

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI

COURSE PLAN – PART I			
Course Title	Electronic Circuits Laboratory		
Course Code	ECLR12	No. of Credits	2
Course Code of Pre-requisite subject(s)	ECPC17		
Session	January 2018	Section (if, applicable)	A
Name of Faculty	Dr. B. Rebekka	Department	ECE
Email	rebekka@nitt.edu	Telephone No.	9894478823
Name of Course Coordinator(s) (if, applicable)			
E-mail		Telephone No.	
Course Type	Core course		
Syllabus (approved in BoS)			
1. Stability of Q point 2. Single stage RC coupled CE amplifier 3. Single stage RC coupled Current series CE feedback amplifier 4. Darlington emitter follower 5. Differential Amplifier 6. RC phase shift oscillator 7. Colpitt's Oscillator 8. Power amplifier – Class A & class AB Simulation Experiments 1. MOS CS amplifier with resistive load, diode connected load, current source load 2. MOS current mirrors			
COURSE OBJECTIVES			
To expose the students to the fundamentals of electronic circuits			
COURSE OUTCOMES (CO)			
Course Outcomes	Aligned Programme Outcomes (PO)		
1. To analyze the stability of Q point for various biasing methods	3,4,5		
2. To design and analyze BJT amplifier circuits	3,4,5		
3. To design and analyze FET amplifier circuits	3,4,5		
4. To design and analyze various oscillator circuits	3,4,5		

5. To get exposed to Pspice simulation for various electronic circuits	3,4,5
--	-------

COURSE PLAN – PART II

COURSE OVERVIEW

To design and analyze amplifier and oscillator circuits

COURSE TEACHING AND LEARNING ACTIVITIES

S.No.	Week/Contact Hours	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	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	<u>60minutes</u>	50
2.	ASSESSMENT-II (Quiz-written type)	2 nd week of April	30 minutes	25
3.	ASSESSMENT-III (Lab Exam) Final Assessment	4 th week of April	2 hours	25

COURSE EXIT SURVEY (mention the ways in which the feedback about the course shall be assessed)

1. Feedback from the students during class committee meeting.
2. Queries through questionnaire.

COURSE POLICY (preferred mode of correspondence with students, policy on attendance, compensation assessment, academic honesty and plagiarism etc.)

MODE OF CORRESPONDENCE (email/ phone etc)

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.

Queries (if required) to the course teacher shall be emailed to the email id specified.

ATTENDANCE

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.

Students having attendance less than 75% at the end of the semester will have to RE DO the course.

ACADEMIC HONESTY & PLAGIARISM

All students are expected to do their work .The taking of information by means of copying homework assignments, or looking or attempting to look at another student's paper during an examination is considered dishonest.

Also preventing or hampering other students from pursuing their academic activities is also considered as academic dishonest.

Any evidence of such academic dishonesty will result in the loss of all marks on that assignment or exam.

- Students opting for plagiarism during exams will be summarily sent out and awarded zero marks for that exam.
- Students honestly producing original work will be rewarded with better marks.

ADDITIONAL INFORMATION

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

FOR APPROVAL

Course Faculty  CC-Chairperson  HOD 