



NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

COURSE PLAN – PART I			
Name of the programme and specialization	I Year B.Tech, EEE		
Course Title	INTRODUCTION TO ELECTRICAL AND ELECTRONICS ENGINEERING		
Course Code	EEIR15	No. of Credits	02
Course Code of Pre-requisite subject(s)	NIL		
Session	January 2022	Section (if, applicable)	A
Name of Faculty	Dr. P Srinivasa Rao Nayak	Department	EEE
Email	psnayak@nitt.edu	Telephone No.	7708243070
Name of Course Coordinator(s) (if, applicable)	N A		
Course Type (please tick appropriately)	<input type="checkbox"/> General Institute Requirement (GIR) <input type="checkbox"/> Branch Specific Course		
Syllabus (approved in BoS)			
<p>History, major inventions, scope, significance and job opportunities in electrical and electronics engineering, brief overview of various energy resources.</p> <p>Basics of energy conversion, Power apparatus used in power generation, transmission and distribution, Power apparatus used in various industries.</p> <p>Basic ideas about utility supply, electrical tariff, energy audit and importance of energy saving.</p> <p>Introduction to different types of electrical circuits, house wiring, electronic circuits for signal processing, specifications of electronic components.</p> <p>Brief overview of curriculum, laboratories and various software packages, electronic testing and measuring equipment.</p>			
COURSE OBJECTIVES			
This course facilitates the students to get a comprehensive exposure to electrical and electronics engineering			
MAPPING OF COs with Pos			
Course Outcomes	Programme Outcomes (PO) (Enter Numbers only)		
Upon completion of the course, the students shall develop an insightful knowledge on various fundamental elements of electrical and electronics engineering	1,3,8,13		



COURSE PLAN – PART II			
COURSE TEACHING AND LEARNING ACTIVITIES			
S.No.	Week/Contact Hours	Topic	Mode of Delivery
1	Week 1 (2 Lectures) 04-08 April	Introduction to the course, History,	Online lecture
2	Week 2(2 Lectures) 11-16 April	major inventions, scope, significance and job opportunities in electrical and electronics engineering,	Online lecture
3	Week 3(2 Lectures) 18-22 April	brief overview of various energy resources	Online lecture
4	Week 4(2 Lectures) 25-29 April	Basics of energy conversion, Power apparatus used in power generation and distribution.	Online lecture
5	Week 5(3 Lectures) 02-07 May	Power apparatus used in various industries First Assessment Basic ideas about utility supply	Online lecture
6	Week 6(2 Lectures) 09-13 May	electrical tariff, energy audit	Online lecture
7	Week 7(2 Lectures) 16-20 May	importance of energy saving.	Online lecture
8	Week 8(3 Lectures) 23-28 May	Introduction to different types of electrical circuits house wiring,	Online lecture
9	Week 9(2 Lectures) 30 May -03 June	Second Assessment	Online lecture
10	Week 10(2 Lectures) 06-10 June	electronic circuits for signal processing specifications of electronic components	Online lecture



11	Week 11(3 Lectures) 13 -18 June	Brief overview of curriculum, laboratories and various software packages	Online lecture
12	Week 12(2 Lectures) 20-24 June	electronic testing and measuring equipment.	Online lecture
13	Week 12(1 Lectures) 27 -29 June	Compensation Assessment	Online lecture

COURSE ASSESSMENT METHODS

S.No.	Mode of Assessment	Week/Date	Duration	% Weightage
1.	Assessment I (CT1)	Week5 02-07 May	1 hour	25%
2.	Assessment II(CT2)	Week 9 30 May -03 June	1 hour	25%
3.	Assignment	Surprise test / report / viva/assignment -	-	20%
	Compensation Assessment (Written test)	Week 12 27-29 June	1hour	80% of CT1/CT2
4	Final Assessment	4- 9 July	2 hours	30%

ESSENTIAL READINGS : Textbooks, reference books Website addresses, journals, etc

1. Clayton Paul, Syed A Nasar and Louis Unnewehr, 'Introduction to Electrical Engineering', 2nd Edition, McGraw-Hill, 1992.
2. Kothari D.P. & Nagrath I.J., 'Basic Electrical Engineering', 2nd Edition, Tata McGraw-Hill, 2001.
3. P.S. Dhogal, 'Basic Electrical Engineering – Vol. I& II', 42nd Reprint, McGraw-Hill, 2012.

COURSE EXIT SURVEY

- Feedback from the students during class committee meetings
- Anonymous feedback through questionnaire

COURSE POLICY

- All students are expected to attend all the laboratory sessions
- Compensation Examination shall have 80% weightage

ATTENDANCE POLICY (A uniform attendance policy as specified below shall be followed)



- At least 75% attendance in each course is mandatory.
- A maximum of 10% shall be allowed under On Duty (OD) category.
- Students with less than 65% of attendance shall be prevented from writing the final assessment and shall be awarded 'V' grade.

ACADEMIC DISHONESTY & PLAGIARISM

- Possessing a mobile phone, carrying bits of paper, talking to other students, copying from others during an assessment will be treated as punishable dishonesty.
- Zero mark to be awarded for the offenders. For copying from another student, both students get the same penalty of zero mark.
- The departmental disciplinary committee including the course faculty member, PAC chairperson and the HoD, as members shall verify the facts of the malpractice and award the punishment if the student is found guilty. The report shall be submitted to the Academic office.
- The above policy against academic dishonesty shall be applicable for all the programmes.

ADDITIONAL INFORMATION, IF ANY

FOR APPROVAL

Course Faculty _____

CC- Chairperson _____

HOD _____



Guidelines

- a) The number of assessments for any theory course shall range from 4 to 6.
- b) Every theory course shall have a final assessment on the entire syllabus with at least 30% weightage.
- c) One compensation assessment for absentees in assessments (other than final assessment) is mandatory. Only genuine cases of absence shall be considered.
- d) The passing minimum shall be as per the regulations.

B.Tech. Admitted in				P.G.
2018	2017	2016	2015	
35% or (Class average/2) whichever is greater.		(Peak/3) or (Class Average/2) whichever is lower		40%

- e) Attendance policy and the policy on academic dishonesty & plagiarism by students are uniform for all the courses.
- f) Absolute grading policy shall be incorporated if the number of students per course is less than 10.
- g) Necessary care shall be taken to ensure that the course plan is reasonable and is objective.