40	30	10	40	100
2FY2-20	Engineering Physics Lab	30	10	40	10	30	40	30	10	40	100
2FY1-23	Human Values Activities and Sports	30	10	40	10	30	40	30	10	40	100
2FY1-22	Language Lab	30	10	40	10	30	40	30	10	40	100
2FY3-25	Manufacturing Practices Workshop	30	10	40	10	30	40	30	10	40	100
2FY3-24	Computer Programming Lab	30	10	40	10	30	40	30	10	40	100
2FY3-27	Basic Civil Engineering Lab	30	10	40	10	30	40	30	10	40	100
2FY3-26	Basic Electrical Engineering Lab	30	10	40	10	30	40	30	10	40	100
2FY3-29	Computer Aided Machine Drawing	30	10	40	10	30	40	30	10	40	100
2FY3-28	Computer Aided Engineering Graphics	30	10	40	10	30	40	30	10	40	100
4CE4-21	Material Testing Lab	30	10	40	10	30	40	30	10	40	100
4CE4-22	Hydraulics Engineering Lab	30	10	40	10	30	40	30	10	40	100
4CE4-23	Building Drawing	30	10	40	10	30	40	30	10	40	100
4CE4-24	Advanced Surveying Lab	30	10	40	10	30	40	30	10	40	100
4CE4-25	Concrete Lab	30	10	40	10	30	40	30	10	40	100
4CS4-21	Microprocessor & Interfaces Lab	30	10	40	10	30	40	30	10	40	100
4CS4-22	Database Management System Lab	30	10	40	10	30	40	30	10	40	100
4CS4-23	Network Programming Lab	30	10	40	10	30	40	30	10	40	100
4CS4-24	Linux Shell Programming Lab	30	10	40	10	30	40	30	10	40	100
4CS4-25	Java Lab	30	10	40	10	30	40	30	10	40	100
4EC4-21	Analog and Digital Communication Lab	30	10	40	10	30	40	30	10	40	100
4EC4-22	Analog Circuits Lab	30	10	40	10	30	40	30	10	40	100
4EC4-23	Microcontrollers Lab	30	10	40	10	30	40	30	10	40	100
4EC4-24	Electronics Measurement & Instrumentation	30	10	40	10	30	40	30	10	40	100
4EE4-21	Electrical Machine - II Lab	30	10	40	10	30	40	30	10	40	100
4EE4-22	Power Electronics Lab	30	10	40	10	30	40	30	10	40	100
4EE4-23	Digital Electronics Lab	30	10	40	10	30	40	30	10	40	100
4EE3-24	Measurement Lab	30	10	40	10	30	40	30	10	40	100
4IT4-21	Linux Shell Programming Lab	30	10	40	10	30	40	30	10	40	100
4IT4-22	Database Management System Lab	30	10	40	10	30	40	30	10	40	100
4IT4-23	Network Programming Lab	30	10	40	10	30	40	30	10	40	100
4IT4-24	Java Lab	30	10	40	10	30	40	30	10	40	100
4IT4-25	Web Technology Lab	30	10	40	10	30	40	30	10	40	100
4ME3-21	Digital Electronics lab	30	10	40	10	30	40	30	10	40	100
4ME4-22	Fluid Mechanics lab	30	10	40	10	30	40	30	10	40	100
4ME4-23	Production practice lab	30	10	40	10	30	40	30	10	40	100
4ME4-24	Theory of machines Lab	30	10	40	10	30	40	30	10	40	100
6CE4-21	Environmental Engineering Design and Lab	22	8	30	8	22	30	22	8	30	75
6CE4-22	Steel Structure Design	22	8	30	8	22	30	22	8	30	75
6CE4-23	Quantity Surveying and Valuation	15	5	20	5	15	20	15	5	20	50
6CE4-24	Water and Earth Retaining Structures Design	15	5	20	5	15	20	15	5	20	50
6CE4-25	Foundation Design	15	5	20	5	15	20	15	5	20	50
6CS4-21	Digital Image Processing Lab	22	8	30	8	22	30	22	8	30	75
6CS4-22	Machine Learning Lab	22	8	30	8	22	30	22	8	30	75
6CS4-23	Python Lab	22	8	30	8	22	30	22	8	30	75
6CS4-24	Mobile Application Development Lab	22	8	30	8	22	30	22	8	30	75
6EC 4-21	Computer Network Lab	30	10	40	10	30	40	30	10	40	100
6EC 4-22	Antenna and wave propagation Lab	15	5	20	5	15	20	15	5	20	50
6EC 4-23	Electronics Design Lab	30	10	40	10	30	40	30	10	40	100
6EC 4-24	Power Electronics Lab	15	5	20	5	15	20	15	5	20	50
6EE4-21	Power System - II Lab	30	10	40	10	30	40	30	10	40	100
6EE4-22	Electric Drives Lab	30	10	40	10	30	40	30	10	40	100
6EE4-23	Power System Protection Lab	15	5	20	5	15	20	15	5	20	50
6EE4-24	Modelling and simulation lab	15	5	20	5	15	20	15	5	20	50
6IT4-21	Digital Image Processing Lab	22	8	30	8	22	30	22	8	30	75
6IT4-22	Machine Learning Lab	22	8	30	8	22	30	22	8	30	75
6IT4-23	Python Lab	22	8	30	8	22	30	22	8	30	75
6IT4-24	Mobile Application Development Lab	22	8	30	8	22	30	22	8	30	75
6ME4-21	CIMS Lab	22	8	30	8	22	30	22	8	30	75
6ME4-22	Vibration Lab	22	8	30	8	22	30	22	8	30	75
6ME4-23	Machine Design Practice II	22	8	30	8	22	30	22	8	30	75
6ME4-24	Thermal Engineering Lab I	22	8	30	8	22	30	22	8	30	75
8CE4-21	Project Planning & Construction	15	5	20	5	15	20	15	5	20	50
8CE4-22	Pavement Design	15	5	20	5	15	20	15	5	20	50
8CE7-50	Project	210						140			350
8CS4-21	Big Data Analytics Lab	15	5	20	5	15	20	15	5	20	50
8CS4-22	Software Testing and Validation Lab	15	5	20	5	15	20	15	5	20	50
8CS7-50	Project	270						180			450
8EC4-21	Internet of Things (IOT) Lab	15	5	20	5	15	20	15	5	20	50
8EC4-22	Skill Development Lab	15	5	20	5	15	20	15	5	20	50
8EC7-50	Project	210						140			350
8EE4-21	Energy Systems Lab	30	10	40	10	30	40	30	10	40	100
8EE7-50	Project	210						140			350
8IT4-21	Internet of Things Lab	15	5	20	5	15	20	15	5	20	50
8IT4-22	Software Testing and Validation Lab	15	5	20	5	15	20	15	5	20	50
8IT7-50	Project	210						140			350
8ME4-21	Industrial Engineering Lab	15	5	20	5	15	20	15	5	20	50
8ME4-22	Metrology Lab	15	5	20	5	15	20	15	5	20	50
8ME7-50	Project	210						140			350

NOTE: - (1) In Attendance & Performance marks should be given on the basis of student overall performance in semester i. e. continuous evaluation.
(2) In Common Pool marks should be given by HOD on the basis of student Assignment,Non Syllabus Activity,Online Exam Exam,Application/Survey / Case Study based Learning, Pre-Placement Activity, Department Level Career Oriented Activities through out the semester.

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

9 Department Load Allocation

POORNIMA COLLEGE OF ENGINEERING, JAIPUR

Department of Electrical Engineering

Load Sheet of Session 2021-22(Even Semester)

Sr. No.	Faculty Name	Subject(s)	Subject Code	Section	L	T	P	Load Per Week	Total Load
1	Dr. PRAVIN MACHHINDRA SONWANE	Computer Architecture	6EE3-01	A	3	0	0	3	6
		HVDC Transmission System (Elective-I)	8EE4-11	A,B	3	0	0	3	
2	Dr. BABITA JAIN	Project	8EE7-50	A1	0	0	8	8	8
3	DR. PANKAJ GAKHAR	Electrical Machine - II	4EE4-05	A	3	0	0	3	7
		Electrical Machine - II Lab	4EE4-21	A	0	0	4	4	
4	Dr. GAURAV JAIN	Digital Electronics	4EE4-08	A	2	0	0	2	7
		Digital Electronics Lab	4EE4-23	A	0	0	2	2	
		Electrical Energy Conversion and Auditing	6EE4-04	A	3	0	0	3	
5	Dr. MONIKA VARDIA	Electronic Measurement & Instrumentation	4EE3-04	A	3	0	0	3	8
		Measurement Lab	4EE3-24	A	0	0	2	2	
		Power System Planning (Elective-1)	6EE5-11	A	3	0	0	3	
6	Dr. JYOTI SHUKLA	Power System - II	6EE4-02	A	3	0	0	3	7
		Power System - II Lab	6EE4-21	A1	0	0	4	4	
7	Dr. NEERAJ TIWARI	Power System - II Lab	6EE4-21	A2	0	0	4	4	8
		Power System - II Lab	6EE4-21	A3	0	0	4	4	
8	Dr. DEEPIKA CHAUHAN	Power System Protection Lab	6EE4-23	A1	0	0	2	2	6
		Power System Protection Lab	6EE4-23	A2	0	0	2	2	
		Power System Protection Lab	6EE4-23	A3	0	0	2	2	
9	Dr. AMIT SHRIVASTAVA	Modelling and simulation lab	6EE4-24	A1	0	0	2	2	6
		Modelling and simulation lab	6EE4-24	A2	0	0	2	2	
		Modelling and simulation lab	6EE4-24	A3	0	0	2	2	
10	Dr. RANJEET KUMAR	Electric Drives Lab	6EE4-22	A2	0	0	4	4	8
		Electric Drives Lab	6EE4-22	A3	0	0	4	4	
11	DR. HEMANT KAUSHIK	Electrical and Hybrid Vehicles (Elective-2)	6EE5-13	A	3	0	0	3	3
12	Ms. RICHA CHAUDHARY	Power System Protection	6EE4-03	A	3	0	0	3	3
13	MR. PANKAJ VERMA	Electric Drives	6EE4-05	A	3	0	0	3	7
		Electric Drives Lab	6EE4-22	A1	0	0	4	4	
14	Mr. BHAVANESH CHANDRA SHARMA	Signals & Systems	4EE4-07	A	3	0	0	3	3
15	Ms. SHEENA TAHIRA KHAN	Advance Electric Drives (Elective-I)	8EE4-13	A,B	3	0	0	3	3
16	MR. AJIT SINGH RAJAWAT	Power Electronics	4EE4-06	A	3	0	0	3	7
		Power Electronics Lab	4EE4-22	A	0	0	4	4	
17	MR. MANISH SHARMA	Project	8EE7-50	A2	0	0	8	8	8
18	MR. KAVEENDRA KUMAR	Project	8EE7-50	A3	0	0	8	8	8
19	MR. ANMOL CHATURVEDI	Project	8EE7-50	B1	0	0	8	8	8
20	MR. ARPIT KHANDELWAL	Project	8EE7-50	B2	0	0	8	8	8
21	Ms. EKATA SHARMA	Soft Computing	8EE6-60.2	A,B	3	0	0	3	3
22	MR. ABHISHEK SINGH	Energy Audit and Demand side Management	8EE6-60.1	A,B	3	0	0	3	3
23	Mr. ANAND SHARMA	Project	8EE7-50	B3	0	0	8	8	8
24	Mr. ASHISH RAJ	Energy System Lab	8EE4-21	A1,B1	0	0	8	8	8
25	Mr. KAPIL SHRIVASTAVA	Energy System Lab	8EE4-21	A2,B2	0	0	8	8	8
26	Mr. SURENDRA SHARMA	Energy System Lab	8EE4-21	A3,B3	0	0	8	8	8
27	Mr. JALDEEP KUMAR								
28	MR. VIKAS KUMAR SHARMA								
29	Dr. MEENA TEKRIWAL	Biology	4EE2-01	A	2	0	0	2	2
30	MS. KALPANA SHARMA	Managerial Economics and Financial Accounting	4EE1-03	A	2	0	0	2	2

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

10 Time Table

10.1 Orientation Time Table

Poornima College of Engineering						
Department of Electrical Enginering						
Time Table for Orientation Program (EVEN Semester, 2021-22)						
II Year						
Day/Time	9:00 AM - 10:00 AM	10:00 AM - 11:00 AM	11:00 AM - 12:00 PM	12:00 PM - 12:30 PM	12:30 PM - 01:30 PM	01:30 PM - 02:30 PM
Monday 20/09/2021	Tutor Interaction (Dr. Pankaj Gakhar)	NAAC/NBA Philosophy (Mr. Mayank Sharma)	Electrical Machine-II Overview (Dr. Pankaj Gakhar)	L U N C H	Electrical Measurement overview (Dr. Monika Vardia)	Analog Electronics overview (Mr. Mayank Sharma)
Tuesday 21/09/2021	HOD Interaction (Dr. Pravin Sonwane)	Research Paper Writing (Mr. Mayank Sharma)	Power Electronics Overview (Mr. Ajit Singh Rajawat)		Digital Electronics Lab Overview (Dr. Gaurav Jain)	Electrical Circuit Analysis overview (Mr. Mayank Sharma)
Wednesday 22/09/2021	Biology overview (Dr. Meena Takriwal)	Electrical Machine -II Lab Overview (Dr. Pankaj Gakhar)	Project overview (Dr. Gaurav Jain)		Director Interaction (Dr. Mahesh Bundele)	EM & PE Lab overview (Mr. Mayank Sharma)

Poornima College of Engineering						
Department of Electrical Enginering						
Time Table for Orientation Program (EVEN Semester, 2021-22)						
III Year						
Day/Time	9:00 AM - 10:00 AM	10:00 AM - 11:00 AM	11:00 AM - 12:00 PM	12:00 PM - 12:30 PM	12:30 PM - 01:30 PM	01:30 PM - 02:30 PM
Monday 20/09/2021	HOD Interaction (Dr. Pravin Sonwane)	NSP (Dr. Gaurav Jain)	EECA overview (Dr. Gaurav Jain)	L U N C H	Power System-II overview (Dr. Jyoti Shukla)	Electric Drive Lab Overview (Mr. Pankaj Verma)
Tuesday 21/09/2021	Power System Planning overview (Dr. Monika Vardia)	Research Paper Writing (Mr. Mayank Sharma)	Computer architecture overview (Dr. Praveen Sonwane)		Director Interaction (Dr. Mahesh Bundele)	Tutor Interaction (Dr. Gaurav Jain)
Wednesday 22/09/2021	Power System-II Lab (Dr. Jyoti Shukla)	NAAC/NBA Philosophy (Mr. Mayank Sharma)	Electric Drive overview (Mr. Pankaj Verma)		Placement (Dr. Pankaj Gakhar)	Modulation and Simulation lab overview (Dr. Monika Vardia)

POORNIMA COLLEGE OF ENGINEERING						
Department of Electrical Enginering						
Time Table for Orientation Program (EVEN Semester, 2021-22)						
IV Year						
Day/Time	9:00 AM - 10:00 AM	10:00 AM - 11:00 AM	11:00 AM - 12:00 PM	12:00 PM - 12:30 PM	12:30 PM - 01:30 PM	01:30 PM - 02:30 PM
Monday, 06/09/2021	Tutor Interaction (Dr. Pankaj Gakhar)	HOD Interaction (Dr. Pravin Sonwane)	Internship and placement (Mr. Ajit Singh Rajawat)	L U N C H	Subject Overview-HVDC Transmission (Dr. Monika Vardia)	
Tuesday, 07/09/2021	Project (Dr. Gaurav Jain)	NAAC/NBA Philosophy (Mr. Mayank Sharma)	Director Interaction (Dr. Mahesh Bundele)		Subject Overview-ES Lab (Dr. Pankaj Verma)	
Wednesday, 08/09/2021	Add-On/Skill Development Courses (Dr. Pravin Sonwane)	MOOC (Dr. Gaurav Jain)	Subject Overview-Advanced Electric Drive (Mr. Pankaj Verma)		Subject Overview-Open Elective (Dr. Gaurav Jain/Mr. Jyoti Shukla)	

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

10.2 Academic Time Table

Poornima College of Engineering								
Department of Electrical Enginering								
Time Table(IV Sem/IIYr)(17) Location: CT-23, Wef:27.01.2022								
Day/Time	8:30-9:30	9:30-10:30	10:30-11:30	11:30-12:10	12:10-1:10	1:10-2:10	2:10-3:10	3:10-4:00
Monday	DE,4EE4-08,GJ	PE,4EE4-06,ASR	EMI, 4EE3-04,MV	LUNCH	PE LAB, 4EE4-22, ASR, AT-12		SS,4EE4-07,BCS	4NSPEE,JS
Tuesday	EM-II, 4EE4-05, PKG	EM-II Lab,4EE4-21,HK,AT-08			4NSPEE,JS	BIO,4EE2-01,MT	SS,4EE4-07,BCS	Add On-1
Wednesday	DE,4EE4-08,GJ	PE,4EE4-06,ASR	EMI, 4EE3-04,MV		EMI, 4EE3-04,MV	EM-II, 4EE4-05, PKG	SS,4EE4-07,BCS	CLUB/LIBRARY
Thursday	EM-II, 4EE4-05, PKG	MEFA,4EE1-03,KS	EM-II, 4EE4-05, PKG		DE Lab,4EE4-24,GJ,AT-02		PE,4EE4-06,ASR	Add On-1
Friday	DE,4EE4-08,GJ	BIO,4EE2-01,MT	MEFA,4EE1-03,KS		Measurement Lab,4EE3-24,MV,AT-16		PE,4EE4-06,ASR	Add On-1
Saturday	INDUSTRY INSTITUTE INTERACTION				INDUSTRY INSTITUTE INTERACTION			

Sub. Code	Subject Name	Name of Faculty	Abb.	Lab. Code	Lab Name	Name of Faculty	Abb.
4EE2-01	Biology	Dr. Meena Takeriwal	MT	4EE4-21	Electrical Machine - II Lab	Dr. Hemant Kaushik	HK
4EE1-03	Managerial Economics and Financial Accounting	Ms. Kalpana Sharma	KS	4EE4-22	Power Electronics Lab	Mr. Ajit Singh Rajawat	ASR
4EE3-04	Electronic Measurement & Instrumentation	Dr. Monika Vardiya	MV	4EE4-23	Digital Electronics Lab	Dr. Gaurav Jain	GJ
4EE4-05	Electrical Machine - II	Dr. Pankaj Gakhar	PKG	4EE3-24	Measurement Lab	Dr. Monika Vardiya	MV
4EE4-06	Power Electronics	Mr. Ajit Singh Rajawat	ASR	4NSPEE	Non Syllabus Project	Dr. Jyoti Shukla	JS
4EE4-07	Signals & Systems	Mr. Bhavnesh Chandra Sharma	BCS				
4EE4-08	Digital Electronics	Dr. Gaurav Jain	GJ				

Time Table Co-ordinator
Mr. Ajit Singh Rajawat

Tutor
Mr. Ajit Singh Rajawat

HOD(EE)
Dr. Pravin M. Sonwa

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

Poornima College of Engineering

Department of Electrical Enginering

Time Table(IV Sem/IIYr)(17) Location: CT-13, Wef:20.01.2022

Day/Time	8:30-9:30	9:30-10:30	10:30-11:30	11:30-12:10	12:10-1:10	1:10-2:10	2:10-3:10	3:10-4:00
Monday	PSP(MV)/ EHV(PG)	EECA, 6EE4-04, GJ	PSPR, 6EE4-03, ASR		6EE4-02, PS-II, JS	6EE4-02, PS-II, JS	ED, 6EE4-05, PV	NSP, 6EENSP, GJ
Tuesday	ED, 6EE4-05, PV	EECA, 6EE4-04, GJ	PSPR, 6EE4-03, ASR		6EE3-01, CA, PMS	6EE4-02, PS-II, JS	6EE3-01, CA, PMS	Add On-1
Wednesday	PSP(MV)/ EHV(PG)	EECA, 6EE4-04, GJ	PSPR, 6EE4-03, ASR	LUNCH	6EE3-01, CA, PMS	6EE3-01, CA, PMS	PSP(MV)/ EHV(PG)	NSP, 6EENSP, PKG
Thursday	ED Lab, 6EE4-22, RK, A2,AT-13 M & S Lab, 6EE4-24, AS, A1,AT-20B PS-II Lab, 6EE4-21, NT, A3,AT-20A		ED, 6EE4-05, PV		PSP Lab, 6EE4-23, DC, A2,AT-15 M & S Lab, 6EE4-24, AS, A3,AT-20B PS-II Lab, 6EE4-21, ES, A1,AT-20A		ED, 6EE4-05, PV	Add On-1
Friday	6EE4-02, PS-II, JS	PSP Lab, 6EE4-23, DC, A3,AT-15 M & S Lab, 6EE4-24, AS, A2,AT-2-B ED Lab, 6EE4-22, SK, A1,AT-13			PSP Lab, 6EE4-23, DC, A1,AT-15 ED Lab, 6EE4-22, RK, A3,AT-13 PS-II Lab, 6EE4-21, NT, A2,AT-20A		NSP, 6EENSP, GJ	Add On-1
Saturday	INDUSTRY INSTITUTE INTERACTION				INDUSTRY INSTITUTE INTERACTION			

Sub. Code	Subject Name	Name of Faculty	Abb.	Lab. Code	Lab Name	Name of Faculty	Abb.
6EE3-01	Computer Architecture	Dr.Pravin Sonwane	PS	6EE4-21	Power System - II Lab	Ms. EKATA SHARMA(A1),Dr. NEERAJ TIWARI(A2 & A3)	ES,NT
6EE4-02	Power System - II	Dr. Jyoti Shukla	JS	6EE4-22	Electric Drives Lab	Ms. SHEENA TAHIRA KHAN(A1),Dr. RANJEET KUMAR(A2 & A3)	SK,RK
6EE4-03	Power System Protection	Mr. Ajit Singh Rajawat	ASR	6EE4-23	Power System Protection Lab	Dr. DEEPIKA CHAUHAN(A1 & A2 & A3)	DC
6EE4-04	Electrical Energy Conversion and Auditing	Dr. Gaurav Jain	GJ	6EE4-24	Modelling and simulation lab	Dr. AMIT SHRIVASTAVA(A1 & A2 & A3)	AS
6EE4-05	Electric Drives	Mr. Pankaj Verma	PV	6NSPEE	NSP	Dr. Gaurav Jain	GJ
6EE5-11	Power System Planning (Elective-1)	Dr. Monika Vardia	MV				
6EE5-13	Electrical and Hybrid Vehicles (Elective-2)	Dr. Pankaj Gakhar	PKG				

Time Table Co-ordinator
Mr. Ajit Singh Rajawat

Tutor
Dr. Gaurav Jain

HOD(EE)
Dr. Pravin M. Sonwane

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

Poornima College of Engineering

Department of Electrical Enginering

Time Table(IV Sem/IIYr)(17) Location: CT-04, Wef:20.01.2022

Day/Time	8:30-9:30	9:30-10:30	10:30-11:30	11:30-12:10	12:10-1:10	1:10-2:10	2:10-3:10	3:10-4:00
Monday	O.E.	8EE7-50,Project(A1),BJ ES Lab,8EE4-21(A2),KS,AT-20A 8EE7-50,Project(A3),KK		L U N C H	P.E.	8EE7-50,Project(A2),MS ES Lab,8EE4-21(A1),AR,AT-20B 8EE7-50,Project(A3),KK		Add on-2
Tuesday	O.E.	8EE7-50,Project(A1),BJ ES Lab,8EE4-21(A3),SS,AT-20A 8EE7-50,Project(A2),MS			P.E.	8EE7-50,Project(A1),BJ ES Lab,8EE4-21(A2),KS,AT-20A 8EE7-50,Project(A3),KK		Add on-2
Wednesday	O.E.	8EE7-50,Project(A2),MS ES Lab,8EE4-21(A1),AR,AT-20B 8EE7-50,Project(A3),KK			P.E.	8EE7-50,Project(A1),BJ ES Lab,8EE4-21(A3),SS,AT-20A 8EE7-50,Project(A2),MS		Add on-2
Thursday								
Friday								
Saturday								

Sub. Code	Subject Name	Name of Faculty	Abb.	Lab. Code	Lab Name	Name of Faculty	Abb.
8EE4-11	HVDC Transmission System (8-PE-1)	DR. HEMANT KAUSHIK	HK	8EE4-21	Energy System Lab	Mr. ASHISH RAJ(A1),Mr. KAPIL SHRIVASTAVA(A2),Mr. SURENDRA SHARMA(A3)	AR,KS,SS
8EE4-13	Advanced Electric Drives (8-PE-2)	MR. PANKAJ VERMA	PV	8EE7-50	Project	Dr. BABITA JAIN(A1),MR. MANISH SHARMA(A2),MR. KAVEENDRA KUMAR(A3)	BJ,MS,KK
8EE6-60.1	Energy Audit and Demand side Management	Dr. GAURAV JAIN	GJ				
8EE6-60.2	Soft Computing	Dr. JYOTI SHUKLA	JS				

Time Table Co-ordinator
Mr. Ajit Singh Rajawat

Tutor
Mr. Pankaj Verma

Dr. Pravin M. S

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

Poornima College of Engineering

Department of Electrical Enginering

Time Table(IV Sem/IIYr)(17) Location: CT-03, Wef:20.01.2022

Day/Time	8:30-9:30	9:30-10:30	10:30-11:30	11:30-12:10	12:10-1:10	1:10-2:10	2:10-3:10	3:10-4:00
Monday	O.E.	8EE7-50,Project(B2),AK ES Lab,8EE4-21(B1),AR,AT-20B 8EE7-50,Project(B3),AS			P.E.	8EE7-50,Project(B1),AC ES Lab,8EE4-21(B3),SS,AT-20A 8EE7-50,Project(B2),AK		Add on-2
Tuesday	O.E.	8EE7-50,Project(B1),AC ES Lab,8EE4-21(B2),KS,AT-20B 8EE7-50,Project(B3),AS			P.E.	8EE7-50,Project(B2),AK ES Lab,8EE4-21(B1),AR,AT-20B 8EE7-50,Project(B3),AS		Add on-2
Wednesday	O.E.	8EE7-50,Project(B1),AC ES Lab,8EE4-21(B3),SS,AT-20A 8EE7-50,Project(B2),AK			P.E.	8EE7-50,Project(B1),AC ES Lab,8EE4-21(B2),KS,AT-20B 8EE7-50,Project(B3),AS		Add on-2
Thursday								
Friday								
Saturday								

Sub. Code	Subject Name	Name of Faculty	Abb.	Lab. Code	Lab Name	Name of Faculty	Abb.
8EE4-11	HVDC Transmission System (8-PE-1)	DR. HEMANT KAUSHIK	HK	8EE4-21	Energy System Lab	Mr. ASHISH RAJ(B1),Mr. KAPIL SHRIVASTAVA(B2),Mr. SURENDRA SHARMA(B3)	AR,KS,SS
8EE4-13	Advanced Electric Drives (8-PE-2)	MR. PANKAJ VERMA	PV	8EE7-50	Project	MR. ANMOL CHATURVEDI(B1),MR. ARPIT KHANDELWAL(B2),Mr. ANAND SHARMA(B3)	AC,AK,AS
8EE6-60.1	Energy Audit and Demand side Management	Dr. GAURAV JAIN	GJ				
8EE6-60.2	Soft Computing	Dr. JYOTI SHUKLA	JS				

Time Table Co-ordinator
Mr. Ajit Singh Rajawat

Tutor
Dr. Pankaj Gakhar

HOD(EE)
Dr. Pravin M. Sonune

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

11 Course Outcome Attainment Process:

11.1 Course Outcome Attainment Process

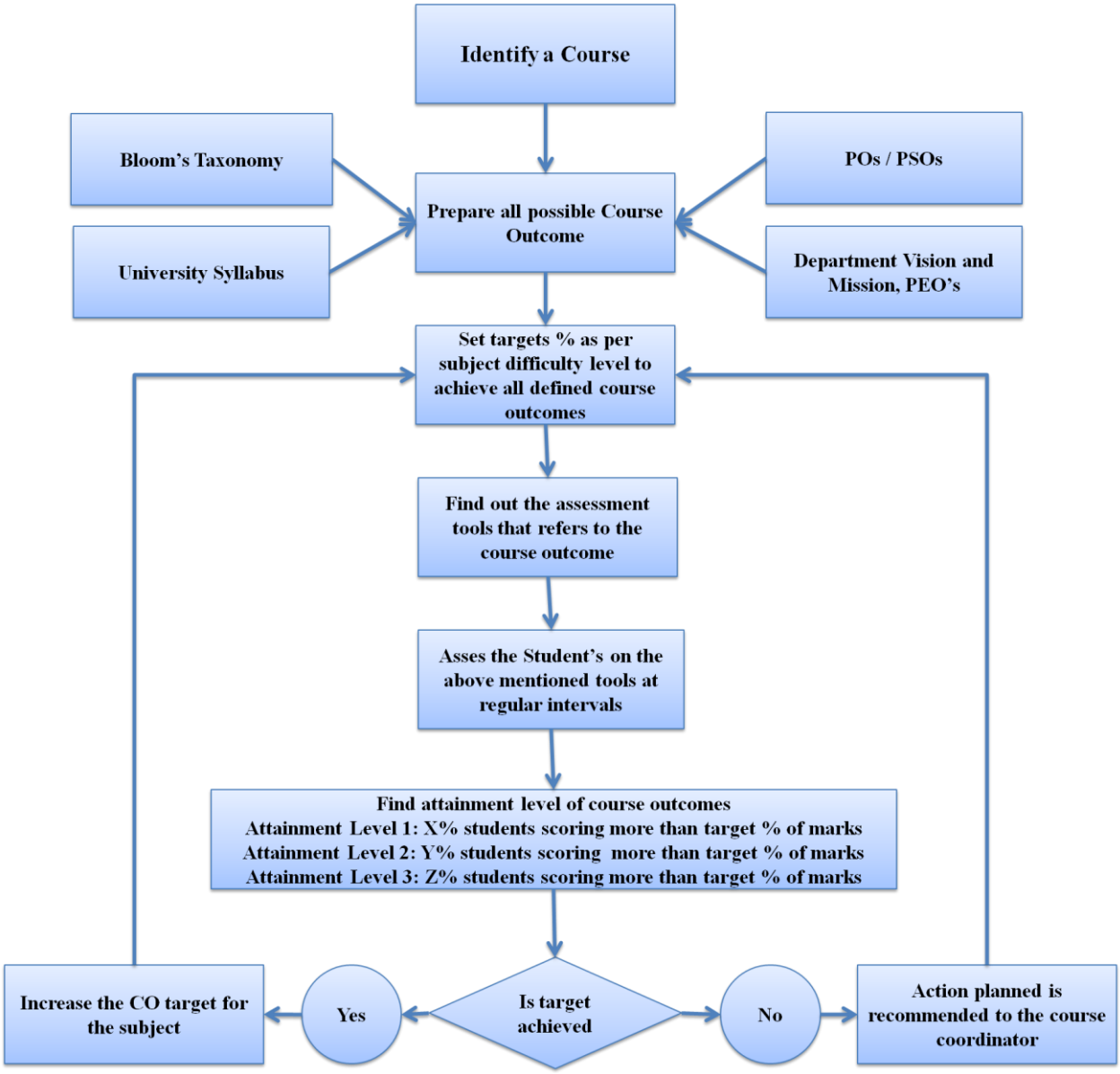


Figure. Course Outcome Attainment Process

11.2 List of CO & CO mapping with PO

Poornima College of Engineering, Jaipur																	
Department of Electrical Engineering																	
CO-PO & CO-PSO Mapping (2022-23)																	
S.No	Course Code	Course Name	CO No	Course Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
1	**4EE2-01**	Biology	CO 1	**Recall** the significance of Biology as important scientific discipline and its classification.	3	-	-	-	-	1	-	-	-	-	-	-	1	-	-
			CO 2	**Enhance** conceptual knowledge of genetics and bio molecules	-	2	-	-	-	1	2	-	-	-	-	-	2	1	-
			CO 3	**Memorize** concepts of enzymes, information transfer and macromolecular analysis	2	-	-	-	-	-	3	-	-	-	-	-	1	-	-
			CO 4	**Compare** metabolism and microbiology.	3	-	-	-	-	-	-	-	-	-	-	-	1	-	-
					2.67	2.00	-	-	-	1.00	2.50	-	-	-	-	-	1.25	1.00	-
2	**4EE1-03**	Managerial Economics and Financial Accounting	CO 1	**Discuss** the concepts of economics like demand, supply, market structure and financial management like balance sheet.	-	-	-	-	-	2	-	3	-	-	3	-	-	2	-
			CO 2	**Apply** the economic functions and theories like: demand & supply functions, production & cost functions & pricing theories	-	-	-	2	-	3	-	3	-	-	3	-	-	2	-
			CO 3	**Analyse** the relationship between economic variables using the concept of elasticity, cash	-	2	-	-	-	-	-	3	-	-	3	-	2	1	-

				flow analysis, fund flow analysis and ratio analysis.															
			CO 4	**Evaluate** the real life problems of business organizations using capital budgeting techniques.	2	-	-	3	-	3	2	3	-	-	3	-	1	2	-
					2.00	2.00	-	2.50	-	2.67	2.00	3.00	-	-	3.00	-	1.50	1.75	-
3	**4EE3-04**	Electronic Measurement & Instrumentation	CO 1	**Explain** the working operation and classification of measuring instruments with their applications [**Understsand]**	2		-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 2	**Demonstarte** the working principle of wattmeters and energy meters. [**Apply]**	2	-	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 3	**Evaluate** the performance of AC /DC Potentiometer [**Analysis**]	-	2	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 4	**Categorize** the various types of resistances used for measurement purposes	-	-	3	-									-	2	-
			CO 5	**Design** the characteristics of various AC bridges. [**Evaluation**]	-	-	2	-	-	-	-	-	-	-	-	-	-	1	-
					2.00	2.00	2.50	-	-	-	-	-	-	-	-	-	2.00	1.50	-
4	**4EE4-05**	Electrical Machine - II	CO 1	**Explain** the fundamental concepts, principles and analysis of AC rotating machines. [**Understsand**]	2	-	-	-	-	-	-	-	-	-	-	-	3	-	-
			CO 2	**Analyze** performance of Induction & Synchronous machine in addition to	-	3	-	-	-	-	-	-	-	-	-	-		2	-

				revolving magnetic field theory. [**Analyze**]															
			CO 3	**Design** of winding type required for production of revolving magnetic field. [**Synthesis**]	-	-	2	-	-	-	-	-	-	-	-	-	-	-	2
			CO 4	**Compare** characteristics of induction and synchronous machines to identify the best suitable solution for its problem. [**Analysis**]	-	2	-	-	-	-	-	-	-	-	-	-	-	3	-
					2.00	2.50	2.00	-	-	-	-	-	-	-	-	-	3.00	2.50	2.00
5	**4EE4-06**	Power Electronics	CO 1	**Demonstrate** the characteristics of power diodes, thyristors (SCRs), IGBTs, MOSFETs, and IGBTs, as well as gate triggering methods of SCRs **[Apply]**	2	-	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 2	**Examine** the waveforms of single phase and three phase controlled rectifiers for R and RL loads**.[Analyze]**	-	3	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 3	**Choose** an appropriate DC-DC converter based on the output application requirements. **[Evalaute]**	-	-	-	2	-	-	-	-	-	-	-	-	-	1	-
			CO 4	**Create** an inverter circuit that uses PWM to smooth the output waveform. **[Create]**	-	-	2	-	-	-	-	-	-	-	-	-	-	2	-
					2.00	3.00	2.00	2.00	-	-	-	-	-	-	-	-	2.00	1.50	-
6			CO 1	**State** the concept, properties and behavior of different	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-

				types of signals, systems, transforms and related techniques. **[REMEMBER]**.															
	4EE4-07	Signals & Systems	CO 2	**Explain** the concept, properties and behavior of different types of signals, systems, transforms and related techniques. **[UNDERSTAND]**.	2	-	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 3	**Use** the fundamentals of different types of signals, systems, transforms and related techniques in analog circuits. **[APPLY]**	3	-	-	-	-	-	-	-	-	-	-	-	3	-	-
			CO 4	**Differentiate** between different types of signals, systems, transforms and related techniques as per the need of applications. **[ANALYZE]**	-	2	-	-	-	-	-	-	-	-	-	-	-	-	2
					2.00	2.00	-	-	-	-	-	-	-	-	-	-	2.33	-	2.00
7	**4EE4-08**	Digital Electronics	CO 1	**Explain** the concept and working of different types of convertors, PLD's, combinational and sequential digital circuits. **[UNDERSTAND]**.	2	-	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 2	**Use** the fundamentals of convertors, PLD's, combinational and sequential digital circuits as per the need of applications. **[APPLY]**	3	-	-	-	-	-	-	-	-	-	-	-	3	-	-
			CO 3	**Examine** the relationship between input and output of different types of convertors, PLD's, combinational and sequential digital circuits. **[ANALYZE]**	-	2	-	-	-	-	-	-	-	-	-	-	-	-	2

			CO 4	**Select** the appropriate convertor, PLD, combinational and sequential digital circuit as per the need of applications. **[EVALUATE]**	-	-	-	2	-	-	-	-	-	-	-	-	-	-	2
			CO 5	**Design** different types of convertors, PLD's, combinational and sequential digital circuits as per the requirements of application.**[CREATE]**	-	-	2	-	-	-	-	-	-	-	-	-	-	2	-
					2.50	2.00	2.00	2.00	-	-	-	-	-	-	-	-	2.50	2.00	2.00
8	**4EE4-21**	Electrical Machine - II Lab	CO 1	**Apply** the principles of Electrical Machines through laboratory experimental work.	3	-	-	-	-	-	-	-	-	-	-	3	3	-	-
			CO 2	**Prepare** reports based on performed experiments with effective demonstration of diagrams and characteristics /graph	-	-	-	-	-	-	-	-	3	-	-	3	-	2	-
			CO 3	**Develop** the experimants on ac machines on virtual lab	-	-	-	-	3	-	-	-	-	-	-	-	2	-	-
			CO 4	**Demonstrate** the starting & speed control of AC motors	-	-	-	-	-	2	-	-	2	-	-	-	2	-	-
			CO 5	**Perform** various tests, find efficiency & voltage regulation of electrical machines	-	-	-	-	-	3	-	-	-	-	-	-	2	-	-
					3.00	-	-	-	3.00	2.50	-	-	2.50	-	-	3.00	2.25	2.00	-
9	**4EE4-22**	Power Electro	CO 1	**Demonstrate** the performance, characteristics, ratings,	-	-	-	-	-	-	-	2	-	-	-	2	-	1	1

		nics Lab		and applications of power diodes, power transistors, thyristors, DIACs, TRIACs, IGBTs, MOSFETs, GTOs, MCTs, and SITs.															
			CO 2	**Examine** the following SCR firing schemes: R, RC, and UJT.	-	-	-	-	-	-	-	-	2	-	-	-	2	-	-
			CO 3	**Evaluate** the various dynamic waveforms of uncontrolled, semi-controlled, and fully controlled bridge rectifiers**.**	-	-	-	-	2	-	-	-	-	-	-	1	-	2	-
			CO 4	**Create** the waveforms for a half-controlled bridge rectifier to regulate the speed of a DC motor**.**	-	-	-	-	-	-	-	-	-	1	2	-	-	1	1
					-	-	-	-	2.00	-	-	2.00	2.00	1.00	2.00	1.50	2.00	1.33	1.00
10	**4EE4-23**	Digital Electronics Lab	CO 1	**Develop** the understanding of number system and its application in digital electronics and compare different types of logic families	2	-	-	-	-	-	-	-	-	-	-	-	1	-	1
			CO 2	**Perform** experiments on adder, subtractor, multiplexer and demultiplexer to verify truth table.	-	-	2	-	2	-	-	-	-	-	-	-	2	2	1
			CO 3	**Design** various sequential circuits using switching speed, throughput/latency, gate count and area, energy dissipation and power.	-	1	-	-	2	-	-	-	-	-	-	-	3	-	-

			CO 4	**Apply** the memory devices in different types of digital circuits for real world application.	-	-	-	-	1	-	-	-	1	-	-	2	3	-	-
					2.00	1.00	2.00	-	1.67	-	-	-	1.00	-	-	2.00	2.25	2.00	1.00
11	**4EE4-24**	Measurement Lab	CO 1	**Discuss** the basics of measurement of electrical quantities	2	-	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 2	**Measure** the voltage, current and resistance of electrical circuit using potentiometer	2	-	-	-	-	-	-	-	2	-	-	-	2	-	-
			CO 3	**Evaluate** the unknown resistance and inductance in electrical circuits using ac bridges	-	2	-	-	-	-	-	-	-	-	-	-	1	1	-
			CO 4	**Calibrate** a single-phase energy meter by phantom loading at different power factors.	-	2	-	-	-	2	-	-	2	-	-	-	2	-	-
					2.00	2.00	-	-	-	2.00	-	-	2.00	-	-	-	1.75	1.00	-
Semester IV Overall PO					2.22	2.06	2.10	2.17	2.22	2.04	2.25	2.50	1.88	1.00	2.50	2.17	2.08	1.66	1.60
1	6EE3-01	Computer Architecture	CO 1	**Describe** the architecture, memory & input-output organization of computers along with 16,32 bit microprocessor.**[Apply]**	2	-	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 2	**Infer** addressing modes, programming models, instruction level pipelining , and memory management units**.[Analyze]**	-	2	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 3	**Assess** multi bus organization, interrupt &	-	3	-	-	-	-	-	-	-	-	-	-	-	1	-

				interrupt controllers, real mode addressing, and dynamic scheduling**.[Evaluate]**															
			CO 4	**Relate** data types, micro instructions, memory types, interface circuits, and instruction sets**[Design]**	-	-	3	-	-	-	-	-	-	-	-	-	-	2	-
					2.00	2.50	3.00	-	-	-	-	-	-	-	-	-	2.00	1.50	-
2	**6EE4-02**	Power System - II	CO 1	**Manipulate** the power flow equations to analyse the voltage and frequency issues of system.**[Apply]**	3	-	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 2	**Examine** the system stability and contigency by observing the system voltage and frequency .**[Analyze]**	-	3	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 3	**Interpret** the power and demand side management in the prospect of optimum utilization of electrical energy by dynamic pricing strategy.**[Evaluate]**	-	2	-	-	-	-	-	-	-	-	-	-	-	1	-
			CO 4	**Summarize** different case studies on power system to assess system security**.[Design]**	-	-	-	2	-	-	-	-	-	-	-	-	2	-	-
					3.00	2.50	-	2.00	-	-	-	-	-	-	-	-	2.00	1.00	-
3	**6EE4-03**	Power System Protection	CO 1	**Demonstrate** the fundamentals, fault analysis techniques, and applications of power	2	-	-	-	-	-	-	-	-	-	-	-	2	-	-

				system protection. **[Apply]**															
			CO 2	**Examine** the impact of power fluctuations on various parameters of power systems. **[Analyze]**	-	3	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 3	**Design** & simulate digital modelling parameters of power system	-	-	3	-	-	-	-	-	-	-	-	-	-	2	-
			CO 4	**Evaluate** power system sampling and aliasing concerns.	-	-	-	2	-	-	-	-	-	-	-	-	1	2	-
					2.00	3.00	3.00	2.00	-	-	-	-	-	-	-	-	1.67	2.00	-
4	**6EE4-04**	Electrical Energy Conversion and Auditing	CO 1	**Describe** the energy scenario, energy strategy, energy law's, energy security and maximization of energy efficiency. **[Apply]**	2	-	-	-	-	-	-	-	-	-	-	-	1	-	-
			CO 2	**Identify** energy conservation techniques and energy efficient technologies for developing electrical and industrial equipment.**[Analyze]**	-	3	-	-	-	-	-	-	-	-	-	-	2	1	1
			CO 3	**Evaluate** pricing, energy audit, energy management and energy balance of an industry or organization.	-	-	2	-	-	-	-	-	-	-	-	-	2	1	1
			CO 4	**Develop** methods of energy optimization, power factor improvement and fuel & energy substitution .	-	-	-	3	-	-	-	-	-	-	-	-	2	1	1
					2.00	3.00	2.00	3.00	-	-	-	-	-	-	-	-	1.75	1.00	1.00
5	**6EE4-05**	Electric Drives	CO 1	**Explain** the in-depth concepts of DC and AC drives, scalar & vector control of ac motors, and	2	-	-	-	-		-	-	-	-	-	-	2	-	-

				multi-quadrant operation of drives. **[Apply]**															
			CO 2	**Relate** the power electronics and roburst control system knowledge for the precise speed control of AC and DC motors. **[Analyze]**	-	2	-	-	-		-	-	-	-	-	-	2	-	-
			CO 3	**Estimate** the closed loop control structure of DC drives and vector control of AC drives.**[Design]**	-	-	2	-	-		-	-	-	-	-	-	-	1	-
			CO 4	**Evaluate** the application based accurate speed control techniques for AC and DC motors.	-	-	-	3	-		-	-	-	-	-	-	2	-	-
					2.00	2.00	2.00	3.00	-	-	-	-	-	-	-	-	2.00	1.00	-
6	**6EE5-11**	Power System Planning.	CO 1	**Define** the basic structure of Indian power sector with organizing & monitoring bodies.**[Apply]**	2	-	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 2	**Select** the Reliability Planning Criteria for Generation, Transmission and Distribution**.[Analyze]**	-	2	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 3	**Evaluate** the factors affecting load dispatch and modeling of Generation Sources.	-	-	3	-	-	-	-	-	-	-	-	-	-	1	-
			CO 4	**Estimate** the Objectives of Transmission Planning with Network Reconfiguration**.[Design]**	-	-	2	-	-	-	-	-	-	-	-	-	-	2	-
					2.00	2.00	2.50	-	-	-	-	-	-	-	-	-	2.00	1.50	-

7	**6EE5-13**	Electrical and Hybrid Vehicles.	CO 1	**Demonstrate** different configurations of electric vehicles and its components, hybrid vehicle configuration , sizing of components and energy management**.[Apply]**	2	-	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 2	**Analyze** the performance of electric and hybrid electric vehicle	-	3	-	-	-	-	-	-	-	-	-	-	-	3	-
			CO 3	**Design** the hybrid vehicle and battery electric vehicles with optimized energy management strategies.	-	-	2	-	-	-	-	-	-	-	-	-	-	-	3
			CO 4	**Evaluate** the drive train topologies in electric as well as hybrid electric vehicle.	-	-	-	3	-	-	-	-	-	-	-	-	-	-	3
					2.00	3.00	2.00	3.00	-	-	-	-	-	-	-	-	2.00	3.00	3.00
8	**6EE4-21**	Power System - II Lab	CO 1	**Practice** different fault conditions in power system and synchronous machine using simulation tools.**[Apply]**	-	2	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 2	**Execute** steady state power flow using Gauss-Seidel, Newton-Raphson and fast decoupled iterative methods for given system.**[Analyze]**	-	-	-	-	2	-	-	-	-	-	-	-	-	2	-
			CO 3	**Assess** voltage security and overload security-using MATLAB.**[Evaluate]**	-	-	-	-	-	3	-	-	-	-	-	-	-	2	-

			CO 4	**Solve** economic load dispatch problem for given power system network.**[Precision]**	-	-	-	-	-	3	2	-	-	-	-	-	1	-	-
			CO 5	**Devise** the transient stability analysis using MATLAB/ETAP Software.**[Design]**	-	-	-	-	3	-	-	-	-	-	-	-	2	-	-
					-	2.00	-	-	2.50	3.00	2.00	-	-	-	-	-	1.67	2.00	-
9	**6EE4-22**	Electric Drives Lab	CO 1	**Explain** the connections of basic and advanced control schemes of AC and DC drives.**[Apply]**	3	-	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 2	**Select** the appropriate control technique for speed control of motors based upon the requirement of the application.**[Analyze]**	-	-	-	-	-	-	-	3	2	-	-	-	-	3	-
			CO 3	**Evaluate** the strengths and limitations of theoratical models with the help of comparison with practical model operation.	-	-	-	-	-	3	-	-	-	2	-	-	-	2	-
			CO 4	**Demonstrate** the safe operating range of an electric drive by applying the theoratical equations.**[Manipulation]**	-	-	-	-	-	-	-	2	-	-	3	-	-	2	-
			CO 5	**Relate** the accuracy of drive operation with the help of obtained real time values of set parameters.**[Precision]**	-	-	-	-	-	-	-	-	3	-	-	-	-	-	2
					3.00	-	-	-	-	3.00	-	2.50	2.50	2.00	3.00	-	2.00	2.33	2.00

10	**6EE4-23**	Power System Protection Lab	CO 1	**Verify** the operation of microprocessor based differential, distance, under/over voltage relays.**[Apply]**	-	3	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 2	**Analyze** the various dynamic characteristics of digital relays for transmission line and transformer protection.**[Analyze]**	-	-	-	-	3	-	-	-	-	-	-	-	-	2	-
			CO 3	**Assess** single phase and three phase power system faults.**[Evaluate]**	-	-	-	-	-	-	-	-	3	-	-	-	-	-	1
			CO 4	**Assemble** the microcontroller based directional DMT and IDMT type relays in over current conditions.**[Create]**	-	-	-	-	2	-	-	-	-	-	-	-	-	2	-
					-	3.00	-	-	2.50	-	-	-	3.00	-	-	-	2.00	2.00	1.00
11	**6EE4-24**	Modelling and simulation lab	CO 1	**Grasp** the softwares that are required for modelling of machines and Power system.**[Apply]**	2	-	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 2	**Analyze** and **compare** the performance of electrical machines operating in cordination with reactive power compensation devices.	-	-	-	-	-	-	-	-	3	-	-	-	-	-	1
			CO 3	**Evaluate** the performance of FACTS controller as per power system application.	-	-	-	-	2	-	-	-	-	-	-	-	-	2	-
			CO 4	**Formulate** an efficient SMIB model	-	-	-	3	2	-	-	-	-	-	3	2	-	2	1

				implementing FACTS controller using MATLAB software.**[Design]**															
					2.00	-	-	3.00	2.00	-	-	-	3.00	-	3.00	2.00	2.00	2.00	1.00
Semester VI Overall PO					2.22	2.56	2.42	2.67	2.33	3.00	2.00	2.50	2.83	2.00	3.00	2.00	1.92	1.76	1.60
1	**8EE4-13**	Advanced Electric Drives	CO 1	**Organize** the advanced controls of AC drives including digital signal processing based motion control. **[Apply]**	3				-	-	-	-	-	-	-	-	2	-	-
			CO 2	**Differentiate** transformations and reference frame theories on AC motors for implementing the vector control scheme. **[Analyze]**		2			-	-	-	-	-	-	-	-	2	-	-
			CO 3	**Argue** the need for field flux control and DSP based control in real world application of AC motor drives. **[Evaluate]**			2		-	-	-	-	-	-	-	-	2	1	-
			CO 4	**Investigate** the vector or field oriented control of ac drives to accommodate parameters variations for uncompromised speed control. **[Evaluate]**			2		1		-	-	-	-	-	-	2	-	1
					3.00	2.00	2.00	-	1.00	-	-	-	-	-	-	-	2.00	1.00	1.00
2	8EE4-11	HVDC Transmission System.	CO 1	**Demonstrate** DC transmission topology along with components of HVDC system. **[Apply]**	3	-	-	-	-	-	-	-	-	-	-	-	2	-	-

			CO 2	**Compair** VSCs for control of HVDC systems. **[Analyze]**		2	-	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 3	**Check** stability issues in HVDC link. **[Evaluate]**			2	-	-	-	-	-	-	-	-	-	-	-	2	-
			CO 4	**Recommend** proper MTDC link. **[Evaluate]**			2	-	-	-	-	-	-	-	-	-	-	2	1	-
					3.00	2.00	2.00	-	-	-	-	-	-	-	-	-	-	2.00	1.50	-
3	**8EE6-60.1**	Energy Audit and Deman d side Manage ment	CO 1	**Show** the energy scenario, energy strategy, energy law's, energy security and energy conservation in India. **[Apply]**	3	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 2	**Organize** the Energy forecasting, Energy economics, Energy pricing and incentives, energy and its management, energy planning, and energy economics. energy auditing of motors, lighting system and building, by appropriate analysis methods through survey instrumentations. **[Analyze]**	-	2	-	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 3	**Examine** the Electrical-Load Management and Demand side Management in transport, agriculture , household and commercial sectors. **[Evaluate]**	-	-	2	-	-	-	-	-	-	-	-	-	-	-	2	-
			CO 4	**Investigate** the pre or detail energy audit in lighting system, household and commercial buildings, agriculture, electric machinerye of an industry or organization. **[Analyze]**	-	2	-	-	-	-	-	-	-	-	-	-	-	2	-	-
					3.00	2.00	2.00	-	-	-	-	-	-	-	-	-	-	2.00	2.00	-

4	**8EE6-60.2**	Soft Computing	CO 1	**Implement** the various soft computing approaches for finding the optimal solutions. **[Apply]**	3	-	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 2	**Compair** the feasibility of applying a soft computing methodology for a particular problem **[Analyze]**		3	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 3	**Justify** soft computing technologies such as FL,NN,GA to optimize the design of complex systems. **[Evaluate]**			3	-	-	-	-	-	-	-	-	-	2	-	-
			CO 4	**Develop** the case of hybrid AI system in specified engineering applications. **[Create]**				2	-	-	-	-	-	-	-	-	1	-	2
					3.00	3.00	3.00	2.00	-	-	-	-	-	-	-	-	1.75	-	2.00
5	**8EE4-21**	Energy Systems Lab	CO 1	**Demonstrate** solar panels at various levels, solar Charge controller, PWM, MPPT with boost converter, Shadowing effect and diode based solution in Solar PV System by using large area Sun Simulator. **[Apply]**	2	-	-	-	-	-	3	-	3	-	2	1	-	1	2
			CO 2	**Categarize** Performance of Solar Flat Plate Thermal Collector Operation with Variation in Mass Flow Rate and Level of Radiation. **[Analyze]**	-	3	-	-	-	-	3	-	3	-	2	1	-	-	3
			CO 3	**Compair** wind turbine generators with DC generators, DFIG, PMSG etc. **[Analyze]**		2	-	-	-	-	3	-	3	-	2	1	-	-	3

			CO 4	**Write** different components of Micro Grid, micro-hydel pumped storage system and Fuel Cell and its operation. **[Apply]**	2	-	-	-	-	-	3	-	3	-	2	1	-	1	3
			CO 5	**Design** and simulate hybrid wind-solar power generation along with Performance Assessment of Hybrid Power System by using Intelligent Controllers for on-grid and off-grid Hybrid Power Systems. **[Create]**			2	-	-	-	3	-	3	-	2	1	-	-	3
					2.00	2.50	2.00	-	-	-	3.00	-	3.00	-	2.00	1.00	-	1.00	2.80
6	**8EE7-50**	Project	CO 1	**Identify** suitable, sustainable and societal as well as industrial issues to **construct** his/her project title			2	3	2								-	2	-
			CO 2	**Conduct** the litrature survey to **apply** the contextual knowledge to assess societal, health, safety, legal and cultural issues mentioned in the project objectives and the consequent responsibilities relevant to the professional engineering practice.	2			3	2	3							1	2	-
			CO 3	**Inspect** the appropriate **modern tool** to **measure** and **use** database in **solving** the identified problem/s.		3	2		3			2	3		2	3	-	2	2
			CO 4	**Infer** the result findings, **compare** with the benchmark models and **justify** the concluding remarks along with the future scope.			3	2	2							2	-	2	2

			CO 5	**Communicate** knowledge and findings for lifelong learning.									3			3	-	-	3
			CO 6	**Prepare** technical report with ethical practices and **communicate** his/her findings in a project with presentation skills and confidence level.					3			3		3		3	-	2	3
			CO 7	**Demonstrate** knowledge and understanding of the **Identified** problem alongwith **team** to **financialy** manage projects and in multidisciplinary **environments.**	3			3		2	2		3		3	3	-	2	3
					2.50	3.00	2.33	2.75	2.40	2.50	2.00	2.50	3.00	3.00	2.50	2.80	1.00	2.00	2.60
7	8EE8-00	SODECA	CO 1	**Identify** engineering professional real time industrial or societal problem to select seminar topic		3					3		-		2	3	-	2	3
			CO 2	**Investigate** various reported solution of engineering problems throughout the corner of society.				3		3	3				2	3	-	2	3
			CO 3	**Argue** and **judge** his/her findings in the selected area	2							3	2	3		2	-	-	2
			CO 4	**Prepare** a good professional document with his/her concluding remarks and **show** his/her **communication** skills and confidence level through **presentation.**					2	3		3	-	3	3	3	-	3	2
					2.00	3.00	-	3.00	2.00	3.00	3.00	3.00	2.00	3.00	2.33	2.75	-	2.33	2.50
Semester VIII Overall PO					**2.64**	**2.50**	**2.22**	**2.58**	**1.80**	**2.75**	**2.67**	**2.75**	**2.67**	**3.00**	**2.28**	**2.18**	**1.75**	**1.64**	**2.18**

12 Course File Sample

Outcome Based Process Implementation Guidelines for Faculty

12.1 Labelling your course file

- **Name of faculty:**
- **Class- SEM:**
- **Branch:**
- **Course Code:**
- **Course Name:**
- **Session:**

12.2 List of Documents:

1. **Vision & Mission Statements of the Institute**
2. **Vision & Mission Statements of the Department**
3. **List of PEO, PSO and PO of department**
4. **Personal Time Table**
5. **RTU Syllabus**
6. **Document as per point no. 1-4 in guidelines**
7. **Course Plan**
8. **Document as per point no 6-12 in guidelines**
9. **Document for CO Assessment Stage 1: As per point no 13, up to 13.2.5**
10. **Document for CO Assessment Stage 2: As per point no 13, up to 13.2.5, with comparison to previous**
11. **Document for CO Assessment Stage 3: As per point no 13, up to 13.2.5, with comparison to previous**
12. **Document for CO Attainment through RTU Component: Previous RTU Result: point no. 13.3 upto 13.3.2**
13. **Document for PO attainment through RTU Component: Previous RTU Result: point no. 13.4 upto 13.4.2**
14. **Document for Overall Attainment of PO through CO: As per point no 13.5**
15. **Document for last three years (Repeat process from 6-14 above): Comparative data should be included in course file**
16. **Lecture Notes**
17. **Copy of Assignments questions given from time to time**
18. **Copy of Tutorial Sheets given (if applicable)**
19. **RTU Question Papers with answer**
20. **Internal Assessment Question Papers with answer from time to time**
21. **Topics covered beyond syllabus- References**
22. **Details of any other activity and its assessment through rubric be included**
23. **Mapping department level/ focus activities with your COs**

13 Outcome Based Process Implementation Guidelines for Faculty

Course CO-PO, Preparation, Assessment Formats

Academic Session: 2021-2022 **Class:** **Semester:**

Name of the Faculty:

Subject: **Subject Code:**

This document is meant as guidelines for implementing Outcome based education system as a part of accreditation process.

1. **Vision & Mission of Department: Statement and Mapping with Institute Mission** **Here you have to include department mission & vision statements and show mapping of keywords with institute mission.**
2. **Program Educational Objectives (PEOs): Statement and Mapping with Department Vision & Mission**
   Here you have to include department PEO statements and show mapping of keywords with department vision & mission.
3. **Program Specific Outcome (PSOs): Statement and Mapping with Department Vision & Mission**
   Here you have to include department PSO statements and show mapping of keywords with department vision & mission.
4. **Program Outcome (POs): Statement and Mapping with PEO and PSO**
   Here you have to include PO statements and show mapping of keywords with department PEOs & PSOs.
5. **Course Plan (Deployment):**

(Please write how you intend to cover the contents: i.e., coverage of Units by lectures, guest lectures, design exercises, solving numerical problems, demonstration of models, model preparation, or by assignments, etc.), **for example**

- **coverage of Units by lectures**
- **design exercises**
- **demonstration of models**
- **by assignments**

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

Lecture No.	Lect. No.	Topics, Problems, Applications	CO/LO	Target Date of Coverage	Actual Date of Coverage	Ref. Book/Journal with Page No.
1.	1	Introduction of Machine	CO1	12/01/2020	12/01/2020	T1 Page 11 - 16
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						

Example T1: Principles of Machine, By P.S.Bhimra, Khanna Publication, Edition 2019

6. **Course Outcomes:** Look for strong mapping of course with specific PO (2-3). Define Generic Course Outcomes (max 4 to 6) using Blooms Taxonomy. (In case of Lab Course define generic Lab Outcomes LO and refer CO as LO in this document).

i. **4EEA101.1(CO1)-**
ii. **4EEA101.2(CO2)-**
iii. **4EEA101.3(CO3)-**
iv. **4EEA101.4(CO4)-**
v. **4EEA101.5(CO5)-**

Dr. Mahesh Bundele B.E., M.E., Ph.D. Director Poornima College of Engineering ISI-6, RIICO Institutional Area Sitapura, JAIPUR

7. **CO-PO-PSO Mapping: Mapping Levels: 1- Low, 2- Moderate, 3-Strong**
   First try to find out 2-3 PO those are strongly related to your subject contents. Go through the contents and try to formulate 4-5 Course Outcome as per bloom taxonomy. Map each CO with PO and PSO as above. While mapping please rethink if you map any PO with 3, it means you are planning to deliver the contents of that
   level and you will also examine the students at that level.

CO	PO												PSO		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1															
CO2															
CO3															
CO4															
CO5															

7.1 PO Strongly Mapped: (Example):

O **PO2: Write full statement with keywords highlighted** o **PO3: Write full statement with keywords highlighted** o **PO4: Write full statement with keywords highlighted**

7.2 PO Moderately Mapped: (Example)

O **PO1: Write full statement with keywords highlighted**

O **PO11: Write full statement with keywords highlighted**

7.3 PO Low Mapped: (Example)

O **PO12: Write full statement with keywords highlighted**

7.4 PSO Strongly Mapped: (Example)

O **PSO 1 : Write full statement with keywords highlighted**

7.5 P S O Moderately Mapped: (Example)

O **PSO 2: Write full statement with keywords highlighted**

6.6 PSO Low Mapped: (Example)

O **PSO 3: Write full statement with keywords highlighted**

8. **Rules for CO/LO Attainment Levels: (Targets)**

All the courses of your department should be divided into three categories A-Most Difficult course, B-Medium level of Difficulty, C- Low level of Difficulty –(Easy)
According to difficulty level, you can decide specific range for CO attainment targets for Continuous assessment from the following table.
Remember that targets for internal assessment should be higher.

Course Category	Level 3	Level 2	Level 1
A	**60 % of students getting > 60% marks**	**50-60 % of students getting > 60% marks**	**40-50 % of students getting > 60% marks**
B	**80 % of students getting > 60% marks**	**60-80 % of students getting > 60% marks**	**40-60 % of students getting > 60% marks**
C	**90 % of students getting > 60% marks**	**70-90 % of students getting > 60% marks**	**40-70 % of students getting > 60% marks**

9. End Term RTU Component: CO Attainment Levels

All the courses of your department should be divided into three categories A-Most Difficult course, B-Medium level of Difficulty, C- Low level of Difficulty –(Easy)
According to difficulty level and the results of past 3-5 years, you can decide specific range for CO attainment targets for RTU component from the following table.

Course Category	Level 3	Level 2	Level 1
A	**50 % of students getting > 60% marks**	**40-50 % of students getting > 60% marks**	**30-40 % of students getting > 60% marks**
B	**60 % of students getting > 60% marks**	**40-60 % of students getting > 60% marks**	**30-40 % of students getting > 60% marks**
C	**80 % of students getting > 60% marks**	**60-80 % of students getting > 60% marks**	**40-60 % of students getting > 60% marks**

For the specific CO/LO attainment levels of your respective course please use the above tables as reference according your subject difficulty level and prepare following table.

S. No.	Course Type	Attainment Level=1	Attainment Level=2	Attainment Level=3
1	**Theory Courses** Mid Semester Exams			
2	**Theory Courses** University Exam			
4	**Practical Courses** – Internal Exams			
5	**Practical Courses** - University Exam			
6	**Assignments/Unit Test**			
7.	**Any other**			

10. CO wise Assessment Activities (as Mentioned in Session Plan):
You can plan for each CO, activities/ assessment tools to be conducted/ used for its achievement.
Use X to those you select for specific CO. Remove all unused columns.

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

	Activities															
CO	**Pre Mid I Test**	**Post Mid I Test**	**Quiz 1**	**Quiz 2**	**Pre Mid II Test**	**Post Mid II Test**	**Assignment 1**	**Assignment 2**	**Workshop**	**Seminar**	**Project**	**Training**	**Discussion**	**Mid 1**	**Mid 2**	**Ind. visit**
CO1																
CO2																
CO3																
CO4																
CO5																
CO6																

In case of Lab course some activities are as follows:

LO	Internal Practical exams	Laboratory Tests	Viva	Records	Project Presentation	Project Evaluation	External practical exams
LO1							
LO2							
LO3							
LO4							

11. CO wise Assessment Activities:

Based on CO-PO mapping, determine targets for each CO as average of targets of all relevant POs.

CO	PO												Avg.	PSO		
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**CO Targets**	**PSO1**	**PSO2**	**PSO3**
CO1																
CO2																
CO3																
CO4																
CO5																

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

12. Activity wise Assessment Tools:

This gives you generalized view of different direct and indirect tools those can be used for assessment / achievement of CO/PO. (Decide which tools are required for assessing a particular CO/LO and in reference to Course A, B, C difficulty level).

Sr. No.	Activity	Assessment Method	Tools	Weightage Marks	Recommendation
1.	Pre-Mid Term 1	Direct	Marks	10	For CO
2.	Post-Mid Term 1	Direct	Marks	10	For CO
3.	Quiz 1	Direct	Marks	10	For CO
4.	Quiz 2	Direct	Marks	10	For CO
5.	Pre Mid Term 2	Direct	Marks	10	For CO
6.	Post Mid Term 2	Direct	Marks	10	For CO
7.	Mid Term 1	Direct	Marks	20	For CO
8.	Mid Term 2	Direct	Marks	20	For CO
9.	Assignment 1	Direct	Marks	10	For CO
10.	Assignment 2	Direct	Marks	10	For CO
11.	Workshop	Indirect	Rubrics	5	For LO
12.	Seminar/ SPL	Indirect	Rubrics	5	For CO/LO
13.	Project (Mini or NSP)	Indirect	Rubrics	20	For LO
14.	Discussion	Indirect	Rubrics	5	For LO
15.	Training	Indirect	Rubrics	20	For LO
16.	Industrial Visit	Indirect	Rubrics	20	For LO
17.	Or any other activity	Direct/ Indirect	Marks/ Rubrics	any	For LO
18.					
Note that for every rubrics you need to decide assessment criteria, range of marks or weightage – above values are indicative					

13. CO Assessment Process:

After every activity (Ideally as per above table): (Frequency of Assessment- Can be taken as monthly). So the assessment can be for all activities held during the month. Do the following.

13.1 Attainment of COs

13.1.1 Attainment Table for CO1: 3EEA101.1

CO1: 4EEA101.1: Attainment Table (Columns) As Applicable CO wise-Monthly									
Student	**Pre Mid I Test 10**	**Quiz 1 10**	**Assignment 10**	**Quiz 1 10**	**WS 10**	**Training 10**	**Total (60)**	**% 0f Marks**	**Level of Attainment**
Name1									**3**
Name2									**2**
Name 3									**1**
Name 4									**2**
Name 5									**1**
Name 6									**2**
----									**--**
------									**--**
	No. of Students attained level 3=					**% of Students Attained Level 3=**			
	No. of Students attained level 2=					**% of Students Attained Level 2=**			
	No. of Students attained level 1=					**% of Students Attained Level 1=**			
	Target Achieved= ? (Check Level 3 % attainment -If No Find Gap)								
	Mark X for absent- Take avg. of all present								

(Repeat it for all other COs, (CO2 – CO5))

13.1.2 CO-Gap Identifications

COs	CO 1	CO 2	CO 3	CO4	CO5
Target					
Achieved					
Gap					

13.1.3 Gaps Identified:

Describe what the reasons for gaps are

i.

ii.

Overall CO Attainment Table: Example

COs	CO 1	CO 2	CO 3	CO4	CO5	Co6
Attainment level as per rules set	3	1	3	3	3	3
Average CO attainment through internal assessment	**2.67**					

13.1.4: Activities Decided to bridge the gap

Please do analyze whether you could get improvement through activities decided and conducted for improvements. Reason should be noted why / how it is improved or not.

13.2 Attainment of POs & PSO:

13.2.1 Target-Expected Attainment of PO by attainment of CO- Put all mappings of 3, 2 and 1. Based on CO-PO mapping, determine targets for each PO as average of targets of all relevant COs.

CO	PO												PSO		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
4EEA101.1															
4EEA101.2															
4EEA101.3															
4EEA101.4															
4EEA101.5															
Obtain Average-PO/PSO Targets	Targets	Targets	Targets	Targets	Targets	Targets	Targets	Targets	Targets	Targets	Targets	Targets	Targets	Targets	Targets

13.2.2 Attainment of POs & PSO through CO as Continuous Evaluation:

Put all attainment values of CO as per mappings with 3, 2, 1 as evaluated in 13.1.1 (Frequency- Monthly)

CO	PO												PSO		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
4EEA101.1															
4EEA101.2															
4EEA101.3															
4EEA101.4															
4EEA101.5															
Obtain Avg. PO/PSO Attainment	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved

13.2.3 PO Gap Identification:

	PO												PSO		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
Targets															
Achieved															
Gap															

13.2.4 Gaps Identified:

Describe what the reasons for gap (for PO) are.

i.

ii.

13.2.5 Activities Decided to bridge the gap

Please do analyze whether you could get improvement through activities decided and conducted for improvements. Reason should be noted why / how it is improved or not.

Repeat whole process after one month, Two months, and three months. Plot bar chart for improvement in CO, PO & PSO. (Every month)

13.3 Attainment of CO through RTU Exam:

This may be possible for previous semester results so overall attainment. If faculty is changed, data will be evaluated by concerned faculty who taught and handed over to current faculty. If faculty not available, then current faculty will do the same.

Attainment of CO: 3EEA101: Subject:			
Student	**RTU Marks (80)**	**% 0f Marks**	**Level of Attainment**
Name1			**3**
Name2			**2**
Name 3			**1**
Name 4			**2**
Name 5			**1**
Name 6			**2**
----			**--**
------			**--**
No. of Students attained level 3=		**% of Students Attained Level 3=**	
No. of Students attained level 2=		**% of Students Attained Level 2=**	
No. of Students attained level 1=		**% of Students Attained Level 1=**	
CO Attainment = ? (Check Level 3 % attainment -If No Find Gap)			
Mark X for absent- Take avg. of all present			

13.3.1 Attainment of CO through RTU Component:

CO: Course Code: Course Name					
Target					
Achieved					
Gap					

13.3.1 Gaps for CO attainment through RTU Component:

Analyze RTU Question paper with respect to COs formulated, contents delivered and students examined, find out reasons for gaps

i.

ii.

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

13.3.2 Action to be taken:

Prepare recommendations for improvement in planning & teaching for gaps identified.

13.4 Attainment of PO through CO (RTU) Component

Put RTU Results as per target achieved only and mapping level, in following table

Attainment of PO through CO (RTU) Component															
CO	**PO**												**PSO**		
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**
4EEA101															

Attainment of PO through CO (RTU) Component															
4EEA101	**PO**												**PSO**		
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**
Targets															
Achieved															
Gap															

13.4.1 Gaps in PO through CO from RTU component:

Analyze RTU Question paper with respect to COs formulated & mapped, contents delivered and students examined, find out reasons for gaps

Describe what are the reasons for gap

i.

ii.

13.4.2 Action to be taken:

Prepare recommendations for improvement in planning & teaching for gaps identified.

13.5 Overall Attainment of PO & PSO: Through Continuous Assessment & RTU

While combining attainment through Continuous evaluation and RTU component, following weightage be considered.

1. **Internal Assessment – Total weightage- 40 %**
2. **RTU Component ------- Weightage – 60 %**

Put all attainments in the following table and compute.

13.5.1: Table 1

	RTU Component			Internal Assessment				
Student	**RTU Marks (80)**	**% of Marks**	**60% Weightage X6/100 (A)**	**Overall CO (-----)**	**% of Marks**	**Weightage X4/100 (B)**	**Total (A+B)**	**Level of Attainment**
Name1								**3**
Name2								**2**
Name 3								**1**
Name 4								**2**
Name 5								**1**
Name 6								**2**
----								**--**
------								**--**
No. of Students attained level 3=					**% of Students Attained Level 3=**			
No. of Students attained level 2=					**% of Students Attained Level 2=**			
No. of Students attained level 1=					**% of Students Attained Level 1=**			
PO Attainment = ? (Check Level 3 % attainment -If No Find Gap)								
Mark X for absent- Take avg. of all present								

OR

13.5.2: Table 2

	RTU			Internal CO1/ Activity 1 (Weightage %)			Internal CO2/ Activity 2 (Weightage			Internal CO3/ Activity 3 (Weightage %)				
Student	**RTU Marks (80)**	**% 0f Marks**	**60% Weightage X-----/100 A**	**Overall CO (-----)**	**% 0f Marks**	**Weightage X--/100 B**	**Overall CO (-----)**	**% 0f Marks**	**Weightage X--/100 C**	**Overall CO (-----)**	**% 0f Marks**	**Weightage X--/100 D**	**Total (A+B+C+D)**	**Level of Attainment**
Name1														**3**
Name2														**2**
Name 3														**1**
Name 4														**2**
Name 5														**1**
Name 6														**2**
----														**--**
------														**--**

No. of Students attained level 3= Attained Level 3=	**% of Students**
No. of Students attained level 2= Attained Level 2=	**% of Students**
No. of Students attained level 1= Attained Level 1=	**% of Students**
PO Attainment = ? (Check Level 3 % attainment -If No Find Gap)	
Mark X for absent- Take avg. of all present	

13.5.3: Overall PO & PSO Attainment through Course:
Put Overall PO & PSO attainment as per mapping 3,2,1 above:

Attainment of Overall PO for Session 2021-2022															
CO	**PO**												**PSO**		
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**
4EEA101															
PO Attainment															

13.5.4: Overall Gaps for Attainment of PO and PSO from the Course
Put Overall PO & PSO targets & attainment as per mapping 3,2,1 above:

Attainment & Gap of Overall PO Session ----------															
4EEA101	**PO**												**PSO**		
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**
Targets															
Achieved															
Gap															

13.5.5. Overall Gaps for Course taught:
Go through all gaps identified above and summarize. Describe what the reasons are.
i.
ii.

13.5.6 Action to be taken:
Prepare recommendations for improvement in planning & teaching (Internal & RTU) for gaps identified. Decide Activities to be conducted to bridge the gaps in COs.

Repeat whole process after One year before, Two year before, and three year before. Plot bar charts for Continuous improvements check in CO, PO & PSO. (Every Year).

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14 File Formats

14.1 List of File Formats

i. Front Page of Course File
ii. ABC Analysis Format
iii. Blown-up Format
iv. Deployment Format
v. Zero Lecture Format
vi. Tutorial Format
vii. Assignment Format
viii. Lecture Note Format
ix. Mid Term Question Paper Format
x. Mid Term Practical Exam Format
xi. Evaluation Sheets Format
xii. Activity Report Format

14.2 Front Page of Course File

POORNIMA
COLLEGE OF ENGINEERING

TEACHING MANUAL

COURSE: _____

SEMESTER: _____

SUBJECT: _____

SUB. CODE: _____

CONTENT: PGC Syllabus, Blown-up, Deployment, Zero Lectures, Detailed lecture notes with cover page, Tutorial/Home-Assignment Sheets

_____

SESSION: 20___-___

NAME OF FACULTY: _____

DEPARTMENT: _____

CAMPUS: _____

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.3 ABC Analysis Format

POORNIMA
COLLEGE OF ENGINEERING

DEPARTMENT OF ELECTRICAL ENGINEERING

EVEN SEMESTER 2021-22

ABC Analysis

Course: B. Tech. **Class/Section: VI SEM** **Date: 04.1.2022**
Name of Faculty: XYZ **Name of Subject: EECA** **Subject Code: 6EE4-04**

Unit No.	Category A	Category B	Category C	Preparedness of "A" topics
1	Energy pricing, energy sector reforms, energy security, energy conservation and its importance, restructuring of the energy supply sector, energy strategy for the future	Final energy consumption, energy needs of growing economy, long term energy scenario, Energy Conservation Act-2001 and its features.	Commercial and Non-commercial energy, primary energy resources, commercial energy production, air pollution, climate change, energy and environment	PPT and Notes
2	Maximum demand controllers, automatic power factor controllers, energy efficient motors, soft starters with energy saver, variable speed drives	Thermal Basics-fuels, thermal energy contents of fuel, temperature & pressure, heat capacity, sensible and latent heat, evaporation, condensation, steam, moist air and humidity	Electricity tariff, load management and maximum demand control, power factor improvement	PPT and Notes
3	Material and Energy balance: Facility as an energy system, methods for preparing process flow, material and energy balance diagrams.	Bench marking, energy performance, matching energy use to requirement, Maximizing system efficiencies, optimizing the input energy requirements, fuel & energy substitution, energy audit instruments.	Definition, energy audit, need, types of energy audit. Energy management (audit) approach understanding energy costs	SPL and PPT
4	Energy saving opportunities with energy efficient motors, selection and location of capacitors, performance assessment of PF capacitors, distribution and transformer losses	Electric motors: Types, losses in induction motors, motor efficiency, factors affecting motor performance, rewinding and motor replacement issues	Electrical system: Electricity billing, electrical load management and maximum demand control, power factor improvement and its benefit	SPL
5	Overview of grid code technical requirements. Fault ride-through for wind farms - real and reactive power regulation	voltage and frequency operating limits, solar PV and wind farm behavior during grid disturbances	Power quality issues. Power system interconnection experiences in the world. Hybrid and isolated operations of solar PV and wind systems.	PPT

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.4 Blown-up Format

POORNIMA
COLLEGE OF ENGINEERING

DEPARTMENT OF ELECTRICAL ENGINEERING

Campus: PCE Course: B.Tech.-EE **Class/Section: 3rd year/ Sec-A** **Date: 06 Jan 2022**
Name of Faculty: XYZ **Name of Subject: EECA** **Code: 6EE4-04**

COURSE PLAN –BLOWN UP

S. No.	Topic as per Syllabus	BLOWN UP TOPICS (Up to 10 TIMES SYLLABUS)
1.	**UNIT-I** **INTRODUCTION:** 1.1 Introduction	1.1.1 Introduction of Electrical Energy System 1.1.2 Scope of Energy Conservation 1.1.3 Overview of Auditing System
2.	**UNIT-II** **ENERGY SCENARIO:** 2.1 Commercial and Non-commercial energy, primary energy resources, commercial energy production	2.1.1 Introduction 2.1.2 Methods of Commercial and Non-commercial energy 2.1.3 Anvantage & Disadvantage of Commercial and Non-commercial energy 2.1.4 Types of Primary and Secondary energy sources 2.1.5 Introduction of Primary Energy source
	2.2 Energy needs of growing economy, long term energy scenario	2.2.1 Introduction of Energy Scenario 2.2.2 Energy factors for growing economy 2.2.3 Fundamental of long term energy system 2.2.4 General Mathematical Expression.
	2.3 Energy pricing, energy sector reforms, energy and environment, energy security, energy conservation and its	2.3.1 Define the Energy Pricing 2.3.2 Types of energy pricing 2.3.3 Effect of energy in the environment 2.3.4 Factor of Energy security

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.5 Deployment Format

POORNIMA
COLLEGE OF ENGINEERING

DEPARTMENT OF ELECTRICAL ENGINEERING

Campus: Poornima College of Engg. **Class/Section: 3rd Year/ Section - A** **Date: 06 Jan 2022**
Course: B.Tech.
Name of Faculty: XYZ **Name of Subject: EECA** **Code: 6EE4-04**

COURSE PLAN (Deployment)

S.No.	TOPIC AS PER BLOWNUP SYLLABUS	LECT. NO.	PLANNED DATE	ACTUAL DEL. DATE	CO/LO	REF. / TEXT BOOK WITH PAGE NO.
1.	**ZERO LECTURE** • Introduction • Basic knowledge about subject • Syllabus, REF. / TEXT BOOKS • RTU Question Paper • Conclusion	L-0	8/2/2021	8/2/2021	CO1	
	UNIT-I					
2	**INTRODUCTION** **Lecture Introduction** 1.1.4 Introduction of Electrical Energy System 1.1.5 Scope of Energy Conservation 1.1.6 Overview of Auditing System **Lecture Conclusion**	L-1	8/2/2021	8/2/2021	CO1	Clive beggs
	UNIT-II					
3	**ENERGY SCENARIO:** **Lecture Introduction** 2.1.6 Introduction 2.1.7 Methods of Commercial and Non-commercial energy 2.1.8 Advantage & Disadvantage of Commercial and Non-commercial energy 2.1.9 Types of Primary and Secondary	L -2	13/2/2021	13/2/2021	CO1	Clive beggs

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.6 Zero Lecture Format

POORNIMA
COLLEGE OF ENGINEERING

ZERO LECTURE

Session: 20 - (Sem.)

Campus: …… Course: …… Class/Section: ……

Name of Faculty: ……

Zero Lecture

1). Name of Subject: …… Code: ……

2). Self-Introduction:

a). Name:
b). Qualification:
c). Designation:
d). Research Area:
e). E-mail Id: ……@poornima.org
f). Other details: Information about areas of proficiency/ expertise such as subject taught, laboratory taken, Member of Professional body, Academic Proficiency, Book Authored, Paper published in National and International Conference/Journals etc.

3). Introduction of Students:

a*). Records of students in 12th*

Sr. No.	Average result of 12th	Name of student scored highest marks	Marks 60% above (No. of students)	Marks between 40%-60% (No. of students)	English Medium Students (No.)	Hindi Medium Students (No.)	No. of Hostellers	No. of Day Scholar

b*). Name of 05 best students based on previous results: ……, ……, ……, ……, ……*

4). Instructional Language: - ……%English; ……..% Hindi (English not less than 60%)

5). Introduction to subject: - (Pl. separate out subject specific matter and general matter valid for all subjects and group/place them appropriately)

a). Relevance to Branch:
b). Relevance to Society:
c). Relevance to Self:
d). Relation with laboratory:
e). Connection with previous year and next year:

6). Syllabus of Poornima Group of Colleges, Jaipur

a). Unit Name:
b). ABC analysis (RGB method) of unit & topics

7). Books/ Website/Journals & Handbooks/ Association & Institution:

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

a). Recommended Text & Reference Books and Websites:

S. No.	Title of Book	Authors	Publisher	Cost (Rs.)	No. of books in Library
Text Books					
T1					
T2					
T3					
Reference Books					
R1					
R2					
R3					
Websites related to subject					
1					
2					

b). Journals & Handbooks: - To give information about different Journals & Handbooks available in library related to the subject and branch.

c). Associations and Institutions: - To give information about different Associations and Institutions related to the subject and branch.

8). Syllabus Deployment: -

a). Total weeks available for academics (excluding holidays) as per Poornima Foundation calendar-

Semester	
No. of Working days available(Approx.)	
No. of Weeks (Approx.)	

- Total weeks available for special activities (as mentioned below)- 02 weeks (Approx.)

Note: Individual faculty must calculate the exact no. of lectures available according to time table etc. after consultation with HOD.

b). Special Activities (To be approved by HOD & Dean & must be mentioned in deployment):

- Open Book Test- Once in a semester
- Quiz - Once in a semester
- Special Lectures (SPL)- Minimum 10% of total no. of lectures including following
  - i. Smart Class by the faculty, who is teaching the subject
  - ii. SPL by expert faculty
  - iii. SPL by expert from industry/academia (other institution)
- Revision classes (Solving Important Question Bank):- 1 class before Mid Term and 2 classes before End Term Exam

c). Lecture schedule per week

i). University scheme (L+T+P) = ...+....+.....

Sr. No.	Name of Unit	No. of lectures	Broad Area	Degree of difficulty (High/Medium/Low)	Text/ Reference books
1.					
2.					
3.					
4.					
5.					

d). Introduction & Conclusion: Each subject, unit and topic shall start with introduction & close with conclusion. In case of the subject, it is Zero lecture.

e). Time Distribution in lecture class: - Time allotted: 60 min.

i. First 5 min. should be utilized for paying attention towards students who were absent for last lecture or continuously absent for many days + taking attendance by calling the names of the students and also sharing any new/relevant information.

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

ii. Actual lecture delivery should be of 50 min.
iii. Last 5 min. should be utilized by recapping/ conclusion of the topic. Providing brief introduction of the coming up lecture and suggesting portion to read.
iv. After completion of any Unit/Chapter a short quiz should be organized.
v. During lecture student should be encouraged to ask questions.

Note: Pl. ensure that each student is having Lecture Note Book. Also, write on the black board day and date, name of the teacher, name of subject with code, unit and lecture no. and topics to be covered at the beginning of each lecture and ensure that students write in lecture note book. Ask students to leave 4/5 pages blank for copying the note from fellow students in case of their absenteeism.

9). Tutorial: - An essential component of Teaching- Learning process in Professional Education.

Objective: - To enhance the recall mechanism.
To promote logical reasoning and thinking of the students.
To interact personally to the students for improve numerical solving ability.

a). *Tutorial processing:* - Tutorial sheet shall be provided to each students

Ist Phase: - It is consisting of questions to be solved in the class assignment session in test mode on perforated sheet given in tutorial notebook and to be collected & kept by respective faculty for review & analysis (20 minutes).

IInd Phase: - Indicating/Initializing the weak issues/ drawback and Evaluating and providing the grade. Making a group with good student for assisting the weak students to explain/solve questions by every student on plain papers given in tutorial note book (20 minutes).

IIIrd Phase: - Solving/ explaining difficulties of lecture class and providing the new home assignment (20 minutes). To be done in tutorial note book.

b). *Home assignment shall comprise of two parts:*

Part (i) Minimum essential questions, which are to be solved and submitted by all with in specified due date.

Part (ii) Other important questions, which may also be solved and submitted for examining and guidance by teacher.

10). Examination Systems:

A. FOR ALL THEORY COURSES:-

a. Continuous Internal Evaluation (CIE)	**20%**
-Assignment / Project / Papers / Essays / Class Participation	10%
-Quiz / Class Test (Announced / Unannounced)	5%
- Attendance and Discipline	5%
b. Mid Semester Exams (MSE) – Two	**20%**
c. End Semester Exam (ESE) - One	**60%**
TOTAL	**100 %**

B. FOR ALL PRACTICAL (LABORATORY) COURSES:-

a. Continuous Internal Evaluation (CIE)	**40%**
-Performance (Lab Record, Viva,)	30%
-Attendance and Participation in laboratory work	10%
b. Mid Semester Exam (MSE)– Two	**20 %**
c. End Semester Exam (ESE) - One	**40%**
TOTAL	**100 %**

11). Any other important point:

Place & Date:

Name of Faculty with Designation

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.7 Lecture Note Front page Format

POORNIMA
COLLEGE OF ENGINEERING

LECTURE NOTES

Campus: ……………….. **Course:** …………………. **Class/Section:** ………………………………. **Date:** ………………

Name of Faculty: ……………………………………. **Name of Subject:** ………………………… **Code:** ……………

Date (Prep.): ……………………………. **Date (Del.):** ………………………**Unit No.:**………………**Lect. No:** ……………………

OBJECTIVE: To be written before taking the lecture (Pl. write in bullet points the main topics/concepts etc., which will be taught in this lecture)

____

____

____

____

IMPORTANT & RELEVANT QUESTIONS:

____

____

____

____

FEED BACK QUESTIONS (AFTER 20 MINUTES):

____

____

____

____

OUTCOME OF THE DELIVERED LECTURE: To be written after taking the lecture (Pl. write in bullet points about students' feedback on this lecture, level of understanding of this lecture by students etc.)

____

____

____

REFERENCES: Text/Ref. Book with Page No. and relevant Internet Websites:

____

____

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.7.1 Detailed Lecture Note Format-1

POORNIMA
COLLEGE OF ENGINEERING

DETAILED LECTURE NOTES

Campus: ……	**Course: ……**	**Class/Section: ……**	**Date: ……**
Name of Faculty: ……		**Name of Subject: ……**	**Code: ……**

14.7.2 Detailed Lecture Note Format-2

POORNIMA
COLLEGE OF ENGINEERING

DETAILED LECTURE NOTES

PAGE NO. .....

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.8 Assignment Format

POORNIMA
COLLEGE OF ENGINEERING

DEPARTMENT OF ELECTRICAL ENGINEERING

Assignment Sheet 1

Campus: Poornima College of Engg. **Class/Section: 2nd Year/ Section - A** **Date: 1 Feb 2022**
Course: B.Tech.
Name of Faculty: XYZ **Name of Subject: EECA** **Code: 6EE4-04**

Q.No.	Question	MM	CO	PO	PSO
Q.1	Explain the Energy Conservation Act, 2001 and its Features in detail?	(10)	1	3	2
Q.2	Define Facility as an Energy System using plant energy system?	(10)	2	1	1
Q.3	Describe the Electricity tariff? Explain any two type of tariff using their mathematical Equation?	(10)	1	1	1
Q.4	A three phase, 10 kW motor has the name plate details as 415 V, 18.2 amps and 0.9 PF. Actual input measurement shows 415 V, 12 amps and 0.7 PF which was measured with power analyzer during motor running.	(10)	3	2	2
Q.5	What is the Energy balance system and also explain the energy balance system using any one example?	(10)	3	3	1
Q.6	Clarify the typical billing components of the two-part tariff structure of industrial utility?	(10)	1	1	1
Q.7	Explain how fluctuations in plant voltage can be overcome.	(10)	2	2	1
Q.8	A Trivector-meter with half-hour cycle has the following inputs during the maximum demand period: What is the maximum demand during the half-hour interval? MD Drawn Duration kVA in Minutes 100 10 200 5	(10)	3	3	2
Q.9	Why centrifugal machines offers the greatest savings when used with Variable Speed Drives.	(10)	4	3	2
Q.10	Categorize how many grid code technical requirement are used in the industry	(10)	2	3	1

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
181-B, RIICO Institutional Area
Sitapura, JAIPUR

14.9 Tutorial Format

POORNIMA
COLLEGE OF ENGINEERING

TUTORIAL SHEET

TUTORIAL SHEET SHEET No.....

Campus: ..... Course: ..... Class/Section: ..... Date: .....

Name of Faculty: ..... Name of Subject: ..... Code: .....

Date of Tut. Sheet Preparation:..... Scheduled Date of Tut.:.....Actual Date of Tut. :.....

Name of Student:.....Scheduled & Actual Date of H.A. Submission:.....&.....

	Questions	CO	PO
FIRST 20 MT. CLASS QUESTIONS			
2 HRS. SOLVABLE HOME ASSIGNMENT (H.A.) QUESTIONS			
OTHER IMPORTANT QUESTIONS			

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.10 Mid Term/ End Term Practical Question Paper Format

R.

POORNIMA COLLEGE OF ENGINEERING, JAIPUR

III B.TECH. (V Sem.) **SET- A**

FIRST MID TERM PRACTICAL EXAMINATION 2021-22

Code 3EE4-23 Category: PCC Subject Name: MACHINE DESIGN PRACTICE-II

(BRANCH – ELECTRICAL ENGINEERING)

Max. Time: 60 Minutes **Max. Marks: 22 + 8 (Viva) = 30**

NOTE: - All questions are compulsory. Use of Design Data Book is allowed.

Q. No.	Question	Marks	LO	PO
Q.1				
Q.2				
Q.3				

POORNIMA COLLEGE OF ENGINEERING, JAIPUR

III B.TECH. (V Sem.) **SET- B**

FIRST MID TERM PRACTICAL EXAMINATION 2021-22

Code 3EE4-23 Category: PCC Subject Name: MACHINE DESIGN PRACTICE-II

(BRANCH – ELECTRICAL ENGINEERING)

Max. Time: 60 Minutes **Max. Marks: 22 + 8 (Viva) = 30**

NOTE: - All questions are compulsory. Use of Design Data Book is allowed.

Q. No.	Question	Marks	LO	PO
Q.1				
Q.2				
Q.3				

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.11 Mid Term Theory Question Paper Format

POORNIMA COLLEGE OF ENGINEERING, JAIPUR

III B.TECH. (VI Sem.) **Roll No. _____**

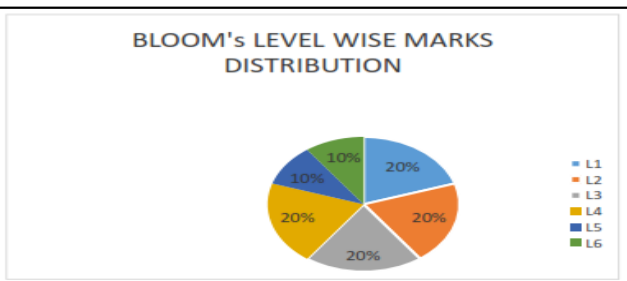
SECOND MID TERM EXAMINATION 2021-22
Code: 6EE4-04 Category: PCC Subject Name–EECA
(BRANCH – ELECTRICAL ENGINEERING)

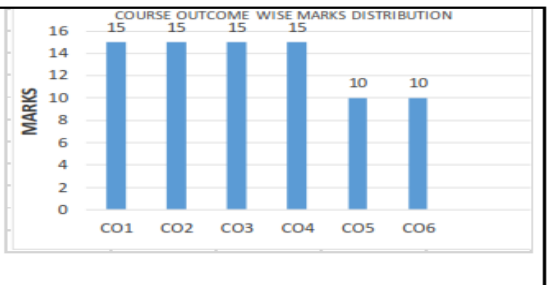
Course Credit: ___
Max. Time: 2 hrs. **Max. Marks: 60**

NOTE:- Read the guidelines given with each part carefully.

Course Outcomes (CO):
At the end of the course the student should be able to:
CO1:
CO2:
CO3:
CO4:
CO5:
CO6:

	PART - A: (All questions are compulsory) Max. Marks (10)				
		Marks	**CO**	**BL**	**PO**
Q.1		**2**			
Q.2		**2**			
Q.3		**2**			
Q.4		**2**			
Q.5		**2**			
	PART - B: (Attempt 4 questions out of 6) Max. Marks (20)				
Q.6		**5**			
Q.7		**5**			
Q.8		**5**			
Q.9		**5**			
Q.10		**5**			
Q.11		**5**			
	PART - C: (Attempt 3 questions out of 4) Max. Marks (30)				
Q.12		**10**			
Q.13		**10**			
Q.14		**10**			
Q. 15		**10**			





BL – Bloom's Taxonomy Levels (1- Remembering, 2- Understanding, 3 – Applying, 4 – Analyzing, 5 – Evaluating, 6 - Creating)
CO – Course Outcomes; PO – Program Outcomes

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

13. List of Important Links

List of Important Links		
Sr. No.	**Link**	**Particulars**
1	https://www.rtu.ac.in/index/	Rajasthan Technical University
2	http://www.pce.poornima.org	Institute Website
3	http://www.pce.poornima.org/Downloads.html	Format of Students & Employees
4	https://www.turnitin.com/login_page.asp?lang=en_us	Plagiarism Checker
5	http://pcelibrary.poornima.org/	PCE Digital Library
6	https://ndl.iitkgp.ac.in/	National Digital Library of India (NDLI)
7	https://swayam.gov.in/	SWAYAM MOOCs platform
8	https://www.vlab.co.in/	Virtual Labs
9	https://spoken-tutorial.org/	Spoken Tutorial
10	https://fossee.in/	FOSSEE (Free/Libre and Open Source Software for Education)
11	https://www.sih.gov.in/	Smart India Hackathon
12	https://www.swayamprabha.gov.in/	32 high quality educational channels through DTH on 24X7 basis.
13	https://ieeexplore.ieee.org/Xplore/home.jsp.You	IEEE All Society Periodicals Package
14	https://booksc.org/	Link for Free for book and articles
15	https://jgateplus.com/home/	J-gate Plus (JOURNALS -GATE) subscriptions
16	http://www.delnet.nic.in/	Developing Library Network
17	https://dst.rajasthan.gov.in/content/dst-gov/en/home.html	Department of Science & Technology, Government of Rajasthan
18	https://ipindia.gov.in/index.htm	Official website of Intellectual Property India
19	http://pce.poornima.org/Downloads.html	Academic Formats Word File
Note:- Required Credentials can be taken from Respective Department Heads		

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

POORNIMA
COLLEGE OF ENGINEERING

DEPARTMENT OF ELECTRICAL ENGINEERING

CURRICULUM DELIVERY PLAN

OUTLINE-ODD SEM-2022-23

ISI-6, RIICO Institutional Area, Sitapura, Jaipur-302022 (Rajasthan)

• Phone: +91-141-2770790 • E-mail: infor@poornima.org

• Website: www.poornima.org

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

Table of Contents

1 The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of Continuous Internal Assessment (CIA)

PCE is affiliated to RTU, Kota and follows the planned and prescribed curriculum of University. The Internal Quality Assurance Cell (IQAC) of PCE takes the responsibility of monitoring the effective delivery of the curriculum through a well-planned and documented process. To ensure effective curriculum delivery, a Curriculum Delivery Plan (CDP) is prepared by all PAC's of the respective departments. A CDP includes detailed planning for preparation, verification, execution and adherence to all documents related to academic delivery of all courses. As per the directions received from IQAC, the Examination cell plans for the Continuous Internal Assessment. Examination cell then circulate CIA planning to the PAC. Examination cell sends all the CIE Data to Director's Office for the final approval before its submission to RTU. Detail outlines are as follows.

1. Director Office, PCE receives the curriculum from RTU, Kota through university website.
2. IQAC prepares institute academic calendar aligned with RTU academic calendar considering input received in last GC meeting and other stakeholders. IQAC forwards the Institute Academic Calendar to PAC (Program Assessment Committee) for identifying curriculum gaps and examination cell for CIE. PACs then prepares CDPs after consolidating the course specific planning received from the respective faculty members.
3. A CDP includes activities for gap abridgement which are proposed to be carried out by the faculty members.
4. IQAC also instructs PACs to prepare the department activity calendar. PACs receives approval of department activity calendars and CDPs from DABs before its final approval from IQAC.
5. IQAC also reviews the CDPs approved by DABs and gives suggestions/ approvals periodically. All the activities (SPL, Industrial visit, workshop etc.) planned are taken into consideration for the Department activity calendar after the approval from DABs.
6. Subject wise Course files are prepared by respective faculty, comprising of Syllabus, ABC analysis, Blown-Up, Deployment, Lecture notes, Zero Lecture, Tutorial and Assignment sheets, COs Statements, and Mapping with POs and PSOs.
7. Faculty frequently use ICT tools for more effective content delivery using PPTs, video lectures etc.
8. Student attendance is monitored by tutors and chief proctor office with help of SHARP ERP software. Attendance defaulters are regularly counseled through their tutors for improving their attendance.
9. Institute also conducts Annual Internal Academic Audit for the effectiveness of teaching-learning methodologies and the necessary actions are taken as suggested by the audit team.
10. Conferences, seminars, webinars, workshops, expert lectures, STTPs, and FDPs are organized throughout the year on the recent advances in the field of engineering.
11. Continuous Internal Assessment process includes Midterm exam, Tutorials, Assignments, Quizzes, presentation, Class Test, viva-voce etc.
12. As per the RTU examination scheme, mid semester examinations are conducted centrally by examination cell as per the planning & academic calendar and other assessments are conducted at departmental level.
13. All the evaluations are carried out by the faculty members which include COs-POs attainment, Gap identification & action taken for the fulfillment of gap.
14. Student feedback and attainment of COs-POs are reviewed by the PAC for any revision in planning & Delivery.
15. End term semester examinations are conducted by the RTU, Kota.

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

2 Vision & Mission Statements

2.1 Vision & Mission Statements of the Institute

Vision of Institution

To create knowledge based society with scientific temper, team spirit and dignity of labor to face the global competitive challenges

Mission of Institution

To evolve and develop skill based systems for effective delivery of knowledge so as to equip young professionals with dedication & commitment to excellence in all spheres of life

2.2 Vision & Mission Statements of the Programme B. Tech. (Electrical Engineering)

2.2.1 Vision of Department

To be a model of excellence in Professional Education and Research by creating electrical engineers who are prepared for lifelong engagement in the rapidly changing fields and technologies with the ability to work in team.

2.2.2 Mission of Department

- To provide a dynamic environment of technical education wherein students learn in collaboration with others to develop knowledge of basic and engineering sciences.
- To identify and strengthen current thrust areas based upon informed perception of global societal issues in the electrical and allied branches.
- To develop human potential with intellectual capability who can become a good professional, researcher and lifelong learner.

2.2.3 PEO of the Department

Program Educational Objectives (PEOs

- **PEO 1**: Graduates will have the ability to formulate, analyze and apply design process using the basic knowledge of engineering and sciences to solve complex electrical engineering problems.
- **PEO 2**: Graduates will exhibit quality of leadership, teamwork, time management, with a commitment towards addressing societal issues of equity, public and environmental safety using modern engineering tools.
- **PEO 3**: Graduates will possess dynamic communication and have successful transition into a broad range of multi-disciplinary career options in industry, government and research as lifelong learner.

2.2.4 Program Specific Outcome (PSOs)

- PSO1: Graduate possesses the ability to apply fundamental knowledge of basic sciences, mathematics and computation to solve the problems in the field of electrical engineering for the benefit of society.
- PSO2: Graduate possesses the ability to professionally communicate and ethically solve complex electrical engineering problems using modern engineering tools.
- PSO3: Graduate possesses sound fundamental knowledge to be either employable or develop entrepreneurship in the emerging areas of renewable and green energy, electric and hybrid vehicles and smart grids and shall be susceptive to life- long learning.

2.3 Program Outcomes (PO)

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.

3 Department Academic & Administrative Bodies - Structure & Functions

3.1 Department Advisory Board (DAB)

3.1.1 Primary Objective

Department Advisory Board (DAB) of Department of Electrical Engineering, PCE, Jaipur is formed to provide necessary suggestions for developing a structured approach for continuous improvement in curriculum delivery, planning and incorporation of Curricular, Extra and Co-Curricular activities needed to abridge the pre-identified curriculum gaps.

3.1.2 Roles & Responsibilities

1. Suggest improvement in academic plans and recommend standard practices/system for attainment of Program Educational Objectives, Program Outcomes, Program Specific Outcomes and Course Outcomes.
2. Provide guidelines for industry-institute interactions to bridge up curriculum/industry gap and suggest quality improvement initiatives to enhance employability.
3. Develop a structured Curriculum Delivery Plan, Department Academic Calendar and seek approval for them from Internal Quality Assurance Cell.
4. Incorporate suggestions received from Program Assessment Committee (PAC) by including proposed activities for bridging curricular gaps identified.
5. To identify and suggest thrust areas to conduct various activities (final year projects, training courses and additional experiments to meet PEOs, and propose necessary action plan for skill development of students, required for entrepreneurship development and quality improvement.

3.1.3 Department-Wise Composition

Session: 2022-23

S. No.	Category	Nominated by	Name of Members	Address

1	Chairman, DAB-CE	Chairman, IQAC	Dr. Mahesh M. Bundele (Principal & Director, PCE)	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
2	Member Secretary	Chairman, DAB-EE	Dr. PRAVIN MACHHINDRA SONWANE Head, Department of Electrical Engineering	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
3	Faculty representative-1	Chairman, DAB-EE	Dr. Neeraj Tiwari Professor EE, PCE	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
4	Faculty representative-2	Chairman, DAB-EE	Mr. Ajit Singh Rajawat, Assistant Professor, PCE	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
5	Faculty representative-3	Chairman, DAB-EE	Dr. Pankaj Gakhar Associate Professor	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
6	Faculty representative-4	Chairman, DAB-EE	Dr. Ekata Sharma Associate Prof, PCE	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
7	Faculty representative-5	Chairman, DAB-EE	Dr. Hemant Kaushik, Associate Professor, PCE	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
8	Faculty representative-6	Chairman, DAB-EE	Mr. Pankaj Verma, Assistant Professor, PCE	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
9	Special Invitee	Chairman, DAB-EE	Dr. Rekha Nair Dean First Year, PCE	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
10	Alumni Representative-1	Chairman, DAB-EE	Mr. Gourabh Gupta	REC, Banglore
11	Alumni Representative-2	Chairman, DAB-EE	Mr. Love Mishra	Sr. Engineer, Ultratech
12	Student Representative	Chairman, DAB-EE	Abhishek Dubey	PCE20EE800, Student PCE
13	Industry Representative	Chairman, DAB-EE	Mr. Jagdish Prasad Meena	Executive Engineer, RVPNL, Jaipur
14	Parents Representative-1	Chairman, DAB-EE	Dr. ASEEM VERMA	Professor Dentist College
15	Parents Representative-2	Chairman, DAB-EE	Mr. RAMENDRA YADAV	Secretary, Piramal Group, Jhunjunu

3.1.4 Meeting Frequency & Objectives

Meeting No.	Meeting Code	Meeting Month-Week	Meeting Objective
1.	DAB-1	July First Week	● Consideration of gaps and proposed activities by PAC last meeting to be implemented in DAC and CDP. ● Prepares final draft of CDP and DAC to be proposed in upcoming IQAC meeting
2.	DAB-2	September Second Week	● Approval / Suggestions of proposals from last PAC Meeting. ● Revision of DAB Drafts for being proposed in upcoming GC
3	DAB-3	December First Week	● Draft preparation for DAC and CDP for upcoming semester after considering inputs from PAC. ● Review Semester closure draft from PAC.

Dr. Mahesh Bundele B.E., M.E., Ph.D. Director Poornima College of Engineering ISI-6, RIICO Institutional Area Sitapura, JAIPUR

4.	DAB-4	April Last Week / May First Week	● Draft of PCE Academic Calendar and CDP proposed ● Previous session closure with gaps and feedback. ● Completion of ATR-2 for current semester based on last GC sessions and compiling it with ATR-1

3.2 Program Assessment Committee

3.2.1 Primary Objective

The primary objective of Program Assessment Committee (PAC) is to identify, bridge and assess the gaps in Program's Curriculum received from University through attainment calculation.

3.2.2 Roles & Responsibilities

1. Identify gaps in curriculum laid down by University and propose activities for bridging identified gaps.

2. Implement academic plans and standard practices/system for attainment of Program Educational Objectives, Program Outcomes, Program Specific Outcomes and Course Outcomes.

3. Regular Monitoring of curriculum gap abridgement and course deployment practices through pre-defined methods.

4. Execute Industry-Institute Interactions to enhance the employability thereby meeting the industry standards and requirements.

5. Implement Curriculum Delivery Plan & Department Academic Calendar.

3.2.3 Department-Wise Composition

Session: 2022-23

S. No.	Category	Nominated by	Name of Members	Address
1	Chairman, PAC-CE	Chairman, IQAC / Head of Institution	Dr. PRAVIN MACHHINDRA SONWANE Head, Department of Electrical Engineering	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
2	Member Secretary	Chairman, PAC-EE	DR. PANKAJ GAKHAR Associate Professor	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
3	Faculty representative-1	Chairman, PAC-EE	Dr. GAURAV JAIN	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
4	Faculty representative-2	Chairman, PAC-EE	MR. PANKAJ VERMA, Assistant Professor, PCE	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
5	Faculty representative-3	Chairman, PAC-EE	MR. AJIT SINGH RAJAWAT, Assistant Professor	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
6	Faculty representative-4	Chairman, PAC-EE	Mrs. EKATA SHARMA Associate Prof, PCE	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

7	Faculty representative-5	Chairman, PAC-EE	Mr. Vikas Kumar Sharma Assistant Professor	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur
8	Faculty representative-6	Chairman, PAC-EE	Mr. Vineet Sharma Assistant Professor	Poornima College of Engineering, ISI-6, RIICO Inst. Area, Sitapura, Jaipur

3.2.4 Meeting Frequency & Objectives

Meeting No.	Meeting Code	Meeting Month-Week	Meeting Objective
1.	PAC-1	July Last Week	● Execution of Academic, Extra and Co-Curricular activities ● Regular assessment of Academic, Extra and Co-Curricular activities ● Regular calculation of attainments ● Revision of Academics gaps ● Prepared regular report of program for all assessment, attainment & gaps
2.	PAC-2	August Last Week	● Execution of Academic, Extra and Co-Curricular activities ● Regular assessment of Academic, Extra and Co-Curricular activities ● Regular calculation of attainments ● Revision of Academics gaps ● Prepared regular report of program for all assessment, attainment & gaps
3	PAC-3	September Last Week	● Execution of Academic, Extra and Co-Curricular activities ● Regular assessment of Academic, Extra and Co-Curricular activities ● Regular calculation of attainments ● Revision of academics gaps as previous attainment ● Assessment of activities required for being proposed in upcoming GC ● Submit report to Governing Council about previous semester & planning of next semester.
4.	PAC-4	October Last Week	● Inclusion of suggestions for revising gaps ● Execution of Academic, Extra and Co-Curricular activities according to suggestions in GC ● Regular assessment of Academic, Extra and Co-Curricular activities ● Regular calculation of attainments ● Revision of academics gaps as previous attainment
5.	PAC-5	November Third Week	● Revision of academics gaps as previous attainment ● Regular assessment of Academic, Extra and Co-Curricular activities ● Identification and proposal of gaps and activities to be considered by DAB to prepare Department Academic Calendar and CDP for upcoming semester. ● Semester closure report draft to be prepared ● Elective proposals/CBCS
6.	PAC-6	December Third Week	● Incorporation of suggestions from IQAC and DAB meetings in execution of Semester activities ● Execution and assessment of Academic, Extra and Co-Curricular activities ● Revision of academics gaps as previous attainment ● Calculation of attainments
7.	PAC-7	January Last Week	● Execution of Academic, Extra and Co-Curricular activities ● Regular assessment of Academic, Extra and Co-Curricular activities ● Regular calculation of attainments ● Revision of Academics gaps

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

			● Prepared regular report of program for all assessment, attainment & gaps
8.	PAC-8	February Last Week	● Execution of Academic, Extra and Co-Curricular activities ● Regular assessment of Academic, Extra and Co-Curricular activities ● Regular calculation of attainments ● Revision of Academics gaps ● Prepared regular report of program for all assessment, attainment & gaps
9.	PAC-9	March Last Week	● Execution of Academic, Extra and Co-Curricular activities ● Regular assessment of Academic, Extra and Co-Curricular activities ● Regular calculation of attainments ● Revision of Academics gaps ● Prepared regular report of program for all assessment, attainment & gaps ● Draft preparation of Semester closure
10.	PAC-10	April Second Week	● Execution of Academic, Extra and Co-Curricular activities ● Regular assessment of Academic, Extra and Co-Curricular activities ● Regular calculation of attainments ● Revision of Academics gaps ● Prepared regular report of program for all assessment, attainment & gaps
11.	PAC-11	May Last Week	● Execution of Academic, Extra and Co-Curricular activities ● Regular assessment of Academic, Extra and Co-Curricular activities ● Regular calculation of attainments ● Revision of Academics gaps ● Prepared regular report of program for all assessment, attainment & gaps ● Report submission of Semester closure ● Identification and proposal of gaps and activities to be considered by DAB to prepare Department Academic Calendar and CDP for upcoming semester.
12.	PAC-12	June Last Week	● Feedback of last IQAC and suggestions for new semester to be implemented in CDP and DAC ● Elective proposals/CBCS

4 List of Faculty Members & Technical Staff

Sr. No.	Faculty Name	Emp.ID	Designation	Email ID	Mobile No.
1	Mr. SHIVRAJ SHARMA	1698	ASST PROFESSOR	shivrajsharma@poornima.org	9784290681
2	DR. PANKAJ GAKHAR	3820	ASSOCIATE PROFESSOR	pankaj.gakhar@poornima.org	7737764255
3	Mr. JALDEEP KUMAR	3832	ASST PROFESSOR	jaldeepkumar@poornima.org	9413004430
4	MR. MANISH SHARMA	3926	ASST PROFESSOR	manish.sharma@poornima.org	9694522907
5	MR. ABHISHEK SINGH	5353	ASST PROFESSOR	abhishek.singh@poornima.edu.in	9557210581
6	Dr. GAURAV JAIN	6085	PROFESSOR	jaingaurav@yahoo.com	9602410960
7	Dr. RANJEET KUMAR	6098	PROFESSOR	ranjeet.kumar@poornima.org	8302201104
8	Dr. EKATA SHARMA	6377	ASSOCIATE PROFESSOR	ekatasharma1975@gmail .com	9530025325
9	Dr. PRAVIN MACHHINDRA SONWANE	6380	PROFESSOR	vapron@rediffmail.com	8805868462
10	MR. AJIT SINGH RAJAWAT	6849	ASST PROFESSOR	ajit.rajawat@poornima.org	7737819353
11	DR. PANKAJ VERMA	6872	ASSOCIATE PROFESSOR	pankaj.verma@poornima.org	9463970020
12	Ms. RICHA CHAUDHARY	6931	ASST PROFESSOR	richachaudhary2106@gmail.com	8851096563

13	Mr. BHAVANESH CHANDRA SHARMA	7012	ASST PROFESSOR	bhavaneshsharma2009@gmail.com	9772809472
14	Ms. SHEENA TAHIRA KHAN	7020	ASST PROFESSOR	khansheena70@gmail.com	8290616919
15	DR. HEMANT KAUSHIK	6878	PROFESSOR	hemant.kaushik@poornima.org	9950937390
16	DR. NEERAJ TIWARI	5298	PROFESSOR	neeraj.tiwari@poornima.org	9411984649
17	DR. VIKAS KUMAR SHARMA	7399	ASSOCIATE PROFESSOR	vikas.sharma@poornima.org	9887352062
18	MR. VINEET SHARMA	7376	ASST PROFESSOR	vineet.sharma@poornima.org	8239873121
19	MR. RACHIT SAXENA	7469	ASST PROFESSOR	rachit.saxena@poornima.org	9828151962
20	MR. MAYANK SHARMA	4846	ASST PROFESSOR	msecajmer@gmail.com	9413040458
21	DR. MEENA TEKRIWAL	2365	ASSOCIATE PROFESSOR	meenatekriwal@poornima.org	9413928194
22	DR. SHUCHI DAVE	3420	PROFESSOR	drshuchidave@gmail.com	9357252185
23	MS. KALPANA SHARMA	6050	ASST PROFESSOR	klpna.sharma88@gmail.com	9413077523
24	Dr. SHALINI SHAH	7125	ASSOCIATE PROFESSOR	shalini.shah@poornima.org	9116789047
25	MR. SITARAM GURJAR	2695	Technical Assistant	sitaramgurjar@poornima.org	9602335554
26	MR. NEMI CHAND KOLI	1483	Technical Officer	nemichand@poornima.org	9887793801
27	MR. HANUMAN PRASAD KHORAL	4216	Technical Assistant	hanuman.kharol@poornima.org	9667100385

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

5 Institute Academic Calendar

JULY 2022

Sun	Mon	Tue	Wed	Thu	Fri	Sat
31					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

AUGUST 2022

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

SEPTEMBER 2022

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

OCTOBER 2022

Sun	Mon	Tue	Wed	Thu	Fri	Sat
30	31					1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

NOVEMBER 2022

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

DECEMBER 2022

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

POORNIMA
COLLEGE OF ENGINEERING

Affiliated to RTU, Kota • Approved by AICTE & UGC under 2(f) • Accredited by NBA

ACADEMIC CALENDAR 2022-23*#

ODD SEMESTER

JULY 2022

RTU THEORY EXAMINATION OF FIRST YEAR [EVEN SEM 2021-22]
Practical Training [After II, IV, VI Sem.]

AUGUST 2022

Tuesday 16	Commencement of Classes-Odd Semesters B.Tech III Sem.
Wednesday 17	Commencement of Classes-Odd Semesters B.Tech VII Sem.
Monday 15	Celebration of Independence Day
Tuesday 16 to Thursday 18	Orientation programme-B.Tech. III Sem.
Wednesday17 to Saturday 20	Orientation programme-B.Tech. VII Sem.

SEPTEMBER 2022

RTU THEORY EXAMINATION OF SECOND YEAR [EVEN SEM 2021-22]

Monday 05	Faculty Felicitation Program, Celebration of Teachers' Day & activities under WISE
Thursday 15	Engineers' Day
Monday 19	Commencement of Classes-Odd Semesters V Sem.
Monday 19 to Wednesday 21	Orientation programme-B. Tech. V Sem.
Monday 26 to Friday 30	First Mid Term Theory & Practical Exam for B.Tech VII Sem

OCTOBER 2022

Sunday 02	Annual Day 'KALANIDHI' & Prize distribution ceremony
Thursday 06	Manthan- Inter-college Debate Competition
Monday 10 to Saturday 15	First Mid Term Theory & Practical Exam for B.Tech III Sem
Monday 10 to Saturday 29	Orientation programme-B. Tech. I Sem.
Monday 31	Commencement of Classes-Odd Semesters I Sem.

NOVEMBER 2022

Tuesday 01	Blood Donation Camp
Monday 07 to Saturday 12	First Mid Term Theory & Practical Exam for B.Tech V Sem
Monday 28	Last Teaching Day for B.Tech VII Sem
Tuesday 29 to Saturday 03	Second Mid-TermTheory & Practical Exam for B.Tech VII Sem

DECEMBER 2022

Wednesday 07	End-Term Theory Exams for B.Tech VII Sem
Monday 12	End-Term Practical Exams for B.Tech VII Sem
Monday 12 to Saturday 17	First Mid Term Theory & Practical Exam for B.Tech I Sem
Saturday 17	Last Teaching Day for B.Tech III Sem
Monday 19 to Saturday 24	Second Mid-TermTheory & Practical Exam for B.Tech III Sem
Friday 30	Last Teaching Day for B.Tech V Sem

JANUARY 2023

Monday 02 to Saturday 07	Second Mid-TermTheory & Practical Exam for B.Tech V Sem
Tuesday 03	End-Term Practical Exams for B.Tech III Sem
Monday 09	End-Term Practical Exams for B.Tech V Sem
Tuesday 17	End-Term Theory Exams for B.Tech III Sem
Wednesday 18	End-Term Theory Exams for B.Tech V Sem

FEBRUARY 2023

Thursday, 09	Last Teaching Day for B.Tech I Sem
Friday 10 to Friday 17	Second Mid Term Theory & Practical Exam for B.Tech I Sem
Monday 20	End-Term Practical Exams for B.Tech I Sem
Saturday 11 March	End-Term Theory Exams for B.Tech I Sem

HOLIDAYS IN ODD SEMESTER

Bakrid / Eid ul-Adha"	Sunday, July 10, 2022
Raksha Bandhan	Thursday, August 11, 2022
Shri Krishna Janmashtami	Friday, August 19, 2022
Vijay Dashmi	Wednesday, October 5, 2022
Diwali Break	Saturday, Oct. 22 to Wednesday, Oct. 26
Guru Nanak Jayanti	Tuesday, November 8, 2022
Christmas	Sunday, December 25, 2022
Winter Break	As per RTU Examination Schedule
New Year Day	December 31, 2022 to January 01, 2023

*Subject to revision as per RTU notifications

#For all Engineering Faculty and Students of PCE

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
181-B, RIICO Institutional Area
Sitapura, JAIPUR

6 Department Activity Calendar

Poornima College of Engineering, Jaipur					
Calendar for Electrical Engineering : Odd Semester - Session 2022-23					
(A) Academic Processes					
S. No.	**Activity/ Process**	**B.Tech. I Sem.**	**B.Tech. III Sem.**	**B.Tech. V Sem.**	**B.Tech. VII Sem.**
1	Date of Registration & start of regular classes for students	Monday, October 31, 22	Tuesday, August 16, 22	Monday, September 19, 22	Wednesday, August 17, 22
2	Orientation programme	Monday, October 31, 22 to Saturday, October 29, 22	Tuesday, August 16, 22 to Thursday August18, 22	Monday, September 19, 22 to Wednesday, September 21, 22	Wednesday, August 17, 22 to Saturday, August 20, 22
3	Date of submission of question papers by faculty members to secrecy for 1st Mid-term	Tuesday, December 06, 22	Saturday, October 01, 22	Tuesday, November 01, 22	Friday, September 16, 22
4	I Mid Term Theory & Practical Exam	Monday, December 12, 22 to Saturday, December 17, 22	Monday, October 10, 22 to Saturday, October 15, 22	Monday, November 7, 22 to Saturday, November 12, 22	Monday, September 26, 22 to Friday, October 30, 22
5	Showing evaluated answer books of 1st Mid-term exam to students in respective classes	Upto Wednesday, December 21, 22	Upto Saturday, Octomber 22, 22	Upto Monday, November 21, 2022	Upto Saturday, November 5, 2022
6	Last date of submission of Evaluated Answer Books and Mark of First Mid-term Theory & Practical exam to Exam and Secrecy Cell respectively	Upto Monday, December 26, 22	Upto Saturday, November 12, 2022	Upto Saturday, November 26, 2022	Upto Monday, November 7, 2022
7	Date of submission of question papers by faculty members to secrecy for 2nd Mid-term	Friday, December 09, 22	Thursday, November 17, 2022	Wednesday, November 30, 2022	Monday, October 17, 2022
8	Revision classes	To be declared later according to RTU Exam Schedule			
9	Last Teaching Day	Monday, January 09, 2023	Saturday, December 17, 22	Friday, December 30, 2022	Monday, November 28, 2022
10	2nd Mid-term theory & Practical Exams	Friday, February 10, 2023 to Friday 17, 2023	Monday -Saturday, Decmber 19-24 , 22	Monday-Saturday, January 02- 07, 2023	Tuesday -Saturday, November 29-December 03, 2022
11	End-Term Practical Exams	Monday, February 20, 2023	Tuesday, January 03, 23	Wednesday, January 18, 2023	Monday, December 12, 2022
(B) Events and Activities					
12	SPACE AND TIME HARMONICS AND ITS IMPACTS	Monday, August 22, 2022			
13	TEACHER'S DAY	Monday, September 05, 2022			
14	INDUSTRIAL AUTOMATION USING PLC SCADA	Tuesday, September 6, 2022 to Wednesday, September 7, 2022			
15	STARTUP IDEAS IN DIGITAL WORLD	Tuesday, September 13, 2022			
16	ENGINEER'S DAY	Thursday, September 15, 2022			
17	SOLAR STUDY LAMP ASSEMBLY	Thursday, November 03, 2022			
(C) Holidays					
18	Bakrid / Eid ul-Adha"	Sunday, July 10, 2022			
19	Raksha Bandhan	Thursday, August 11, 2022			
20	Shri Krishna Janmashtami	Friday, August 19, 2022			
21	Vijay Dashmi	Wednesday, October 05, 2022			
22	Diwali Break	Saturday, October 22 -26, 2022			
23	Guru Nanak Jayanti	Tuesday, November 08, 2022			
24	Christmas	Sunday, December 25, 2022			
25	Winter Break	As per RTU examination schedule			
"स्वच्छ भारत.. सम्पन्न भारत.."					

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

7 Teaching Scheme

7.1 RTU Teaching Scheme

Teaching and Examination Scheme

2nd Year: Electrical Engineering
III Semester: B.Tech.

SN	Category	Course Code	Course Title	Hours			Marks			Cr
				L	T	P	IA	ETE	Total	
1	BSC	3EE2-01	Advance Mathematics	3	0	0	30	120	**150**	**3**
2	HSMC	3EE1-02/ 3EE1-03	Technical Communication / Managerial Economics and Financial Accounting	2	0	0	20	80	**100**	**2**
3	ESC	3EE3-04	Power generation Process	2	0	0	20	80	**100**	**2**
4	PCC	3EE4-05	Electrical Circuit Analysis	3	0	0	30	120	**150**	**3**
5		3EE4-06	Analog Electronics	3	0	0	30	120	**150**	**3**
6		3EE4-07	Electrical Machine - I	3	0	0	30	120	**150**	**3**
7		3EE4-08	Electromagnetic Field	2	0	0	20	80	**100**	**2**
8		3EE4-21	Analog Electronics Lab	0	0	2	30	20	**50**	**1**
9		3EE4-22	Electrical Machine-I Lab	0	0	4	60	40	**100**	**2**
10		3EE4-23	Electrical circuit design Lab	0	0	4	60	40	**100**	**2**
11	Training Exam	3EE7-30	Training Seminar	0	0	2			**50**	**1**
12	SODECA	3EE8-00	Social Outreach, Discipline & Extra Curricular Activities						**25**	**0.5**
			Total						**1225**	**24.5**

L = Lecture, **T** = Tutorial, **P** = Practical, **IA**=Internal Assessment,

ETE=End Term Exam, **Cr**=Credits

RAJASTHAN TECHNICAL UNIVERSITY, KOTA

Teaching & Examination Scheme
B.Tech. : Electrical Engineering
3rd Year –V Semester

SN	Category	Course		Contact hrs/week			Marks				Cr
		Code	Title	L	T	P	Exm Hrs	IA	ETE	Total	
THEORY											
1	ESC	5EE3-01	Electrical Materials	2	0	0	2	20	80	**100**	**2**
2	PCC/ PEC	5EE4-02	Power System - I	3	0	0	3	30	120	**150**	**3**
3		5EE4-03	Control System	3	0	0	3	30	120	**150**	**3**
4		5EE4-04	Microprocessor	3	0	0	3	30	120	**150**	**3**
5		5EE4-05	Electrical Machine Design	3	0	0	3	30	120	**150**	**3**
6		Professional Elective I (any one)		2	0	0	2	20	80	**100**	**2**
		5EE5-11	Restructured Power System.								
		5EE5-12	Electromagnetic Wave.								
		5EE5-13	Digital Control System.								
		Sub Total		**16**	**0**	**0**		**160**	**640**	**800**	**16**
PRACTICAL & SESSIONAL											
7	PCC	5EE4-21	Power System - I Lab	0	0	2	2	30	20	**50**	**1**
8		5EE4-22	Control System Lab	0	0	2	2	30	20	**50**	**1**
9		5EE4-23	Microprocessor Lab	0	0	2	2	30	20	**50**	**1**
10		5EE4-24	System Programming Lab	0	0	2	2	30	20	**50**	**1**
11	PSIT	5EE7-30	Industrial Training	0	0	1		75	50	**125**	**2.5**
12	SODECA	5EE8-00	Social Outreach, Discipline & Extra Curricular Activities						25	**25**	**0.5**
		Sub- Total		**0**	**0**	**9**		**195**	**155**	**350**	**7**
		TOTAL OF V SEMESTER		**16**	**0**	**9**		**355**	**795**	**1150**	**23**

L: *Lecture,* ***T:*** *Tutorial,* ***P:*** *Practical,* ***Cr:*** *Credits*
ETE: *End Term Exam,* ***IA:*** *Internal Assessment*

Office of Dean Academic Affairs
Rajasthan Technical University, Kota

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

RAJASTHAN TECHNICAL UNIVERSITY, KOTA

Scheme & Syllabus

IV Year- VII & VIII Semester: B. Tech. (Electrical Engineering)

Teaching & Examination Scheme
B. Tech.: Electrical Engineering
4th Year - VII Semester

SN	Course Type	Course		Hours per Week			Marks				Cr
		Code	Name	L	T	P	Exm Hrs	IA	ETE	Total	
1	PEC	7EE5-11	Wind and Solar Energy Systems.	3	0	0	3	30	120	**150**	**3**
2		7EE5-12	Power Quality and FACTS								
3		7EE5-13	Control System Design.								
4	OE		Open Elective-I	3	0	0	3	30	120	**150**	**3**
			SUB TOTAL	**6**	**0**	**0**		**60**	**240**	**300**	**6**
PRACTICAL & SESSIONAL											
5	PCC	7EE4-21	Embedded Systems Lab	0	0	4	2	60	40	**100**	**2**
6	PCC	7EE4-22	Advance control system lab	0	0	4	2	60	40	**100**	**2**
7	PSIT	7EE7-30	Industrial Training	1	0	0		75	50	**125**	**2.5**
8		7EE7-40	Seminar	2	0	0		60	40	**100**	**2**
9	SODE-CA	7EE8-00	Social Outreach, Discipline & Extra Curricular Activities	0	0	0		0	25	**25**	**0.5**
			SUB TOTAL	**3**	**0**	**8**		**255**	**195**	**450**	**6**
			TOTAL OF VII SEMESTER	**9**	**0**	**8**		**315**	**435**	**750**	**15**

L: *Lecture,* ***T:*** *Tutorial,* ***P:*** *Practical,* ***Cr:*** *Credits*
ETE: *End Term Exam,* ***IA:*** *Internal Assessment*

Office of Dean Academic Affairs
Rajasthan Technical University, Kota

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

8 PCE Teaching Scheme

Poornima Group, Jaipur

Teaching Scheme of Odd Semester 2022-23

Year	Sem	Students	Teaching				Course Name	Subject Code	No. of Sec	No. of Batch	Batch Size (T/H/F)	Total Load (L)	Total Load (T)	Total Load (P)	Total Load (L+T+P)	Teaching Dept.
			L	T	P	Credit										
2	3	27	3	0	0	3	Advance Mathematics	3EE2-01	1	2	F	3	0	0	3	Maths
2	3	27	2	0	0	2	Technical Communication	3EE1-02	1	2	F	2	0	0	2	English
2	3	27	2	0	0	3	Power generation Process	3EE3-04	1	2	F	2	0	0	2	EE
2	3	27	3	0	0	3	Electrical Circuit Analysis	3EE4-05	1	2	F	3	0	0	3	EE
2	3	27	3	0	0	3	Analog Electronics	3EE4-06	1	2	F	3	0	0	3	EE
2	3	27	3	0	0	3	Electrical Machine - I	3EE4-07	1	2	F	3	0	0	3	EE
2	3	27	2	0	0	2	Electromagnetic Field	3EE4-08	1	2	F	2	0	0	2	EE
2	3	27	0	0	2	1	Analog Electronics Lab	3EE4-21	1	2	F	0	0	4	4	EE
2	3	27	0	0	4	2	Electrical Machine-I Lab	3EE4-22	1	2	F	0	0	8	8	EE
2	3	27	0	0	4	2	Electrical circuit design Lab	3EE4-23	1	2	F	0	0	8	8	EE
2	3	27	0	0	2	1	Industrial Training	3EE7-30	1	2	F	0	0	4	4	EE
2	3	27	0	0	1		NSP		1	2	F	0	0	2	2	EE
															44	
3	5	13	2	0	0	2	Electrical Materials	5EE3-01	1	1	F	3	0	0	3	EE
3	5	13	3	0	0	3	Power System - I	5EE4-02	1	1	F	3	0	0	3	EE
3	5	13	3	0	0	3	Control System	5EE4-03	1	1	F	3	0	0	3	EE
3	5	13	3	0	0	3	Microprocessor	5EE4-04	1	1	F	3	0	0	3	EE
3	5	13	3	0	0	3	Electrical Machine Design	5EE4-05	1	1	F	3	0	0	3	EE
3	5	13	2	0	0	2	Restructured Power System.	5EE5-11	1	1	F	3	0	0	3	EE
3	5	13	0	0	2	1	Power System - I Lab	5EE4-21	1	1	H	0	0	2	2	EE
3	5	13	0	0	2	1	Control System Lab	5EE4-22	1	1	H	0	0	2	2	EE
3	5	13	0	0	2	1	Microprocessor Lab	5EE4-23	1	1	H	0	0	2	2	EE
3	5	13	0	0	2	1	System Programming Lab	5EE4-24	1	1	H	0	0	2	2	EE
3	5	13	0	0	1	2.5	Industrial Training	5EE7-30	1	1	F	0	0	2	2	EE
3	5	13			2		NSP		1	1	F	0	0	2	2	EE
															30	
4	7	58	3	0	0	3	Professional Elective-2	7EE5-11/13	2	3	F	6	0	0	6	EE
4	7	58	3	0	0	3	Open Elective - I	7EE6.60.1/2	2	3	F	6	0	0	6	EE
4	7	58	0	0	4	2	Embedded Systems Lab	7EE4-21	1	3	H	0	0	12	12	EE
4	7	58	0	0	4	2	Advance control system lab	7EE4-22	1	3	H	0	0	12	12	EE
4	7	58	1	0	0	2.5	Industrial Training	7EE7-30	1	3	F	1	0	0	1	EE
4	7	58	2	0	0	2	Seminar	7EE7-40	1	3	F	2	0	0	2	EE
4	7	58	0	0	3		Project-1	-	1	3	F	0	0	9	9	EE

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

8.1 Marking Scheme

MARKING SCHEME FOR PRACTICAL EXAM, ODD SEM., 2022-23,		EXAM & SECRECY CELL, PCE									
		I+II Mid Term Exam			Atten & Performance.			End Term Exam			Max.
Code	SUBJECT	Exp.	Viva	Total	Attn.	Perf.	Total	Exp.	Viva	Total	Marks
1FY2-20	Engineering Physics Lab	30	10	40	10	30	40	30	10	40	100
1FY2-21	Engineering Chemistry Lab	30	10	40	10	30	40	30	10	40	100
1FY1-22	Language Lab	30	10	40	10	30	40	30	10	40	100
1FY1-23	Human Values Activities & Sports	30	10	40	10	30	40	30	10	40	100
1FY3-24	Computer Programming Lab	30	10	40	10	30	40	30	10	40	100
1FY3-25	Manufacturing Practices Workshop	30	10	40	10	30	40	30	10	40	100
1FY3-26	Basic Electrical Engineering Lab	30	10	40	10	30	40	30	10	40	100
1FY3-27	Basic Civil Engineering Lab	30	10	40	10	30	40	30	10	40	100
1FY3-28	Computer Aided Engineering Graphics	30	10	40	10	30	40	30	10	40	100
1FY3-29	Computer Aided Machine Drawing	30	10	40	10	30	40	30	10	40	100
3CE4-21	Surveying Lab	30	10	40	10	30	40	30	10	40	100
3CE4-22	Fluid Mechanics Lab	30	10	40	10	30	40	30	10	40	100
3CE4-23	Computer Aided Civil Engineering Drawing	30	10	40	10	30	40	30	10	40	100
3CE4-24	Civil Engineering Maretials Lab	30	10	40	10	30	40	30	10	40	100
3CE4-25	Geology Lab	30	10	40	10	30	40	30	10	40	100
3CE7-30	Training Seminar			60					40		100
3CS4-21	Data Structures and Algorithms Lab	30	10	40	10	30	40	30	10	40	100
3CS4-22	Object Oriented Programming Lab	30	10	40	10	30	40	30	10	40	100
3CS4-23	Software Engineering Lab	30	10	40	10	30	40	30	10	40	100
3CS4-24	Digital Electronics Lab	30	10	40	10	30	40	30	10	40	100
3CS7-30	Training Seminar			60					40		100
3AID4-21	Data Structures and Algorithms Lab	30	10	40	10	30	40	30	10	40	100
3AID4-22	Object Oriented Programming Lab	30	10	40	10	30	40	30	10	40	100
3AID4-23	Software Engineering Lab	30	10	40	10	30	40	30	10	40	100
3AID4-24	Digital Electronics Lab	30	10	40	10	30	40	30	10	40	100
3AID7-30	Industrial Training			60					40		100
3CAI4-21	Data Structures and Algorithms Lab	30	10	40	10	30	40	30	10	40	100
3CAI4-22	Object Oriented Programming Lab	30	10	40	10	30	40	30	10	40	100
3CAI4-23	Software Engineering Lab	30	10	40	10	30	40	30	10	40	100
3CAI4-24	Digital Electronics Lab	30	10	40	10	30	40	30	10	40	100
3CAI7-30	Industrial Training			60					40		100
3CCB4-21	Data Structures and Algorithms Lab	30	10	40	10	30	40	30	10	40	100
3CCB4-22	Object Oriented Programming Lab	30	10	40	10	30	40	30	10	40	100
3CCB4-23	Software Engineering Lab	30	10	40	10	30	40	30	10	40	100
3CCB4-24	Digital Electronics Lab	30	10	40	10	30	40	30	10	40	100
3CCB7-30	Industrial Training			60					40		100
3EC4-21	Electronics Devices Lab	30	10	40	10	30	40	30	10	40	100
3EC4-22	Digital System Design Lab	30	10	40	10	30	40	30	10	40	100
3EC4-23	Signal Processing Lab	30	10	40	10	30	40	30	10	40	100
3EC3-24	Computer Programming Lab-I	30	10	40	10	30	40	30	10	40	100
3EC7-30	Training Seminar			60					40		100
3EE4-21	Analog Electronics Lab	30	10	40	10	30	40	30	10	40	100
3EE4-22	Electrical Machine-I Lab	30	10	40	10	30	40	30	10	40	100
3EE4-23	Electrical circuit design Lab	30	10	40	10	30	40	30	10	40	100
3EE7-30	Training Seminar			60					40		100
3IT4-21	Data Structures and Algorithms Lab	30	10	40	10	30	40	30	10	40	100
3IT4-22	Object Oriented Programming Lab	30	10	40	10	30	40	30	10	40	100
3IT4-23	Software Engineering Lab	30	10	40	10	30	40	30	10	40	100
3IT4-24	Digital Electronics Lab	30	10	40	10	30	40	30	10	40	100
3IT7-30	Training Seminar			60					40		100
3ME4-21	Machine drawing practice	30	10	40	10	30	40	30	10	40	100
3ME4-22	Materials Testing Lab	30	10	40	10	30	40	30	10	40	100
3ME4-23	Basic Mechanical Engineering Lab	30	10	40	10	30	40	30	10	40	100
3ME4-24	Programming using MAT LAB	30	10	40	10	30	40	30	10	40	100
3ME7-30	Training Seminar			60					40		100
5CE4-21	Concrete Structures Design	30	10	40	10	30	40	30	10	40	100
5CE4-22	Geotechnical Engineering Lab	30	10	40	10	30	40	30	10	40	100
5CE4-23	Water Resource Engineering Design	30	10	40	10	30	40	30	10	40	100
5CE7-30	Industrial Training			60					40		100
5CS4-21	Computer Graphics & Multimedia Lab	30	10	40	10	30	40	30	10	40	100
5CS4-22	Compiler Design Lab	30	10	40	10	30	40	30	10	40	100
5CS4-23	Analysis of Algorithms Lab	30	10	40	10	30	40	30	10	40	100
5CS4-24	Advance Java Lab	30	10	40	10	30	40	30	10	40	100
5CS7-30	Industrial Training			60					40		100
5EC4-21	RF Simulation Lab	30	10	40	10	30	40	30	10	40	100
5EC4-22	Digital Signal Processing Lab	30	10	40	10	30	40	30	10	40	100
5EC4-23	Microwave Lab	30	10	40	10	30	40	30	10	40	100
5EC7-30	Industrial Training			60					40		100
5EE4-21	Power System - I Lab	30	10	40	10	30	40	30	10	40	100
5EE4-22	Control System Lab	30	10	40	10	30	40	30	10	40	100
5EE4-23	Microprocessor Lab	30	10	40	10	30	40	30	10	40	100
5EE4-24	System Programming Lab	30	10	40	10	30	40	30	10	40	100
5EE7-30	Industrial Training			60					40		100
5IT4-21	Computer Graphics & Multimedia Lab	30	10	40	10	30	40	30	10	40	100
5IT4-22	Compiler Design Lab	30	10	40	10	30	40	30	10	40	100
5IT4-23	Analysis of Algorithms Lab	30	10	40	10	30	40	30	10	40	100
5IT4-24	Advanced Java Lab	30	10	40	10	30	40	30	10	40	100
5IT7-30	Industrial Training			60					40		100
5ME3-21	Mechatronic Lab	30	10	40	10	30	40	30	10	40	100
5ME4-22	Heat Transfer lab	30	10	40	10	30	40	30	10	40	100
5ME4-23	Production Engineering Lab	30	10	40	10	30	40	30	10	40	100
5ME4-24	Machine Design Practice I	30	10	40	10	30	40	30	10	40	100
5ME7-30	Industrial Training			60					40		100
7CE4-21	Road Material Testing Lab	15	5	20	5	15	20	15	5	20	50
7CE4-22	Professional Practices & Field Engineering	15	5	20	5	15	20	15	5	20	50
7CE4-23	Soft Skills Lab	15	5	20	5	15	20	15	5	20	50
7CE4-24	Environmental Monitoring and Design Lab	15	5	20	5	15	20	15	5	20	50
7CE7-30	Practical Training			75					50		125
7CE7-40	Seminar			60					40		100
7CS4-21	Internet of Things Lab	30	10	40	10	30	40	30	10	40	100
7CS4-22	Cyber Security Lab	30	10	40	10	30	40	30	10	40	100
7CS7-30	Industrial Training			75					50		125
7CS7-40	Seminar			60					40		100
7EC4-21	VLSI Design Lab	30	10	40	10	30	40	30	10	40	100
7EC4-22	Advance communication lab (MATLAB	15	5	20	5	15	20	15	5	20	50
7EC4-23	Optical Communication Lab	15	5	20	5	15	20	15	5	20	50
7EC7-30	Industrial Training			75					50		125
7EC7-40	Seminar			60					40		100
7EE4-21	Embedded Systems Lab	30	10	40	10	30	40	30	10	40	100
7EE4-22	Advance control system lab	30	10	40	10	30	40	30	10	40	100
7EE7-30	Industrial Training			75					50		125
7EE7-40	Seminar			60					40		100
7IT4-21	Big Data Analytics Lab	30	10	40	10	30	40	30	10	40	100
7IT4-22	Cyber Security Lab	30	10	40	10	30	40	30	10	40	100
7IT7-30	Industrial Training			75					50		125
7IT7-40	Seminar			60					40		100
7ME4-21	FEA Lab	22	8	30	8	22	30	22	8	30	75
7ME4-22	Thermal Engineering Lab II	22	8	30	8	22	30	22	8	30	75
7ME4-23	Quality Control Lab	15	5	20	5	15	20	15	5	20	50
7ME7-30	Industrial Training *			75					50		125
7ME7-40	Seminar *			60					40		100

NOTE: - (1) In Attendance & Performance marks should be given on the basis of student overall performance in semester i. e. continuous evaluation.
(2) In Common Pool marks should be given by HOD on the basis of student Assignment,Non Syllabus Activity,Online Exam Exam,Application/Survey / Case Study based Learning, Pre-Placement Activity, Department Level Career Oriented Activities through out the semester.

9 Department Load Allocation

POORNIMA COLLEGE OF ENGINEERING, JAIPUR									
Department of Electrical Engineering									
Load Sheet of Session 2022-23(odd Semester)									
Sr. No.	**Faculty Name**	**Subject(s)**	**Subject Code**	**Section**	**L**	**T**	**P**	**Load Per Week**	**Total Load**
1	Dr. PRAVIN MACHHINDRA SONWANE	Restructured Power System	5EE5-11	A	3	0	0	2	6
		Industrial Training	7EE7-30	A1,A2	2	0	0	2	
		Industrial Training	5EE7-30	A	1	0	0	1	
2	DR. PANKAJ GAKHAR	Electrical Machine - I	3EE4-07	A	3	0	0	3	7
		Electrical Machine-I Lab	3EE4-22	A1	0	0	4	4	
3	Dr. GAURAV JAIN	Electromagnetic Field	3EE4-08	A	3	0	0	2	8
		Embeded System Lab	7EE4-21	A1	0	0	4	4	
		NSP	5EENSP	A	0	0	1	1	
4	Dr. EKATA SHARMA	Electrical Circuit Analysis	3EE4-05	A	3	0	0	3	7
		Advanced Control System Lab	7EE4-22	A3	0	0	4	4	
5	DR. PANKAJ VERMA	Microprocessor	5EE4-04	A	4	0	0	3	8
		Embeded System Lab	7EE4-21	A2	0	0	4	4	
6	Dr. RANJEET KUMAR	Electrical Machine Design	5EE4-05	A	4	0	0	3	8
		Embeded System Lab	7EE4-21	A3	0	0	4	4	
7	DR. HEMANT KAUSHIK	Power System - I	5EE4-02	A	3	0	0	3	7
		Advanced Control System Lab	7EE4-22	A1	0	0	4	4	
8	DR. VIKAS KUMAR SHARMA	Control System	5EE4-03	A	4	0	0	3	8
		Seminar	7EE7-40	A2,A3	0	0	4	4	
9	MR. AJIT SINGH RAJAWAT	Power generation Process	3EE3-04	A	3	0	0	2	8
		Industrial Training	3EE4-30	A1	2	0	0	2	
		Industrial Training	7EE7-30	A3	1	0	0	1	
		Power System - I Lab	5EE4-21	A	0	0	2	2	
10	MR. VINEET SHARMA	Power Generation Sources	7EE6-60.2	A	3	0	0	3	7
		Electrical Circuit design Lab	3EE4-23	A1	0	0	4	4	
11	MR. MAYANK SHARMA	Analog Electronics	3EE4-06	A	3	0	0	3	7
		Analog Electronics Lab	3EE4-21	A1,A2	0	0	4	4	
12	MR. RACHIT SAXENA	Electrical Machines and Drives	7EE6-60.1	A	3	0	0	3	7
		Electrical Circuit design Lab	3EE4-23	A2	0	0	4	4	
13	Ms. SHEENA TAHIRA KHAN	Wind and Solar Energy system	7EE5-11	A	3	0	0	3	7
		Electrical Machine-I Lab	3EE4-22	A2	0	0	4	4	
14	MR. ABHISHEK SINGH	Power Quality and FACTS	7EE5-12	A	3	0	0	3	7
		Advanced Control System Lab	7EE4-22	A2	0	0	4	4	
15	MR. MANISH SHARMA	Electrical Materials	5EE3-01	A	3	0	0	2	8
		Industrial Training	3EE4-30	A2	2	0	0	2	
		Seminar	7EE7-40	A1	0	0	2	2	
		NSP	3EENSP	A1	0	0	1	1	
16	Mr. JALDEEP KUMAR	Control System Lab	5EE4-22	A	0	0	2	2	7
		Microprocessor Lab	5EE4-23	A	0	0	2	2	
		System Programming Lab	5EE4-24	A	0	0	2	2	
		NSP	3EENSP	A2	0	0	1	1	
17	DR. SHUCHI DAVE	Advance Mathematics	3EE2-01	A	3	0	0	3	3
18	Dr. SHALINI SHAH	Technical Communication	3EE1-02	A	2	0	0	2	2

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

10 Time Table

10.1 Orientation Time Table

Poornima College of Engineering						
Department of Electrical Enginering						
Time Table for Orientation Program (ODD Semester, 2022-23)						
II Year						
Day/Time	9:00 AM - 10:00 AM	10:00 AM - 11:00 AM	11:00 AM - 12:00 PM	12:00 PM - 12:30 PM	12:30 PM - 01:30 PM	01:30 PM - 02:30 PM
Monday 20/09/2021	Tutor Interaction (Mr. Pankaj Verma)	NAAC/NBA Philosophy (Mr. Mayank Sharma)	Electrical Machine-I Overview (Dr. Pankaj Gakhar)	L U N C H	Electromagnetic Field overview (Dr. Gaurav Jain)	Analog Electronics overview (Dr. Hemant Kaushik)
Tuesday 21/09/2021	HOD Interaction (Dr. Pravin Sonwane)	Research Paper Writing (Mr. Mayank Sharma)	Power Generation Process Overview (Mr. Ajit Singh Rajawat)		Industrial Training /Placement overview (Dr. Gaurav Jain)	Electrical Circuit Analysis overview (Mr. Mayank Sharma)
Wednesday 22/09/2021	Technical Communication overview (Dr. Shalini Shah)	Electrical Machine -I Lab Overview (Dr. Pankaj Gakhar)	Project overview (Dr. Gaurav Jain)		Director Interaction (Dr. Mahesh Bundele)	AE & ECD Lab overview (Mr. Mayank Sharma)

Poornima College of Engineering						
Department of Electrical Enginering						
Time Table for Orientation Program (ODD Semester, 2022-23)						
III Year						
Day/Time	9:00 AM - 10:00 AM	10:00 AM - 11:00 AM	11:00 AM - 12:00 PM	12:00 PM - 12:30 PM	12:30 PM - 01:30 PM	01:30 PM - 02:30 PM
Monday 20/09/2021	HOD Interaction (Dr. Pravin Sonwane)	NSP (Dr. Gaurav Jain)	Electrical Materials overview (Dr. Gaurav Jain)	L U N C H	Power System-I overview (Dr. Hemant Kaushik)	System programming Lab Overview (Dr. Vikas Kumar Sharma)
Tuesday 21/09/2021	Control System overview (Mr. Ajit Singh Rajawat)	Research Paper Writing (Mr. Mayank Sharma)	Restructered Power System overview (Dr. Praveen Sonwane)		Director Interaction (Dr. Mahesh Bundele)	Tutor Interaction (Dr. Pankaj Gakhar)
Wednesday 22/09/2021	Indutrial Training (Dr. Pravin Sonwane)	NAAC/NBA Philosophy (Mr. Mayank Sharma)	Microprocessor overview (Dr Pankaj Verma)		Placement (Dr. Pankaj Gakhar)	Electrical Machine Design overview (Mr. Vineet Sharma)

POORNIMA COLLEGE OF ENGINEERING						
Department of Electrical Enginering						
Time Table for Orientation Program (ODD Semester, 2022-23)						
IV Year						
Day/Time	9:00 AM - 10:00 AM	10:00 AM - 11:00 AM	11:00 AM - 12:00 PM	12:00 PM - 12:30 PM	12:30 PM - 01:30 PM	01:30 PM - 02:30 PM
Monday, 06/09/2021	Tutor Interaction (Mr. Ajit Singh Rajawat)	HOD Interaction (Dr. Pravin Sonwane)	Internship and placement (Mr. Ajit Singh Rajawat)	L U N C H	Subject Overview-Wind & Solar Energy (Dr. Hemant Kaushik)	
Tuesday, 07/09/2021	Project (Dr. Gaurav Jain)	NAAC/NBA Philosophy (Mr. Mayank Sharma)	Director Interaction (Dr. Mahesh Bundele)		Subject Overview-ES Lab (Dr. Pankaj Verma)	
Wednesday, 08/09/2021	Add-On/Skill Development Courses (Dr. Pravin Sonwane)	MOOC (Dr. Gaurav Jain)	Subject Overview-Power Quality & Facts (Mr. Ajit Singh)		Subject Overview-Open Elective (Dr. Gaurav Jain/Mr. Vineet Sharma)	

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

10.2 Academic Time Table

POORNIMA COLLEGE OF ENGINEERING
DEPARTMENT OF ELECTRICAL ENGINEERING
III SEM

Class Location: AT-04
WEF: 18.08.2022
Tutor Name: Mr. Pankaj Verma

	1 8:00 - 9:00	2 9:00 - 10:00	3 10:00 - 11:00	LUNCH 11:00 - 11:50	4 11:50 - 12:50	5 12:50 - 13:50	6 13:50 - 14:50	7 14:50 - 15:50
Mo	**3EE2-01 AM** Shuchi Dave	**3EE3-04 PGP** Ajit Singh Rajawat	**3EE4-06 AE** Mayank Sharma		**3EE4-05 ECA** Ekata Sharma	AT-08 Batch 1 3EE4-22 EM-1 LAB Pankaj Gakhar AT-02 Batch 2 3EE4-21 AE LAB Mayank Sharma		**Add on** Pravin Machhindra Sonwane
Tu	**3EE1-02 TC** Shalini Shah	**3EE4-08 EF** Gaurav Jain	**3EE4-07 EM-1** Pankaj Gakhar		**3EE1-02 TC** Shalini Shah	AT-10 Batch 1 3EE7-30 Industrial Training Ajit Singh Rajawat AT-12 Batch 2 3EE4-23 ECD LAB Rachit Saxena		**Add on** Pravin Machhindra Sonwane
We	**3EE4-08 EF** Gaurav Jain	**3EE3-04 PGP** Ajit Singh Rajawat	**3EE4-07 EM-1** Pankaj Gakhar		**3EE2-01 AM** Shuchi Dave	AT-12 Batch 1 3EE4-23 ECD LAB Vineet Sharma AT-08 Batch 2 3EE4-22 EM-1 LAB Sheena Tahira Khan		**Add on** Pravin Machhindra Sonwane
Th	**3EE4-06 AE** Mayank Sharma	AT-02 Batch 1 3EE4-21 AE LAB Mayank Sharma AT-12 Batch 2 3EE4-23 ECD LAB Rachit Saxena			**3EE4-05 ECA** Ekata Sharma	AT-08 Batch 1 3EE4-22 EM-1 LAB Pankaj Gakhar CT-05 Batch 2 3EE7-30 Industrial Training Manish Sharma		**Add on** Pankaj Verma
Fr	**3EE4-07 EM-1** Pankaj Gakhar	**3EE4-05 ECA** Ekata Sharma	**3EE4-06 AE** Mayank Sharma		**3EE2-01 AM** Shuchi Dave	AT-12 Batch 1 3EE4-23 ECD LAB Vineet Sharma AT-08 Batch 2 3EE4-22 EM-1 LAB Sheena Tahira Khan		**Add on** Pankaj Verma
Sa	**I3 Activity** Ajit Singh Rajawat	I3 Activity IIIrd			I3 Activity			AT-12 Batch 1 **NSP** Manish Sharma AT-15 Batch 2 **NSP** Jaldeep Kumar

Time Table Coordinators , HOD, Vice Principal, Director PCE

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

POORNIMA COLLEGE OF ENGINEERING
DEPARTMENT OF ELECTRICAL ENGINEERING
V SEM

Class Location: AT-05
WEF: 20.09.2022
Tutor Name: Dr. Pankaj Gakhar

	1 8:00 - 9:00	2 9:00 - 10:00	3 10:00 - 11:00	LUNCH 11:00 - 11:50	4 11:50 - 12:50	5 12:50 - 13:50	6 13:50 - 14:50	7 14:50 - 15:50
Mo	**5EE5-11 RPS** Pravin Machhindra Sonwane	**5EE4-05 EMD** Ranjeet Kumar	**5EE3-01 EM** Manish Sharma		**5EE4-04 MP** Pankaj Verma	AT-01 5EE4-23 MP LAB Jaldeep Kumar		AT-04 **Add on** Pravin Machhindra Sonwane
Tu	**5EE5-11 RPS** Pravin Machhindra Sonwane	**5EE4-05 EMD** Ranjeet Kumar	**5EE3-01 EM** Manish Sharma		**5EE4-02 PS-I** Hemant Kaushik	**5EE4-03 CS** Vikas Kumar Sharma	**5EE4-02 PS-I** Hemant Kaushik	AT-04 **Add on** Pravin Machhindra Sonwane
We	**5EE4-04 MP** Pankaj Verma	**5EE4-03 CS** Vikas Kumar Sharma	**5EE3-01 EM** Manish Sharma		**5EE4-02 PS-I** Hemant Kaushik	**5EE4-05 EMD** Ranjeet Kumar	**5EE4-03 CS** Vikas Kumar Sharma	AT-04 **Add on** Pravin Machhindra Sonwane
Th	**5EE4-03 CS** Vikas Kumar Sharma	AT-20A 5EE4-22 CS LAB Jaldeep Kumar			**5EE4-04 MP** Pankaj Verma	AT-20A 5EE4-24 SP LAB Jaldeep Kumar		AT-04 **Add on** Pankaj Verma
Fr	**5EE4-05 EMD** Ranjeet Kumar	**5EE5-11 RPS** Pravin Machhindra Sonwane	AT-10 **5EE7-30 Industrial Training** Pravin Machhindra Sonwane		**5EE4-04 MP** Pankaj Verma	AT-15 5EE4-21 PS-I LAB Ajit Singh Rajawat		AT-04 **Add on** Pankaj Verma
Sa	**I3 Activity** Hemant Kaushik	I3 Activity Vth			I3 Activity			AT-09 **NSP** Gaurav Jain

Time Table Coordinators , HOD, Vice Principal, Director PCE

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

POORNIMA COLLEGE OF ENGINEERING
DEPARTMENT OF ELECTRICAL ENGINEERING
VII SEM

Class Location: CT-05
WEF: 18.08.2022
Tutor Name: Mr. Ajit Singh Rajawat

	1 8:00 - 9:00	2 9:00 - 10:00	3 10:00 - 11:00	LUNCH 11:00 - 11:50	4 11:50 - 12:50	5 12:50 - 13:50	6 13:50 - 14:50	7 14:50 - 15:50
Mo	AT-10 Group 1 **7EE6-60.2 PGS** Vineet Sharma AT-03 Group 2 **7EE6-60.1 EMD** Rachit Saxena	AT-20B BATCH-1 **7EE4-21 ES LAB** Gaurav Jain AT-20A BATCH-2 **7EE4-21 ES LAB** Pankaj Verma BATCH-3 **7EE7-40 Seminar** Vikas Kumar Sharma			Group 1 **7EE5-11 WSES** Sheena Tahira Khan AT-03 Group 2 **7EE5-12 PQAF** Abhishek Singh	AT-20A BATCH-1 **7EE4-21 ES LAB** Gaurav Jain BATCH-2 **7EE7-40 Seminar** Vikas Kumar Sharma AT-20B BATCH-3 **7EE4-21 ES LAB** Ranjeet Kumar		AT-04 **Add on** Pravin Machhindra Sonwane
Tu	AT-10 Group 1 **7EE6-60.2 PGS** Vineet Sharma AT-03 Group 2 **7EE6-60.1 EMD** Rachit Saxena	AT-20A BATCH-1 **7EE4-22 ACS LAB** Hemant Kaushik AT-20B BATCH-2 **7EE4-22 ACS LAB** Abhishek Singh AT-20C BATCH-3 **7EE4-22 ACS LAB** Ekata Sharma			Group 1 **7EE5-11 WSES** Sheena Tahira Khan AT-03 Group 2 **7EE5-12 PQAF** Abhishek Singh	BATCH-1 **7EE7-40 Seminar** Manish Sharma AT-20A BATCH-2 **7EE4-21 ES LAB** Pankaj Verma AT-20B BATCH-3 **7EE4-21 ES LAB** Ranjeet Kumar		AT-04 **Add on** Pravin Machhindra Sonwane
We	AT-10 Group 1 **7EE6-60.2 PGS** Vineet Sharma AT-03 Group 2 **7EE6-60.1 EMD** Rachit Saxena	Group 1 **7EE5-11 WSES** Sheena Tahira Khan AT-03 Group 2 **7EE5-12 PQAF** Abhishek Singh	BATCH-1 **7EE7-30 Industrial Training** Pravin Machhindra Sonwane AT-09 BATCH-2 **7EE7-30 Industrial Training** Vikas Kumar Sharma AT-12 BATCH-3 **7EE7-30 Industrial Training** Ajit Singh Rajawat		AT-15 BATCH-1 **NSP** Ajit Singh Rajawat AT-09 BATCH-2 **NSP** Vineet Sharma AT-12 BATCH-3 **NSP** Rachit Saxena	AT-20A BATCH-1 **7EE4-22 ACS LAB** Hemant Kaushik AT-20B BATCH-2 **7EE4-22 ACS LAB** Abhishek Singh AT-20C BATCH-3 **7EE4-22 ACS LAB** Ekata Sharma		AT-04 **Add on** Pravin Machhindra Sonwane
Th								
Fr								
Sa								

Time Table Coordinators , HOD, Vice Principal, Director PCE

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

11 Course Outcome Attainment Process:

11.1 Course Outcome Attainment Process

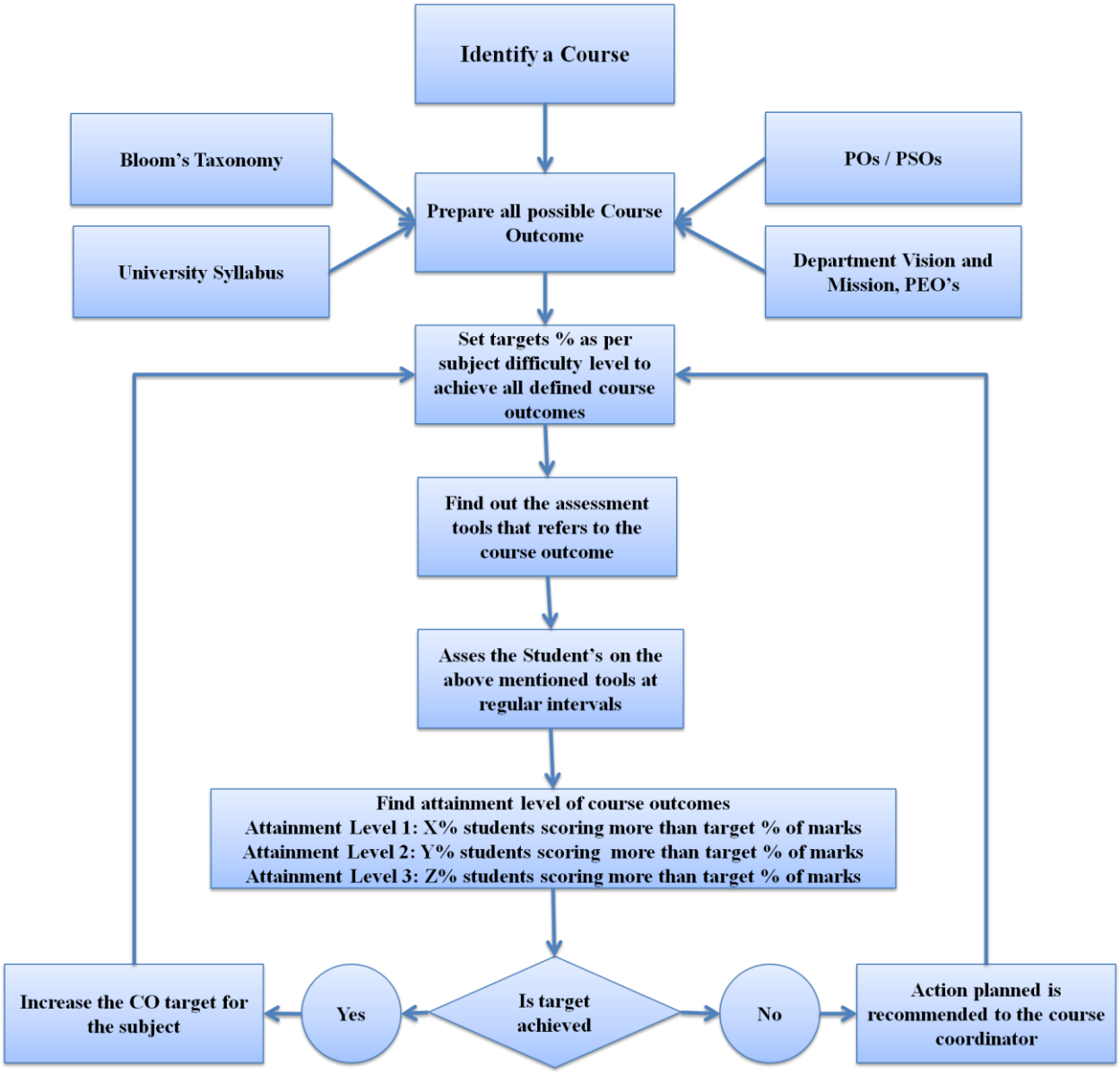


Figure. Course Outcome Attainment Process

11.2 List of CO & CO mapping with PO

Poornima College of Engineering, Jaipur																			
Department of Electrical Engineering																			
CO-PO & CO-PSO Mapping (2022-23)																			
S.No	Course Code	Course Name	CO No	Course Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
1	**3EE2-01**	Advance Mathematics	CO 1	**Explain** the numerical methods, Laplace transform, Fourier transform, Z-transform and complex variables. **[Apply]**	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-
			CO 2	**Apply** numerical methods to find unknown values with help of known values, roots of polynomial and transcendental equations and Solution of ordinary differential equation. **[Apply]**	2	-	-	-	-	-	-	-	-	-	-	-	1	-	-
			CO 3	**Identify** numerical differentiation and integration whenever and wherever routine methods are not applicable. **[Apply]**	2	-	-	-	-	-	-	-	-	-	-	-	1	-	-
			CO 4	**Inspect** the Fundamentals of the Fourier, Laplace, and Z-Transforms. These systems can be carried out in terms of either a time domain or a transform domain formulation. **[Analyze]**	-	3	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 5	**Evaluate** a variety of numerical problems & complex contour integrals and solve them by using appropriate technology, and Compare the viability of different approaches to directly, by the fundamental theorem and numerical solution of problems.	-	3	-	-	-	-	-	-	-	-	-	-	2	-	-
					1.67	3.00	-	-	-	-	-	-	-	-	-	-	1.40	-	-

2	3EE1-02	Technical Communication	CO 1	**Understand** the characteristics of technical writing and the importance of purpose, audience, and genre for written communication in technical fields. (**Understand**)	-	-	-	-	-	3	-	-	3	3	-	3	-	3	-
			CO 2	Planning, drafting, revising, editing, and critiquing technical and professional documents through individual and collaborative writing. (Recall)	-	-	-	-	-	3	-	-	2	3	-	3	-	2	1
			CO 3	Create clear, concise technical documents that effectively use style and grammar and information structure in ways that create meaning with the reader. (Create)	-	-	-	-	-		-	-	2	3	-	3	-	2	1
			CO 4	Researching, analyzing, synthesizing, and applying information to create technical reports. (**Examine**)	-	-	-	-	-	3	-	-	3	3	-	3	-	-	2
					-	-	-	-	-	3.00	-	-	2.50	3.00	-	3.00	-	2.33	1.33
3	**3EE3-04**	Power generation Process	CO 1	**Prepare** an assessment of the environmental impact of conventional and non-conventional sources of electricity generation. **[Apply]**	2	-	-	-	-	-	-	-	-	-	-	-	1	-	-
			CO 2	**Infer** the types of load curves, factors used in generation, and methods for improving power factor. **[Analyze]**	-	2	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 3	**Assess** different real-time tariff issues in electrical engineering. **[Evaluate]**	-	-	-	2	-	-	-	-	-	-	-	-	-	1	-
			CO 4	**Categorize** power plant economics for conventional and nonconventional plants under different conditions.**[Create]**	-	-	2	-	-	-	-	-	-	-	-	-	2	-	-
					2.00	2.00	2.00	2.00	-	-	-	-	-	-	-	-	1.67	1.00	-
4	**3EE4-05**	Electrical Circuit	CO 1	**Practice** the fundamental concepts in circuit theory followed by an analytical	2	-	-	-	-	-	-	-	-	-	-	-	1	-	-

		Analysis		understanding of transient and steady state stability concepts alongwith the transformations from time domain to frequency domain. [**Apply**]														
			CO 2	**Select** the fundamental concepts, theorems, transforms for computing the values of system parameters, stability states, and current & voltage values in a particular branch or node. **[Analyze]**	-	3	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 3	**Assess** the circuit and phasor diagrams, network interconnections, steady state stabilities, and gain or phase margins. **[Evaluate]**	-	-	2	-	-	-	-	-	-	-	-	-	-	1	-
			CO 4	**Design** theoratically converter/electronic circuits based on rated value of current, voltage and loads. [**Create**]	-	-	-	2	-	-	-	-	-	-	-	-	-	2	-
					2.00	3.00	2.00	2.00	-	-	-	-	-	-	-	-	1.50	1.50	-
5	**3EE4-06**	Analog Electronics	CO 1	**Relate** the concept and working of analog circuits comprising diodes, BJT's, MOSFET's and Op-amps **[Apply]**.	2	-	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 2	**Demonstrate** the characteristic and output response of analog circuits comprising diodes, BJT's, MOSFET's and Op-amps. **[APPLY]**	3	-	-	-	-	-	-	-	-	-	-	-	3	-	-
			CO 3	**Compare** the relationship between input and output response of analog circuits comprising diodes, BJT's, MOSFET's and Op-amps. **[ANALYZE]**	-	2	-	-	-	-	-	-	-	-	-	-	-	-	2
			CO 4	**Select** the appropriate switching, amplifying, voltage regulation, filtering, controller and comparator circuit comprising diode, BJT, MOSFET and Op-amps. **[EVALUATE]**	-	-	-	2	-	-	-	-	-	-	-	-	-	-	2

			CO 5	**Design** switching, amplifying, voltage regulation, filtering, controller and comparator circuits comprising diode, BJT, MOSFET and Op-amps. **[CREATE]**	-	-	2	-	-	-	-	-	-	-	-	-	-	2	-
					2.50	2.00	2.00	2.00	-	-	-	-	-	-	-	-	2.50	2.00	2.00
6	**3EE4-07**	Electrical Machine - I	CO 1	**Illustrate** basic principles and laws pertaining to the magnetic circuits of DC machines and Transformers **[Apply]**	2	-	-	-	-	-	-	-	-	-	-	-	3	-	-
			CO 2	**Infer** the control practices and characteristics of DC Machines and Transformers. **[Analyze]**	-	3	-	-	-	-	-	-	-	-	-	-	-	2	-
			CO 3	**Check** the equivalent circuit of dc machines and transformers. **[Evaluate]**	-	-	2	-	-	-	-	-	-	-	-	-	-	-	2
			CO 4	**Summarize** the performance, types of connections and testing of DC machines and Transformers under different loading conditions. **[Create]**	-	-	-	3	-	-	-	-	-	-	-	-	-	3	-
					2.00	3.00	2.00	3.00	-	-	-	-	-	-	-	-	3.00	2.50	2.00
7	**3EE4-08**	Electromagnetic Field	CO 1	**Demonstrate** the laws and theorems of electric field, magnetic field and time varying fields. **[Apply]**	3	-	-	-	-	-	-	-	-	-	-	-	2	1	-
			CO 2	**Debate** the Charge distribution, boundary conditions, Laplace, Poisson and Maxwell's equations in search of a solution. **[Analyze]**	-	2	-	-	-	-	-	-	-	-	-	-	2	1	-
			CO 3	**Investigate** the behaviour of dielectric and conductive material in electromagnetic fields by using electric or magnetic motive force conditions. **[Analyze]**	-	2	-	-	-	-	-	-	-	-	-	-	2	1	1
			CO 4	**Estimate** the capacitance, inductance, mutual inductance, electronic wave, electric field intensity, electric flux density, magnetic flux density and Plane wave conditions for real time problem. **[Evaluate]**	-	-	2	-	-	-	-	-	-	-	-	-	2	1	-

					3.00	2.00	2.00	-	-	-	-	-	-	-	-	-	2.00	1.00	1.00
8	**3EE4-21**	Analog Electronics Lab	CO 1	**Analyze** the possible causes of discrepancies between experimental observations and theoretical results in amplifier, regulator and oscillator circuits. **[ANALYZE]**.	-	3	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 2	**Measure** the output response of various amplifier, regulator and oscillator circuits on a circuit design software tool. **[MANIPULATION]**	-	-	-	-	2	-	-	-	-	-	-	-	-	3	-
			CO 3	**Contribute** efficiently in a team so as to achieve the desired response of amplifier, regulator and oscillator circuits. **[RESPONDING]**	-	-	-	-	-	-	-	-	2	-	-	-	-	2	-
			CO 4	**Demonstrate** the solution to a problem on amplifier, regulator and oscillator circuits. **[PRECISION]**	-	-	-	-	-	-	-	-	-	2	-	-	2	-	-
					-	3.00	-	-	2.00	-	-	-	2.00	2.00	-	-	2.00	2.50	-
9	**3EE4-22**	Electrical Machine-I Lab	CO 1	**Apply** the principles of Electrical Machines through laboratory experimental work	2	-	-	-	-	-	-	-	-	-	-	3	3	-	-
			CO 2	**Prepare** reports based on performed experiments with effective demonstration of diagrams and characteristics /graph	-	-	-	-	-	-	-	-	3	-	-	3	-	2	-
			CO 3	**Perform** the experimental work on dc machines and transformers on virtual lab	-	-	-	-	3	-	-	-	-	-	-	-	2	-	-
			CO 4	**Demonstrate** the starting & speed control of DC motors	-	-	-	-	-	2	-	-	2	-	-	-	2	-	-
			CO 5	**Perform** various tests, find efficiency & voltage regulation of electrical machines	-	-	-	-	-	3	-	-	-	-	-	-	2	-	-
					2.00	-	-	-	3.00	2.50	-	-	2.50	-	-	3.00	2.25	2.00	-

10	**3EE4-23**	Electrical circuit design Lab	CO 1	**Analyze** the possible causes of discrepancies between experimental observations and theoretical results in analog circuits consisting of semiconductor devices and sensors. **[ANALYZE]**.	-	3	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 2	**Measure** the output response of analog circuits consisting of semiconductor devices and sensors on a circuit design software tool. **[MANIPULATION]**	-	-	-	-	2	-	-	-	-	-	-	-	-	3	-
			CO 3	**Contribute** efficiently in a team so as to achieve the desired response of analog circuits consisting of semiconductor devices and sensors. **[RESPONDING]**	-	-	-	-	-	-	-	-	2	-	-	-	-	3	-
			CO 4	**Demonstrate** the solution to a problem of analog circuits consisting of semiconductor devices and sensors. **[PRECISION]**	-	-	-	-	-	-	-	-	-	2	-	-	2	-	-
					-	3.00	-	-	2.00	-	-	-	2.00	2.00	-	-	2.00	3.00	-
11	**3EE7-30**	Industrial Training	CO 1	**Discover** the basics of electrical power plants and manufacturing companies.**[Apply]**	2	-	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 2	**Examine** an organization's or industry's working practices and management style.**[Analyse]**	-	-	-	-	-	2	2	-	-	-	-	-	-	-	2
			CO 3	**Identify** and analyze real-life problems in the chosen industry for his internship or project,If any**[Analyze]**	-	-	-	-	2	-	-	-	2	-	-	1	-	1	1
			CO 4	**Enhance** their ability to communicate and gain confidence through presentations.**[Evaluate]**	-	-	-	-	-	-	-	-	-	2	-	-	-	2	-
			CO 5	**Develop** a report on industrial learning and training inside the factory.**[Create]**	-	-	-	-	-	-	-	2	2	1	1	1	-	2	1
					2.00	-	-	-	2.00	2.00	2.00	2.00	2.00	1.50	1.00	1.00	2.00	1.67	1.33

Semester III Overall PO					2.15	2.63	2.00	2.25	2.25	2.50	2.00	2.00	2.20	2.13	1.00	2.33	2.03	1.95	1.53
23	**5EE3-01**	Electrical Materials	CO 1	**Explain** the laws and concept of electrical properties, magnetic properties, semiconductors materials and superconductivity along with conductivity of metals.**[Apply]**	2	-	-	-	-	-	-	-	-	-	-	-	1	-	-
			CO 2	**Examine** materials science in electrical domain of different industries.**[Analyze]**	-	2	-	-	-	-	-	-	-	-	-	-	2	1	-
			CO 3	**Discriminate** the bonding structure, Carrier density and characteristics of various electrical materials.**[Evaluate]**	-	3	-	-	-	-	-	-	-	-	-	-	2	1	-
			CO 4	**Relate** internal field, thermal conduction, electron scattering and energy gaps in electrical materials science.**[Create]**	-	-	3	-	-	-	-	-	-	-	-	-	2	1	-
					2.00	2.50	3.00	-	-	-	-	-	-	-	-	-	1.75	1.00	-
24	**5EE4-02**	Power System - I	CO 1	**Express** the overall framework of the power system while taking various faults and their mitigation measures into account.**[Apply]**	3	-	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 2	**Illustrate** various electrical characteristics of transmission lines in transient, sub-transient, and steady state stability modes. **[Analyze]**	-	3	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 3	**Interpret** the integration of distributed generation with grid while taking into account the protection system in real-time projects. **[Design]**	-	-	2	-	-	-	-	-	-	-	-	-	-	1	-
			CO 4	**Examine** electrical machines parameters & insulation requirements under different stability modes**. [Evaluate]**	-	-	-	3	-	-	-	-	-	-	-	-	2	1	-
					3.00	3.00	2.00	3.00	-	-	-	-	-	-	-	-	2.00	1.00	-
25	**5EE4-03**	Control System	CO 1	**Apply** the fundamentals of linear and nonlinear control systems for mathematical representation.	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-

			CO 2	**Differenciate** the time and frequency response of Linear Time Invarient systems. **[Analyze]**	-	3	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 3	**Assess** the state space variables in classical control system.**[Evaluate]**	-	3	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 4	**Design** various controllers using different stability condition and specifications.	-	-	2	-	-	-	-	-	-	-	-	-	-	1	-
					3.00	3.00	2.00	-	-	-	-	-	-	-	-	-	2.00	1.00	-
26	**5EE4-04**	Microprocessor	CO 1	**Explain** the fundamental concepts of 8051 architecture, programming instructions, and 8051 interfacing schemes. **[Apply]**	3	-	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 2	**Relate** the programming knowledge for external devices interfacing and serial communication**[Analyze]**	-	2	-	-	-	-	-	-	-	-	-	-	1	2	-
			CO 3	**Judge** the complex 8051 real world interfacing problems with focus on application specific outputs **[Evaluate]**	-	2	-	-	-	-	-	-	-	-	-	-	2	1	-
			CO 4	**Develope** 8051 programs for controlling external/interfacing devices for solving a particular task/problem **[Design]**	-	-	2	-	-	-	-	-	-	-	-	-	2	-	-
					3.00	2.00	2.00	-	-	-	-	-	-	-	-	-	1.75	1.50	-
27	**5EE4-05**	Electrical Machine Design	CO 1	**Interpret** the characteristics of engineering materials used for electrical machine designing. **[Apply]**	2	-	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 2	**Infer** the performance characteristics of electrical Machines with the specified constraints .**[Analyze]**	-	3	-	-	-	-	-	-	-	-	-	-	-	2	-
			CO 3	**Relate** electrical machine models in computer aided design software.**[Create]**	-	-	3	-	-	-	-	-	-	-	-	-	-	2	-

			CO 4	**Interpret** the design of windings & core of electrical machines.**[Evaluate]**	-	-	-	2	-	-	-	-	-	-	-	-	-	1	-
					2.00	3.00	3.00	2.00	-	-	-	-	-	-	-	-	2.00	1.67	-
28	**5EE5-11**	Restructured Power System.	CO 1	**Discover** the restructuring process, reasons and objectives of deregulation, market & pricing models, and congestion management.**[Apply]**	2	-	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 2	**Categorize** electricity market models, congestion management methods, ancillary services,and transmission pricing.**[Anlyze]**	-	2	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 3	**Compare** methods of congestion management, market models & pricing schemes to **identify** the best options.**[Evaluate]**	-	3	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 4	**Prepare** theoratically a restructured model of existing power system by taking into account network congestion, best pricing model, and ancillary services.**[Create]**	-	-	2	-	-	-	-	-	-	-	-	-	-	2	1
					2.00	2.50	2.00	-	-	-	-	-	-	-	-	-	2.00	2.00	1.00
29	**5EE4-21**	Power System - I Lab	CO 1	**Illustrate** the basic layouts of hydro, thermal, nuclear and gas power plants.**[Apply]**	-	3	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 2	**Distinguish** the parameters of the feeders, distributors, and EHV transmission lines. **[Analyze]**	-	-	-	-	2	-	-	-	-	-	-	-	-	2	-
			CO 3	**Evaluate** the dielectric strength of transformer oil, insulating materials & insulators.	-	-	-	-	-	-	-	-	-	-	-	2	-	-	1
			CO 4	**Create** a probability tool to forecast load for short, medium, and long term planning.	-	-	-	-	3	-	-	-	-	-	-	-	-	2	-
					-	3.00	-	-	2.50	-	-	-	-	-	-	2.00	2.00	2.00	1.00
30	**5EE4-22**	Control System Lab	CO 1	**Analyze** the output response of a given system for different test signals.	-	3	-	-	-	-	-	-	-	-	-	-	2	-	-

			CO 2	**Design** the 1st order and 2nd order circuits for transient response analysis.	-	-	-	-	-	-	-	-	2	-	-	-	2	-	-
			CO 3	**Identify** the frequency response of various compensating networks.**[Analyze]**	-	-	-	-	-	-	-	-	-	3	-	-	2	-	-
			CO 4	**Investigate** the various approches for controller parameter tuning.**[Evaluate]**	-	-	-	-	-	-	-	-	3	-	-	-	-	2	-
			CO 5	**Device** the stability of control system using Bode plots **[Create**].	-	-	-	-	-	-	-	-	-	-	3	-	2	-	-
					-	3.00	-	-	-	-	-	-	2.50	3.00	3.00	-	2.00	2.00	-
31	**5EE4 -23**	Microp rocesso r Lab	CO 1	**Demonstrate** the functions, operations, memory structure and hardware units of 8085 microprocessor kit. **[Apply]**	3	-	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 2	**Examine** different waveforms using 8253 / 8254 programmable timer. **[Analyze]**	-	-	-	-	-	-	-	-	3	-	-	-	-	2	-
			CO 3	**Build and demonstrate** assembly level programs for transferring data to specified output ports in serial and parallel fashion. **[Evaluate]**	-	-	-	-	-	-	-	-	-	-	3	-	-	2	-
			CO 4	**Fabricate** 8 bit LED/LCD interface to 8085 microprocessor kit using 8155 and 8255. **[Manipulation]**	-	-	-	-	-	-	-	-	-	-	2	-	-	1	-
			CO 5	**Develop** programs to perform addition, subtraction, division, block transfer, searching, sorting, etc using assembly language.**[Create]**	-	-	3	-	-	-	-	-	-	-	-	-	2	-	-
					3.00	-	3.00	-	-	-	-	-	3.00	-	2.50	-	2.00	1.67	-
32	**5EE4 -24**	System Progra mming Lab	CO 1	**Apply** the basic of MATLAB features and syntaxes in mathematical Programming.	3	-	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 2	**Solve** various basic electrical and electronic problems in MATLAB environment **[Analyze]**	-	-	-	-	2	-	-	-	-	-	-	-	-	2	-
			CO 3	**Execute** the single phase induction machine Torque- speed	-	-	-	-	-	-	-	-	-	-	2	-	-	1	-

				characteristics and transformer test in MATLAB Simulink.														
			CO 4	**Design** Single Phase Full Wave Diode Bridge Rectifier With LC Filter in MATLAB Simulink.	-	-	-	-	-	-	-	-	-	3	-	-	-	2	-
			CO 5	**Evalute** the importance of MATLAB in research by simulation work	-	-	-	-	-	-	-	-	-	-	-	2	-	-	1
					3.00	-	-	-	2.00	-	-	-	-	3.00	2.00	2.00	2.00	1.67	1.00
33	**5EE7-30**	Industrial Training	CO 1	**Selecting** preferred training according to your subject area in the coming year**[Apply]**	3	-	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 2	**Identify** industrial practices and disciplines with the help of industry professionals.**[Analyze]**	-	-	-	-	-	-	-	3	-	-	-	2	-	-	2
			CO 3	**Examine** advanced tools and techniques used in the industrial processing.**[Evaluate]**	-	-	-	-	3	2	-	-	-	-	-	-	-	1	1
			CO 4	**Develop** awareness about general workplace behavior and build interpersonal and team skills.**[Create]**	-	-	-	-	-	-	2	3	-	3	-	-	-	2	-
			CO 5	**Create** professional presentations and work reports.**[Precision]**	-	-	-	-	-	-	-	-	3	3	2	3	-	2	1
					3.00	-	-	-	3.00	2.00	2.00	3.00	3.00	3.00	2.00	2.50	2.00	1.67	1.33
Semester V Overall PO					2.67	2.75	2.43	2.50	2.50	2.00	2.00	3.00	2.83	3.00	2.38	2.17	1.95	1.56	1.08
45	**7EE4-12**	Power Quality and Facts	CO 1	**Demonstrate** compensated and uncompensated transmission line and **compare** the series and shunt compensation. **[Apply]**	3												2	-	-
			CO 2	**Compair** the FACTs equipment's with their working principles and their applications in electrical systems. **[Analyze]**		2											2	-	-
			CO 3	**Differntiate** Power Quality Problems in Distribution Systems **[Analyze]**		3											2	-	-
			CO 4	**Illustrate** DSTATCOM & Dynamic Voltage Restorer **[Apply]**	3												2	1	-

					3.00	2.50	-	-	-	-	-	-	-	-	-	-	2.00	1.00	-
46	**7EE5-11**	Wind and Solar Energy Systems.	CO 1	**Use** the concept of wind and solar pv energy generation in energy applications **[Apply]**	3	-	-	-	-	-	-	-	-	-	-	-	3	-	-
			CO 2	**Categerize** the different topologies of wind and solar power generation **[Analyze]**	-	3	-	-	-	-	-	-	-	-	-	-	-	-	3
			CO 3	**Defend** hybrid and standalone solar and Wind energy systems. **[Evaluate]**	-	-	2	-	-	-	-	-	-	-	-	-	-	-	3
			CO 4	**Investigate** the different issues in intehration of wind and solar energy systems into the grid. **[Analyze]**	-	2	-	-	-	-	-	-	-	-	-	-	-	-	3
					3.00	2.50	2.00	-	-	-	-	-	-	-	-	-	3.00	-	3.00
47	**7EE4-21**	Embedded Systems Lab	CO 1	**Explain** the fundamentals of embedded system and sensor integration. **[Understand]**	2		2							1			2	-	-
			CO 2	**Practice** the programming knowledge for controlling a real time process using hardware in loop system. **[Apply]**					3				2	2	3	3	-	2	1
			CO 3	**Investigate** the type of sensor required in a particular control process. **[Analyze]**					3				2	2	3	3	-	-	1
			CO 4	**Critisize** the processing time requirements for conversion of real time data into digital domain and vice versa. **[Analyze]**					3				2	3	3	3	-	-	1
			CO 5	**Check** the complex real world embedded system processes. **[Evaluate]**									3	2	3		-	2	-
					2.00	-	2.00	-	3.00	-	-	-	2.25	2.00	3.00	3.00	2.00	2.00	1.00
48	**7EE4-22**	Advance control system lab	CO 1	**Demonstrate** the time response of a rotary and linear servo system using MATLAB. **[Apply]**	-	-	-	-	2	-	-	1	-	-		1	-	2	-
			CO 2	**Examine** how a DC and an AC servo motor's speed positioning control transfer function works. **[Evaluate]**	-	-	-	-	3	-	-	2	-	-	2		-	2	-

			CO 3	**Inspect** the frequency response analysis of small motion, linearized model of industrial robot using MATLAB.**[Analyze]**	-	-	-	-	2	-	-	3	-	-	3		-	2	1
			CO 4	**Assess** the P, PI, and PID Controllers for a variety of control system applications in MATLAB.**[Evaluate]**	-	-	-	-	3	-	-	3	-	-	3	2	-	2	-
			CO 5	**Arrange** an Arduino controller for practical systems for pendulums and inverted pendulums.**[Create]**	-	-	-	-	3	-	-	2	-	-	3	2	-	2	1
					-	-	-	-	2.60	-	-	2.20	-	-	2.75	1.67	-	2.00	1.00
49	**7EE7-30**	Industrial Training	CO 1	**Implement** classroom engineering knowledge in real-world industrial/laboratory situations.**[Apply]**	-	-	-	-	2	2	-	3	2	3	3	3	2	1	-
			CO 2	**Test** knowledge of advanced tools and techniques, as well as exposure to industry professional design approach.**[Analyze]**	-	-	-	-	3	2	-	3	3	3	3	3	-	2	-
			CO 3	**Organize** to the engineer's role and responsibilities, as well as the code of ethics.**[Apply]**	-	-	-	-	-	-	-	3	3	3	3	3	-	2	1
			CO 4	**Prepare** industry leading documents, reports, and presentations.**[Create]**	-	-	-	-	2	-	-	3	2	3	3	3	-	2	2
			CO 5	**Develop** interpersonal and teamwork skills, and **demonstrate** knowledge of acceptable workplace behaviour.**[Create]**	-	-	-	-	-	-		3	3	3	3	3	-	2	2
					-	-	-	-	2.33	2.00	-	3.00	2.60	3.00	3.00	3.00	2.00	1.80	1.67
50	**7EE7-40**	Seminar	CO 1	**Demonstrate** various reported engineering problem solutions from all corners of society.**[Apply]**	-	-	-	-	2	3	3	3	2	-	3	3	-	2	-
			CO 2	**Categorize** a good professional document with his concluding remarks.**[Analyze]**	-	-	-	-	1	3	3	3	2	3	3	3	-	2	-
			CO 3	**Argue** and judge his/her findings in the selected area.**[Evaluate]**	-	-	-	-	2	3	3	3	3	3	3	3	-	-	1

			CO 4	**Develop** communication skills and confidence level through presentation.**[Create]**	-	-	-	-	2	3	3	3	3	3	3	3	-	2	-
					-	-	-	-	1.75	3.00	3.00	3.00	2.50	3.00	3.00	3.00	-	2.00	1.00
51	7EE8-00	Social Outreach, Discipline & Extra Curricular Activitie	CO 1	**Show** interest in an appropriate social activity for his/her knowledge enhancement in domain area. **[Apply]**	-	-	-	1	-	3	3	3	3	-	2	3	-	2	-
			CO 2	**Justify** to maintain discipline and decorum in all extracurricular activities **[Evaluate]**	-	-	-	-	-	3	3	3	3	-	2	3	-	2	2
			CO 3	**Summarize** his/her thrust area for internship. **[Create]**	-	-	-	-	-	3	3	3	3	2	2	3	-	2	1
			CO 4	**Prepare** and participate in events such as clean India, blood donation camp etc. **[Create]**	-	-	-	-	-	3	3	3	3	-	2	3	-	2	2
					-	-	-	1.00	-	3.00	3.00	3.00	3.00	2.00	2.00	3.00	-	2.00	1.67
52	**7EE6-60.2**	Power Generation Sources	CO 1	**Describe** the various renewable energy sources. **[Apply]**	2	-	-	-	-	-	-	-	-	-	-	3	-	2	-
			CO 2	**Inspect** possible renewable energy sources. **[Analyze]**	-	2	-	-	-	-	-	-	-	2	-	3	-	-	3
			CO 3	**illustrate** the renewable energy sources. **[Apply]**	3	-	-	-	2	-	2	-	-	-	-	3	-	-	3
			CO 4	**Identify** the energy sources & **Propose** renewable energy sources as societal application. **[Create]**	-	-	-	2	-	-	-	-	-	2	-	3	-	-	3
					2.50	2.00	-	2.00	2.00	-	2.00	-	-	2.00	-	3.00	-	2.00	3.00
53	**7EE6.60.1**	Electrical Machine and Drives	CO 1	**Use** the concepts of constructional details and principle of rotating machines in electrical drives. **[Apply]**	3	-	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 2	**Identify** motor rating and specification for efficient conversion. **[Apply]**	2	-	-	-	-	-	-	-	-	-	-	-	2	-	-
			CO 3	**Investigate** the various control techniques for speed control on various electric drives . **[Analyze]**	-	2	-	-	-	-	-	-	-	-	-	-	2	-	-

			CO 4	**Justify** the design knowledge for various closed loop control of electric drives **[Evaluate]**	-	-	2	-	-	-	-	-	-	-	-	-	2	1	-
					2.50	2.00	2.00	-	-	-	-	-	-	-	-	-	2.00	1.00	-
Semester VII Overall PO					**2.60**	**2.25**	**2.00**	**1.50**	**2.34**	**2.67**	**2.67**	**2.80**	**2.59**	**2.40**	**2.75**	**2.78**	**2.20**	**1.73**	**1.76**

12 Course File Sample

Outcome Based Process Implementation Guidelines for Faculty

12.1 Labelling your course file

- **Name of faculty:**
- **Class- SEM:**
- **Branch:**
- **Course Code:**
- **Course Name:**
- **Session:**

12.2 List of Documents:

1. **Vision & Mission Statements of the Institute**
2. **Vision & Mission Statements of the Department**
3. **List of PEO, PSO and PO of department**
4. **Personal Time Table**
5. **RTU Syllabus**
6. **Document as per point no. 1-4 in guidelines**
7. **Course Plan**
8. **Document as per point no 6-12 in guidelines**
9. **Document for CO Assessment Stage 1: As per point no 13, up to 13.2.5**
10. **Document for CO Assessment Stage 2: As per point no 13, up to 13.2.5, with comparison to previous**
11. **Document for CO Assessment Stage 3: As per point no 13, up to 13.2.5, with comparison to previous**
12. **Document for CO Attainment through RTU Component: Previous RTU Result: point no. 13.3 upto 13.3.2**
13. **Document for PO attainment through RTU Component: Previous RTU Result: point no. 13.4 upto 13.4.2**
14. **Document for Overall Attainment of PO through CO: As per point no 13.5**
15. **Document for last three years (Repeat process from 6-14 above): Comparative data should be included in course file**
16. **Lecture Notes**
17. **Copy of Assignments questions given from time to time**
18. **Copy of Tutorial Sheets given (if applicable)**
19. **RTU Question Papers with answer**
20. **Internal Assessment Question Papers with answer from time to time**
21. **Topics covered beyond syllabus- References**
22. **Details of any other activity and its assessment through rubric be included**
23. **Mapping department level/ focus activities with your COs**

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

13 Outcome Based Process Implementation Guidelines for Faculty

Course CO-PO, Preparation, Assessment Formats

Academic Session: 2022-2023 **Class:** **Semester:**

Name of the Faculty:

Subject: **Subject Code:**

This document is meant as guidelines for implementing Outcome based education system as a part of accreditation process.

1. **Vision & Mission of Department: Statement and Mapping with Institute Mission** **Here you have to include department mission & vision statements and show mapping of keywords with institute mission.**
2. **Program Educational Objectives (PEOs): Statement and Mapping with Department Vision & Mission**
   Here you have to include department PEO statements and show mapping of keywords with department vision & mission.
3. **Program Specific Outcome (PSOs): Statement and Mapping with Department Vision & Mission**
   Here you have to include department PSO statements and show mapping of keywords with department vision & mission.
4. **Program Outcome (POs): Statement and Mapping with PEO and PSO**
   Here you have to include PO statements and show mapping of keywords with department PEOs & PSOs.
5. **Course Plan (Deployment):**

(Please write how you intend to cover the contents: i.e., coverage of Units by lectures, guest lectures, design exercises, solving numerical problems, demonstration of models, model preparation, or by assignments, etc.), **for example**

- **coverage of Units by lectures**
- **design exercises**
- **demonstration of models**
- **by assignments**

Lecture No.	Lect. No.	Topics, Problems, Applications	CO/LO	Target Date of Coverage	Actual Date of Coverage	Ref. Book/Journal with Page No.
1.	1	Introduction of Machine	CO1	12/07/2022	12/07/2022	T1 Page 11 - 16
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						

Example T1: Principles of Machine, By P.S.Bhimra, Khanna Publication, Edition 2019

6. **Course Outcomes:** Look for strong mapping of course with specific PO (2-3). Define Generic Course Outcomes (max 4 to 6) using Blooms Taxonomy. (In case of Lab Course define generic Lab Outcomes LO and refer CO as LO in this document).

i. **3EEA101.1(CO1)-**
ii. **3EEA101.2(CO2)-**
iii. **3EEA101.3(CO3)-**
iv. **3EEA101.4(CO4)-**
v. **3EEA101.5(CO5)-**

7. **CO-PO-PSO Mapping: Mapping Levels: 1- Low, 2- Moderate, 3-Strong**
   First try to find out 2-3 PO those are strongly related to your subject contents. Go through the contents and try to formulate 4-5 Course Outcome as per bloom taxonomy. Map each CO with PO and PSO as above. While mapping please rethink if you map any PO with 3, it means you are planning to deliver the contents of that
   level and you will also examine the students at that level.

CO	PO												PSO		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1															
CO2															
CO3															
CO4															
CO5															

7.1 PO Strongly Mapped: (Example):

O **PO2: Write full statement with keywords highlighted** o **PO3: Write full statement with keywords highlighted** o **PO4: Write full statement with keywords highlighted**

7.2 PO Moderately Mapped: (Example)

O **PO1: Write full statement with keywords highlighted**

O **PO11: Write full statement with keywords highlighted**

7.3 PO Low Mapped: (Example)

O **PO12: Write full statement with keywords highlighted**

7.4 PSO Strongly Mapped: (Example)

O **PSO 1 : Write full statement with keywords highlighted**

7.5 P S O Moderately Mapped: (Example)

O **PSO 2: Write full statement with keywords highlighted**

6.6 PSO Low Mapped: (Example)

O **PSO 3: Write full statement with keywords highlighted**

8. **Rules for CO/LO Attainment Levels: (Targets)**

All the courses of your department should be divided into three categories A-Most Difficult course, B-Medium level of Difficulty, C- Low level of Difficulty –(Easy)
According to difficulty level, you can decide specific range for CO attainment targets for Continuous assessment from the following table.
Remember that targets for internal assessment should be higher.

Course Category	Level 3	Level 2	Level 1
A	**60 % of students getting > 60% marks**	**50-60 % of students getting > 60% marks**	**40-50 % of students getting > 60% marks**
B	**80 % of students getting > 60% marks**	**60-80 % of students getting > 60% marks**	**40-60 % of students getting > 60% marks**
C	**90 % of students getting > 60% marks**	**70-90 % of students getting > 60% marks**	**40-70 % of students getting > 60% marks**

9. End Term RTU Component: CO Attainment Levels

All the courses of your department should be divided into three categories A-Most Difficult course, B-Medium level of Difficulty, C- Low level of Difficulty –(Easy)
According to difficulty level and the results of past 3-5 years, you can decide specific range for CO attainment targets for RTU component from the following table.

Course Category	Level 3	Level 2	Level 1
A	**50 % of students getting > 60% marks**	**40-50 % of students getting > 60% marks**	**30-40 % of students getting > 60% marks**
B	**60 % of students getting > 60% marks**	**40-60 % of students getting > 60% marks**	**30-40 % of students getting > 60% marks**
C	**80 % of students getting > 60% marks**	**60-80 % of students getting > 60% marks**	**40-60 % of students getting > 60% marks**

For the specific CO/LO attainment levels of your respective course please use the above tables as reference according your subject difficulty level and prepare following table.

S. No.	Course Type	Attainment Level=1	Attainment Level=2	Attainment Level=3
1	**Theory Courses** Mid Semester Exams			
2	**Theory Courses** University Exam			
4	**Practical Courses** – Internal Exams			
5	**Practical Courses** - University Exam			
6	**Assignments/Unit Test**			
7.	**Any other**			

10. CO wise Assessment Activities (as Mentioned in Session Plan):
You can plan for each CO, activities/ assessment tools to be conducted/ used for its achievement.
Use X to those you select for specific CO. Remove all unused columns.

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

	Activities															
CO	**Pre Mid I Test**	**Post Mid I Test**	**Quiz 1**	**Quiz 2**	**Pre Mid II Test**	**Post Mid II Test**	**Assignment 1**	**Assignment 2**	**Workshop**	**Seminar**	**Project**	**Training**	**Discussion**	**Mid 1**	**Mid 2**	**Ind. visit**
CO1																
CO2																
CO3																
CO4																
CO5																
CO6																

In case of Lab course some activities are as follows:

LO	Internal Practical exams	Laboratory Tests	Viva	Records	Project Presentation	Project Evaluation	External practical exams
LO1							
LO2							
LO3							
LO4							

11. CO wise Assessment Activities:

Based on CO-PO mapping, determine targets for each CO as average of targets of all relevant POs.

CO	PO												Avg.	PSO		
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**CO Targets**	**PSO1**	**PSO2**	**PSO3**
CO1																
CO2																
CO3																
CO4																
CO5																

Dr. Mahesh Bundele B.E., M.E., Ph.D. Director Poornima College of Engineering ISI-6, RIICO Institutional Area Sitapura, JAIPUR

12. Activity wise Assessment Tools:

This gives you generalized view of different direct and indirect tools those can be used for assessment / achievement of CO/PO. (Decide which tools are required for assessing a particular CO/LO and in reference to Course A, B, C difficulty level).

Sr. No.	Activity	Assessment Method	Tools	Weightage Marks	Recommendation
1.	Pre-Mid Term 1	Direct	Marks	10	For CO
2.	Post-Mid Term 1	Direct	Marks	10	For CO
3.	Quiz 1	Direct	Marks	10	For CO
4.	Quiz 2	Direct	Marks	10	For CO
5.	Pre Mid Term 2	Direct	Marks	10	For CO
6.	Post Mid Term 2	Direct	Marks	10	For CO
7.	Mid Term 1	Direct	Marks	20	For CO
8.	Mid Term 2	Direct	Marks	20	For CO
9.	Assignment 1	Direct	Marks	10	For CO
10.	Assignment 2	Direct	Marks	10	For CO
11.	Workshop	Indirect	Rubrics	5	For LO
12.	Seminar/ SPL	Indirect	Rubrics	5	For CO/LO
13.	Project (Mini or NSP)	Indirect	Rubrics	20	For LO
14.	Discussion	Indirect	Rubrics	5	For LO
15.	Training	Indirect	Rubrics	20	For LO
16.	Industrial Visit	Indirect	Rubrics	20	For LO
17.	Or any other activity	Direct/ Indirect	Marks/ Rubrics	any	For LO
18.					
Note that for every rubrics you need to decide assessment criteria, range of marks or weightage – above values are indicative					

13. CO Assessment Process:

After every activity (Ideally as per above table): (Frequency of Assessment- Can be taken as monthly). So the assessment can be for all activities held during the month. Do the following.

13.1 Attainment of COs

13.1.1 Attainment Table for CO1: 3EEA101.1

CO1: 3EEA101.1: Attainment Table (Columns) As Applicable CO wise-Monthly									
Student	**Pre Mid I Test 10**	**Quiz 1 10**	**Assignment 10**	**Quiz 1 10**	**WS 10**	**Training 10**	**Total (60)**	**% 0f Marks**	**Level of Attainment**
Name1									**3**
Name2									**2**
Name 3									**1**
Name 4									**2**
Name 5									**1**
Name 6									**2**
----									**--**
------									**--**
	No. of Students attained level 3=					**% of Students Attained Level 3=**			
	No. of Students attained level 2=					**% of Students Attained Level 2=**			
	No. of Students attained level 1=					**% of Students Attained Level 1=**			
	Target Achieved= ? (Check Level 3 % attainment -If No Find Gap)								
	Mark X for absent- Take avg. of all present								

(Repeat it for all other COs, (CO2 – CO5))

13.1.2 CO-Gap Identifications

COs	CO 1	CO 2	CO 3	CO4	CO5
Target					
Achieved					
Gap					

13.1.3 Gaps Identified:

Describe what the reasons for gaps are

i.

ii.

Overall CO Attainment Table: Example

COs	CO 1	CO 2	CO 3	CO4	CO5	Co6
Attainment level as per rules set	3	1	3	3	3	3
Average CO attainment through internal assessment	**2.67**					

13.1.4: Activities Decided to bridge the gap

Please do analyze whether you could get improvement through activities decided and conducted for improvements. Reason should be noted why / how it is improved or not.

13.2 Attainment of POs & PSO:

13.2.1 Target-Expected Attainment of PO by attainment of CO- Put all mappings of 3, 2 and 1. Based on CO-PO mapping, determine targets for each PO as average of targets of all relevant COs.

CO	PO												PSO		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
3EEA101.1															
3EEA101.2															
3EEA101.3															
3EEA101.4															
3EEA101.5															
Obtain Average-PO/PSO Targets	Targets	Targets	Targets	Targets	Targets	Targets	Targets	Targets	Targets	Targets	Targets	Targets	Targets	Targets	Targets

13.2.2 Attainment of POs & PSO through CO as Continuous Evaluation:

Put all attainment values of CO as per mappings with 3, 2, 1 as evaluated in 13.1.1 (Frequency- Monthly)

CO	PO												PSO		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
3EEA101.1															
3EEA101.2															
3EEA101.3															
3EEA101.4															
3EEA101.5															
Obtain Avg. PO/PSO Attainment	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved

13.2.3 PO Gap Identification:

	PO												PSO		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
Targets															
Achieved															
Gap															

13.2.4 Gaps Identified:

Describe what the reasons for gap (for PO) are.

i.

ii.

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

13.2.5 Activities Decided to bridge the gap

Please do analyze whether you could get improvement through activities decided and conducted for improvements. Reason should be noted why / how it is improved or not.

Repeat whole process after one month, Two months, and three months. Plot bar chart for improvement in CO, PO & PSO. (Every month)

13.3 Attainment of CO through RTU Exam:

This may be possible for previous semester results so overall attainment. If faculty is changed, data will be evaluated by concerned faculty who taught and handed over to current faculty. If faculty not available, then current faculty will do the same.

Attainment of CO: 3EEA101: Subject:			
Student	**RTU Marks (80)**	**% 0f Marks**	**Level of Attainment**
Name1			**3**
Name2			**2**
Name 3			**1**
Name 4			**2**
Name 5			**1**
Name 6			**2**
----			**--**
------			**--**
No. of Students attained level 3=		**% of Students Attained Level 3=**	
No. of Students attained level 2=		**% of Students Attained Level 2=**	
No. of Students attained level 1=		**% of Students Attained Level 1=**	
CO Attainment = ? (Check Level 3 % attainment -If No Find Gap)			
Mark X for absent- Take avg. of all present			

13.3.1 Attainment of CO through RTU Component:

CO: Course Code: Course Name					
Target					
Achieved					
Gap					

13.3.1 Gaps for CO attainment through RTU Component:

Analyze RTU Question paper with respect to COs formulated, contents delivered and students examined, find out reasons for gaps

i.

ii.

13.3.2 Action to be taken:

Prepare recommendations for improvement in planning & teaching for gaps identified.

13.4 Attainment of PO through CO (RTU) Component

Put RTU Results as per target achieved only and mapping level, in following table

Attainment of PO through CO (RTU) Component															
CO	**PO**												**PSO**		
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**
3EEA101															

Attainment of PO through CO (RTU) Component															
3EEA101	**PO**												**PSO**		
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**
Targets															
Achieved															
Gap															

13.4.1 Gaps in PO through CO from RTU component:

Analyze RTU Question paper with respect to COs formulated & mapped, contents delivered and students examined, find out reasons for gaps

Describe what are the reasons for gap

i.

ii.

13.4.2 Action to be taken:

Prepare recommendations for improvement in planning & teaching for gaps identified.

13.5 Overall Attainment of PO & PSO: Through Continuous Assessment & RTU

While combining attainment through Continuous evaluation and RTU component, following weightage be considered.

1. **Internal Assessment – Total weightage- 40 %**
2. **RTU Component ------- Weightage – 60 %**

Put all attainments in the following table and compute.

13.5.1: Table 1

	RTU Component			Internal Assessment				
Student	**RTU Marks (80)**	**% of Marks**	**60% Weightage X6/100 (A)**	**Overall CO (-----)**	**% of Marks**	**Weightage X4/100 (B)**	**Total (A+B)**	**Level of Attainment**
Name1								**3**
Name2								**2**
Name 3								**1**
Name 4								**2**
Name 5								**1**
Name 6								**2**
----								**--**
------								**--**
No. of Students attained level 3=					**% of Students Attained Level 3=**			
No. of Students attained level 2=					**% of Students Attained Level 2=**			
No. of Students attained level 1=					**% of Students Attained Level 1=**			
PO Attainment = ? (Check Level 3 % attainment -If No Find Gap)								
Mark X for absent- Take avg. of all present								

OR

13.5.2: Table 2

	RTU			Internal CO1/ Activity 1 (Weightage %)			Internal CO2/ Activity 2 (Weightage			Internal CO3/ Activity 3 (Weightage %)				
Student	**RTU Marks (80)**	**% 0f Marks**	**60% Weightage X-----/100 A**	**Overall CO (-----)**	**% 0f Marks**	**Weightage X--/100 B**	**Overall CO (-----)**	**% 0f Marks**	**Weightage X--/100 C**	**Overall CO (-----)**	**% 0f Marks**	**Weightage X--/100 D**	**Total (A+B+C+D)**	**Level of Attainment**
Name1														**3**
Name2														**2**
Name 3														**1**
Name 4														**2**
Name 5														**1**
Name 6														**2**
----														**--**
------														**--**

No. of Students attained level 3= Attained Level 3=	**% of Students**
No. of Students attained level 2= Attained Level 2=	**% of Students**
No. of Students attained level 1= Attained Level 1=	**% of Students**
PO Attainment = ? (Check Level 3 % attainment -If No Find Gap)	
Mark X for absent- Take avg. of all present	

13.5.3: Overall PO & PSO Attainment through Course:

Put Overall PO & PSO attainment as per mapping 3,2,1 above:

Attainment of Overall PO for Session 2022-2023															
CO	**PO**												**PSO**		
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**
3CSA101															
PO Attainment															

13.5.4: Overall Gaps for Attainment of PO and PSO from the Course

Put Overall PO & PSO targets & attainment as per mapping 3,2,1 above:

Attainment & Gap of Overall PO Session ----------															
3CSA101	**PO**												**PSO**		
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**
Targets															
Achieved															
Gap															

13.5.5. Overall Gaps for Course taught:

Go through all gaps identified above and summarize. Describe what the reasons are.

i.

ii.

13.5.6 Action to be taken:

Prepare recommendations for improvement in planning & teaching (Internal & RTU) for gaps identified. Decide Activities to be conducted to bridge the gaps in COs.

Repeat whole process after One year before, Two year before, and three year before. Plot bar charts for Continuous improvements check in CO, PO & PSO. (Every Year).

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14 File Formats

14.1 List of File Formats

i. Front Page of Course File
ii. ABC Analysis Format
iii. Blown-up Format
iv. Deployment Format
v. Zero Lecture Format
vi. Tutorial Format
vii. Assignment Format
viii. Lecture Note Format
ix. Mid Term Question Paper Format
x. Mid Term Practical Exam Format
xi. Evaluation Sheets Format
xii. Activity Report Format

14.2 Front Page of Course File

POORNIMA
COLLEGE OF ENGINEERING

TEACHING MANUAL

COURSE: _____

SEMESTER: _____

SUBJECT: _____

SUB. CODE: _____

CONTENT: PGC Syllabus, Blown-up, Deployment, Zero Lectures, Detailed lecture notes with cover page, Tutorial/Home-Assignment Sheets

_____

SESSION: 20___-___

NAME OF FACULTY: _____

DEPARTMENT: _____

CAMPUS: _____

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.3 ABC Analysis Format

POORNIMA
COLLEGE OF ENGINEERING

DEPARTMENT OF ELECTRICAL ENGINEERING

ODD SEMESTER 2022-23

ABC Analysis

Course: B. Tech. **Class/Section: III SEM** **Date: 01.08.2021**
Name of Faculty: XYZ **Name of Subject: EMFT** **Subject Code: 3EE4-08**

Module	(Category A) Hard	(Category B) Medium	(Category C) Easy	Preparedness of "A" topics
MODULE 1: Review of Vector Calculus	Vector calculus differentiation, partial differentiation, integration, vector operator del, Gradient, divergence and curl; integral theorems of vectors.	Three orthogonal coordinate systems rectangular, cylindrical and spherical), Conversion of a vector from one coordinate system to another.	Vector algebra-addition, subtraction, components of vectors, scalar and vector multiplications, triple products	PPT and Notes
MODULE 2: Static Electric Field	Electric dipole, Electrostatic Energy and Energy density.	Gauss law and its applications. Absolute Electric potential, Potential difference, Calculation of potential differences for different configurations.	Coulomb's law, Electric field intensity, Electrical field due to point charges. Line, Surface and Volume charge distributions.	PPT and Notes
MODULE 3: Conductors, Dielectrics and Capacitance	Poisson's equation, Laplace's equation, Solution of Laplace and Poisson's equation, Application of Laplace's and Poisson's equations.	Boundary conditions of perfect dielectric materials. Permittivity of dielectric materials, Capacitance, Capacitance of a two wire line,	Current and current density, Ohms Law in Point form, Continuity of current,	SPL and PPT
MODULE 4: Static Magnetic Fields	Steady magnetic fields produced by current carrying conductors.	Magnetic flux and magnetic flux density, Scalar and Vector Magnetic potentials.	Biot-Savart Law, Ampere Law,	SPL
MODULE 5: Magnetic Forces, Materials and Inductance	Nature of magnetic materials, Magnetization and permeability, Magnetic boundary conditions,	Force on a moving charge, Force on a differential current element, Force between differential current elements,	Magnetic circuits, inductances and mutual inductances.	PPT
MODULE 6: Time Varying Fields and Maxwell's Equations	Motional Electromotive forces. Boundary Conditions.	Faraday's law for Electromagnetic induction, Displacement current,	Point form of Maxwell's equation, Integral form of Maxwell's equations,	PPT and Notes
MODULE 7: Electromagnetic Waves	Maxwell's equation in Phasor form, Wave equation in Phasor form, Plane waves in free space and in a homogenous material.	Wave equation for a conducting medium, Plane waves in lossy dielectrics, Propagation in good conductors, Skin effect. Poynting theorem.	Derivation of Wave Equation, Uniform Plane Waves,	SPL and PPT

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.4 Blown-up Format

POORNIMA
COLLEGE OF ENGINEERING

DEPARTMENT OF ELECTRICAL ENGINEERING

Campus: PCE Course: B.Tech.-EE Class/Section: 2nd year/ Sec-A Date: 15 Jul 2022
Name of Faculty: XYZ Name of Subject: EMFT Code: 3EE4-08

COURSE PLAN –BLOWN UP

S.NO	SYLLABUS TOPIC AS PER UNIVERSITY	BLOWN UP TOPICS
0.	Zero Lecture	(1) Introduction of self. (2) Introduction of subject and its significance (3) Introduction of student
1.	**MODULE- 1** **Review of Vector Calculus**	1.1.1 Scalar and vector quantities
1.1	Vector Algebra	1..1.2 Vector addition & subtraction 1.1.3 Position & distance vector 1.1.4 Vector Multiplication 1.1.5 Component of a vector 1.1.6 Triple products 1.1.7 Numericals
1.2	Coordinate system & Transformation	1.2.1 Cartesian coordinate system 1.2.1 Cylindrical coordinate system 1.2.3 Spherical coordinate system 1.2.4 Conversion of a vector from one coordinate system to another. 1.2.5 Numericals
1.3	Line, surface & volume integral & Differential	1.3.1 Differential elements for Cartesian coordinate system 1.3.2 Differential elements for Cylindrical coordinate system 1.3.3 Differential elements for Spherical coordinate system 1.3.4 Numericals
1.4	Del operator	1.4.1 Concept of del operator 1.4.2 Relation for Cartesian coordinate system

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.5 Deployment Format

POORNIMA
COLLEGE OF ENGINEERING

DEPARTMENT OF ELECTRICAL ENGINEERING

Campus: PCE Course: B.Tech.-EE | **Class/Section: 2nd year/ Sec-A** | **Date: 15 Jul 2022**
Name of Faculty: XYZ | **Name of Subject: EMFT** | **Code: 3EE4-08**

COURSE PLAN (Deployment)

S.No.	TOPIC AS PER BLOWNUP SYLLABUS	LECT. NO.	Target Date of Coverage	ACTUAL DEL. DATE	CO/LO	Teaching Methods	REF. / TEXT BOOK WITH PAGE NO.
1	**ZERO LECTURE** • Introduction • Basic knowledge about subject • Syllabus, REF. / TEXT BOOKS • RTU Question Paper • Conclusion	L-0	14/07/2021	14/07/2021	CO1	PPT	
2	**UNIT-I** **MODULE- 1** **Review of Vector Calculus** Vector Algebra 1.1.1 Scalar and vector quantities 1..1.2 Vector addition & subtraction 1.1.3 Position & distance vector 1.1.4 Numericals	L-1	14/07/2021	14/07/2021	CO1	Chalk/ Board	PRINCIPLES OF ELECTROMAGNETICS by MATTHEW N.O. SADIKU
3	**Vector Algebra** 1.2.1 Vector Multiplication 1.2.2 Component of a vector 1.2.3 Triple products 1.2.4 Numericals	L-2	16/07/2021	16/07/2021	CO1	Chalk/ Board	PRINCIPLES OF ELECTROMAGNETICS by MATTHEW N.O. SADIKU
4	**Coordinate system** 1.3.1 Cartesian coordinate system 1.3.2 Cylindrical coordinate system 1.3.3 Spherical coordinate system 1.3.4 Numericals	L-3	18/07/2021	18/07/2021	CO1	Chalk/ Board	PRINCIPLES OF ELECTROMAGNETICS by MATTHEW N.O. SADIKU
5	**Coordinate System**						

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.6 Zero Lecture Format

POORNIMA
COLLEGE OF ENGINEERING

ZERO LECTURE

Session: 20 - (Sem.)

Campus: …… Course: …… Class/Section: ……

Name of Faculty: ……

Zero Lecture

1). Name of Subject: …… Code: ……

2). Self-Introduction:

a). Name:
b). Qualification:
c). Designation:
d). Research Area:
e). E-mail Id: ……@poornima.org
f). Other details: Information about areas of proficiency/ expertise such as subject taught, laboratory taken, Member of Professional body, Academic Proficiency, Book Authored, Paper published in National and International Conference/Journals etc.

3). Introduction of Students:

a*). Records of students in 12th*

Sr. No.	Average result of 12th	Name of student scored highest marks	Marks 60% above (No. of students)	Marks between 40%-60% (No. of students)	English Medium Students (No.)	Hindi Medium Students (No.)	No. of Hostellers	No. of Day Scholar

b*). Name of 05 best students based on previous results: ……, ……, ……, ……, ……*

4). Instructional Language: - ……%English; ……..% Hindi (English not less than 60%)

5). Introduction to subject: - (Pl. separate out subject specific matter and general matter valid for all subjects and group/place them appropriately)

a). Relevance to Branch:
b). Relevance to Society:
c). Relevance to Self:
d). Relation with laboratory:
e). Connection with previous year and next year:

6). Syllabus of Poornima Group of Colleges, Jaipur

a). Unit Name:
b). ABC analysis (RGB method) of unit & topics

7). Books/ Website/Journals & Handbooks/ Association & Institution:

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

a). Recommended Text & Reference Books and Websites:

S. No.	Title of Book	Authors	Publisher	Cost (Rs.)	No. of books in Library
Text Books					
T1					
T2					
T3					
Reference Books					
R1					
R2					
R3					
Websites related to subject					
1					
2					

b). Journals & Handbooks: - To give information about different Journals & Handbooks available in library related to the subject and branch.

c). Associations and Institutions: - To give information about different Associations and Institutions related to the subject and branch.

8). Syllabus Deployment: -

a). Total weeks available for academics (excluding holidays) as per Poornima Foundation calendar-

Semester	
No. of Working days available(Approx.)	
No. of Weeks (Approx.)	

- Total weeks available for special activities (as mentioned below)- 02 weeks (Approx.)

Note: Individual faculty must calculate the exact no. of lectures available according to time table etc. after consultation with HOD.

b). Special Activities (To be approved by HOD & Dean & must be mentioned in deployment):

- Open Book Test- Once in a semester
- Quiz - Once in a semester
- Special Lectures (SPL)- Minimum 10% of total no. of lectures including following
  - i. Smart Class by the faculty, who is teaching the subject
  - ii. SPL by expert faculty
  - iii. SPL by expert from industry/academia (other institution)
- Revision classes (Solving Important Question Bank):- 1 class before Mid Term and 2 classes before End Term Exam

c). Lecture schedule per week

i). University scheme (L+T+P) = ...+....+.....

Sr. No.	Name of Unit	No. of lectures	Broad Area	Degree of difficulty (High/Medium/Low)	Text/ Reference books
1.					
2.					
3.					
4.					
5.					

d). Introduction & Conclusion: Each subject, unit and topic shall start with introduction & close with conclusion. In case of the subject, it is Zero lecture.

e). Time Distribution in lecture class: - Time allotted: 60 min.

i. First 5 min. should be utilized for paying attention towards students who were absent for last lecture or continuously absent for many days + taking attendance by calling the names of the students and also sharing any new/relevant information.

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

ii. Actual lecture delivery should be of 50 min.
iii. Last 5 min. should be utilized by recapping/ conclusion of the topic. Providing brief introduction of the coming up lecture and suggesting portion to read.
iv. After completion of any Unit/Chapter a short quiz should be organized.
v. During lecture student should be encouraged to ask questions.

Note: Pl. ensure that each student is having Lecture Note Book. Also, write on the black board day and date, name of the teacher, name of subject with code, unit and lecture no. and topics to be covered at the beginning of each lecture and ensure that students write in lecture note book. Ask students to leave 4/5 pages blank for copying the note from fellow students in case of their absenteeism.

9). Tutorial: - An essential component of Teaching- Learning process in Professional Education.

Objective: - To enhance the recall mechanism.
To promote logical reasoning and thinking of the students.
To interact personally to the students for improve numerical solving ability.

a). *Tutorial processing:* - Tutorial sheet shall be provided to each students

I[st] Phase: - It is consisting of questions to be solved in the class assignment session in test mode on perforated sheet given in tutorial notebook and to be collected & kept by respective faculty for review & analysis (20 minutes).

II[nd] Phase: - Indicating/Initializing the weak issues/ drawback and Evaluating and providing the grade. Making a group with good student for assisting the weak students to explain/solve questions by every student on plain papers given in tutorial note book (20 minutes).

III[rd] Phase: - Solving/ explaining difficulties of lecture class and providing the new home assignment (20 minutes). To be done in tutorial note book.

b). *Home assignment shall comprise of two parts:*

Part (i) Minimum essential questions, which are to be solved and submitted by all with in specified due date.

Part (ii) Other important questions, which may also be solved and submitted for examining and guidance by teacher.

10). Examination Systems:

A. FOR ALL THEORY COURSES:-

a. Continuous Internal Evaluation (CIE)	**20%**
-Assignment / Project / Papers / Essays / Class Participation	10%
-Quiz / Class Test (Announced / Unannounced)	5%
- Attendance and Discipline	5%
b. Mid Semester Exams (MSE) – Two	**20%**
c. End Semester Exam (ESE) - One	**60%**
TOTAL	**100 %**

B. FOR ALL PRACTICAL (LABORATORY) COURSES:-

a. Continuous Internal Evaluation (CIE)	**40%**
-Performance (Lab Record, Viva,)	30%
-Attendance and Participation in laboratory work	10%
b. Mid Semester Exam (MSE)– Two	**20 %**
c. End Semester Exam (ESE) - One	**40%**
TOTAL	**100 %**

11). Any other important point:

Place & Date:

Name of Faculty with Designation

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.7 Lecture Note Front page Format

POORNIMA
COLLEGE OF ENGINEERING

LECTURE NOTES

Campus: ……………. **Course:** ……………… **Class/Section:** ……………………………… **Date:** ……………
Name of Faculty: ……………………………… **Name of Subject:** ………………………… **Code:** ……………
Date (Prep.): ……………………… **Date (Del.):** ……………………**Unit No.:**………………**Lect. No:** ……………………

OBJECTIVE: To be written before taking the lecture (Pl. write in bullet points the main topics/concepts etc., which will be taught in this lecture)

____

____

____

____

IMPORTANT & RELEVANT QUESTIONS:

____

____

____

____

FEED BACK QUESTIONS (AFTER 20 MINUTES):

____

____

____

____

OUTCOME OF THE DELIVERED LECTURE: To be written after taking the lecture (Pl. write in bullet points about students' feedback on this lecture, level of understanding of this lecture by students etc.)

____

____

____

REFERENCES: Text/Ref. Book with Page No. and relevant Internet Websites:

____

____

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.7.1 Detailed Lecture Note Format-1

POORNIMA
COLLEGE OF ENGINEERING

DETAILED LECTURE NOTES

Campus:	**Course:**	**Class/Section:**	**Date:** .....
Name of Faculty:		**Name of Subject:**	**Code:** .....

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.7.2 Detailed Lecture Note Format-2

POORNIMA
COLLEGE OF ENGINEERING

DETAILED LECTURE NOTES

PAGE NO. .....

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.8 Assignment Format

POORNIMA
COLLEGE OF ENGINEERING

DEPARTMENT OF ELECTRICAL ENGINEERING

Assignment Sheet 1

Campus: Poornima College of Engg. **Class/Section: 2nd Year/ Section - A** **Date: 1 Sep 2022**
Course: B.Tech.
Name of Faculty: XYZ **Name of Subject: EMFT** **Code: 3EE4-08**

		CO	PO	PSO
Q.1	Evaluate the mathematical expression of the gradient of a Scalar?	1	2	1
Q.2	Write the mathematical expression of the Curl of a Vector?	2	2	2
Q.3	Define permittivity of dielectric material?	2	2	2
Q.4	Write Statement of Vector addition and Vector Subtraction?	1	3	1
Q.5	Define Statement of Poisson's equation and Laplace's equation?	2	2	1
Q.6	Drive the Mathematical expression of Circular Cylindrical Coordinates in detail?	1	1	1
Q.7	Express the following points in cylindrical and spherical coordinates using transformation technique? a) P (1,-4,-3) b) (3, 0, 5)	2	2	3
Q.8	State and Prove divergence theorem. (1) Draw the pattern of magnetic field in which the divergence zero and (2) Draw the pattern of electric field in which divergence non-zero	4	1	1
Q.9	Define Coulomb's law? Also explain the mathematical expression of the Volume charge distribution?	1	2	1
Q.10	Drive the Mathematical transformation between Cartesian to cylindrical Coordinates in detail?	2	1	1

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.9 Tutorial Format

POORNIMA
COLLEGE OF ENGINEERING

TUTORIAL SHEET

TUTORIAL SHEET SHEET No.....

Campus: ..... Course: ..... Class/Section: ..... Date: .....

Name of Faculty: ..... Name of Subject: ..... Code: .....

Date of Tut. Sheet Preparation:..... Scheduled Date of Tut.:.....Actual Date of Tut. :.....

Name of Student:.....Scheduled & Actual Date of H.A. Submission:.....&.....

	Questions	CO	PO
FIRST 20 MT. CLASS QUESTIONS			
2 HRS. SOLVABLE HOME ASSIGNMENT (H.A.) QUESTIONS			
OTHER IMPORTANT QUESTIONS			

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.10 Mid Term/ End Term Practical Question Paper Format

POORNIMA COLLEGE OF ENGINEERING, JAIPUR

III B.TECH. (III Sem.) **SET- A**

FIRST MID TERM PRACTICAL EXAMINATION 2022-23

Code 3EE4-23 Category: PCC Subject Name: MACHINE DESIGN PRACTICE-II

(BRANCH – ELECTRICAL ENGINEERING)

Max. Time: 60 Minutes **Max. Marks: 22 + 8 (Viva) = 30**

NOTE: - All questions are compulsory. Use of Design Data Book is allowed.

Q. No.	Question	Marks	LO	PO
Q.1				
Q.2				
Q.3				

POORNIMA COLLEGE OF ENGINEERING, JAIPUR

III B.TECH. (III Sem.) **SET- B**

FIRST MID TERM PRACTICAL EXAMINATION 2022-23

Code 3EE4-23 Category: PCC Subject Name: MACHINE DESIGN PRACTICE-II

(BRANCH – ELECTRICAL ENGINEERING)

Max. Time: 60 Minutes **Max. Marks: 22 + 8 (Viva) = 30**

NOTE: - All questions are compulsory. Use of Design Data Book is allowed.

Q. No.	Question	Marks	LO	PO
Q.1				
Q.2				
Q.3				

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

14.11 Mid Term Theory Question Paper Format

POORNIMA COLLEGE OF ENGINEERING, JAIPUR

II B.TECH. (III Sem.) **Roll No. _____**

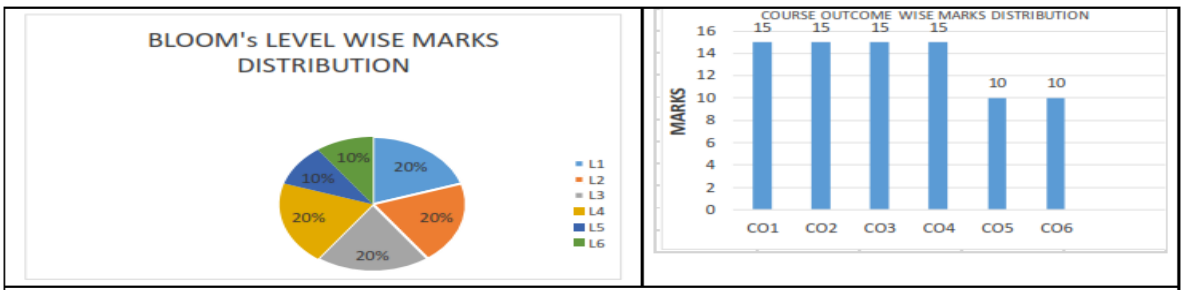
SECOND MID TERM EXAMINATION 2022-23
Code: 3EE4-08 Category: PCC Subject Name–EMF
(BRANCH – ELECTRICAL ENGINEERING)

Course Credit: ___
Max. Time: 2 hrs. **Max. Marks: 60**

NOTE:- Read the guidelines given with each part carefully.

Course Outcomes (CO):
At the end of the course the student should be able to:
CO1:
CO2:
CO3:
CO4:
CO5:
CO6:

	PART - A: (All questions are compulsory) Max. Marks (10)				
		Marks	**CO**	**BL**	**PO**
Q.1		**2**			
Q.2		**2**			
Q.3		**2**			
Q.4		**2**			
Q.5		**2**			
	PART - B: (Attempt 4 questions out of 6) Max. Marks (20)				
Q.6		**5**			
Q.7		**5**			
Q.8		**5**			
Q.9		**5**			
Q.10		**5**			
Q.11		**5**			
	PART - C: (Attempt 3 questions out of 4) Max. Marks (30)				
Q.12		**10**			
Q.13		**10**			
Q.14		**10**			
Q. 15		**10**			



BL – Bloom's Taxonomy Levels (1- Remembering, 2- Understanding, 3 – Applying, 4 – Analyzing, 5 – Evaluating, 6 - Creating)
CO – Course Outcomes; PO – Program Outcomes

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

13. List of Important Links

List of Important Links		
Sr. No.	**Link**	**Particulars**
1	https://www.rtu.ac.in/index/	Rajasthan Technical University
2	http://www.pce.poornima.org	Institute Website
3	http://www.pce.poornima.org/Downloads.html	Format of Students & Employees
4	https://www.turnitin.com/login_page.asp?lang=en_us	Plagiarism Checker
5	http://pcelibrary.poornima.org/	PCE Digital Library
6	https://ndl.iitkgp.ac.in/	National Digital Library of India (NDLI)
7	https://swayam.gov.in/	SWAYAM MOOCs platform
8	https://www.vlab.co.in/	Virtual Labs
9	https://spoken-tutorial.org/	Spoken Tutorial
10	https://fossee.in/	FOSSEE (Free/Libre and Open Source Software for Education)
11	https://www.sih.gov.in/	Smart India Hackathon
12	https://www.swayamprabha.gov.in/	32 high quality educational channels through DTH on 24X7 basis.
13	https://ieeexplore.ieee.org/Xplore/home.jsp.You	IEEE All Society Periodicals Package
14	https://booksc.org/	Link for Free for book and articles
15	https://jgateplus.com/home/	J-gate Plus (JOURNALS -GATE) subscriptions
16	http://www.delnet.nic.in/	Developing Library Network
17	https://dst.rajasthan.gov.in/content/dst-gov/en/home.html	Department of Science & Technology, Government of Rajasthan
18	https://ipindia.gov.in/index.htm	Official website of Intellectual Property India
19	http://pce.poornima.org/Downloads.html	Academic Formats Word File
Note:- Required Credentials can be taken from Respective Department Heads		

Dr. Mahesh Bundele
B.E., M.E., Ph.D.
Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR