

Department of Electronics and Communication Engineering
NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI

Course Title	Electronic Circuits Laboratory		
Course Code	ECPC17	No. of Credits	2
Department	ECE	Faculty	Dr. R. Pandeewari
Pre-requisites Course Code	ECLR12		
Course Coordinator(s) (if, applicable)	Dr. R. Pandeewari		
Other Course Teacher(s)/Tutor(s) E-mail	-	E-mail/Telephone No.	<u>rpands@nitt.edu</u> 0431-2503318
Course Type	Laboratory course		

COURSE OVERVIEW

- To expose the students to the fundamentals of electronic circuits

COURSE OUTCOMES (CO)

Course Outcomes	Aligned Programme Outcomes(PO)
1. To design full wave rectifier with filters and analyze the ripple factor	
2. To analyze the stability of Q point for various biasing methods	
3. To design and analyze BJT and FET amplifier circuits	
4. To design and analyze various oscillator circuits	
5. To get exposed to Pspice simulation for various electronic circuits	

COURSE TEACHING AND LEARNING ACTIVITIES

S. No.	Week	Topic	Mode of Delivery
1.	First week of January (3 Contact Hours)	Introduction to the Lab course	
2.	Second week of January (3 Contact Hours)	Full wave rectifier with filters	
3.	Third week of January (3 Contact Hours)	Stability of Q point	
4.	Fourth week of January (3 Contact Hours)	Single stage RC coupled CE amplifier	
5.	First week of February (3 Contact Hours)	Single stage RC coupled current series CE feedback amplifier	
6.		Redo Class	
7.	Third week of February (3 Contact Hours)	Darlington emitter follower	
8.	Fourth week of February (3 Contact Hours)	Differential Amplifier	
9.	First week of March (3 Contact Hours)	Single stage CS FET amplifier	
10.	Second week of March (3 Contact Hours)	RC phase shift oscillator	
11.	Third week of March (3 Contact Hours)	Colpitt's Oscillator	
12.		Redo Class	
13.	First week of April (3 Contact Hours)	Pspice Simulation	
14.	Second week of April (3 Contact Hours)	Assessment II	Quiz(Written test)
15	Third week of April (3 Contact Hours)	Assessment III	Lab Exam

COURSE ASSESSMENT METHODS

S.No.	Mode of Assessment	Week/Date	Duration	% Weightage
1.	ASSESSMENT-I (Continuous evaluation)	Entire course duration	60minutes	50
2.	ASSESSMENT-II (Quiz-written type)	2 nd week of April	30 minutes	25
3.	ASSESSMENT-III (Lab Exam)	4 th week of April	2 hours	25

ESSENTIAL READINGS :

1. Electronic Circuits Lab Manual

COURSE EXIT SURVEY

1. Feedback from the students during class committee meeting.
2. Queries through questionnaire.
3. Course Attainment is calculated through Direct tools (Exams)

COURSE POLICY**Correspondence:**

1. All the students are advised to come to class regularly. All the correspondence (schedule of classes/ schedule of assessment/ course material/ any other information regarding this course) will be intimated in the class / over phone.
2. Queries (if required) to the course teacher shall be emailed to the email id specified.

Attendance:

1. Attendance will be taken by the faculty in all the contact hours. Every student should maintain minimum 75 % physical attendance (on other duty will not be considered) in these contact hours to attend the end semester examination.
2. Any student, who fails to maintain the minimum 75% attendance but has attendance between 50% and 75%, will be eligible for attending the end semester examination provided if he/she appears for the compensation assessment (CPA) and scores more than 60 % marks in the CPA. Otherwise, they will have to REDO the course.

3. Students having attendance less than 50% at the end of the semester will have to RE DO the course.

Assessment:

1. Attending all the assessments is MANDATORY for every student.
2. If any student is not able to attend either one or both of the continuous assessments I & III due to genuine reason, student is permitted to attend the compensation assessment (CPA) with only 20 % weightage for both the cases.
3. At any case, CPA will not be considered as an improvement test.
4. If any student is not able to attend the End semester due to genuine reason with valid attestation, student is permitted to take up FORMATIVE ASSESSMENT.
5. Finally, every student is expected to score minimum 35% of the mark of the class in the total assessment (1, 2, 3 and end semester) to pass the course. Otherwise the student would be declared fail and 'F' grade will be awarded. Further the student can take up only FORMATIVE ASSESSMENT.

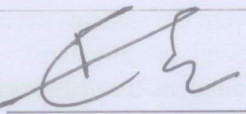
ADDITIONAL COURSE INFORMATION

Queries and feedback may also be emailed to the Course Faculty directly at rpands@nitt.edu

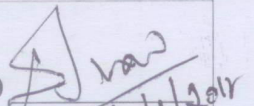
FOR SENATE'S CONSIDERATION

Course Faculty Dr. R. Pandeeswari

CC-Chairperson


4.1.2017

HOD


4/1/2017