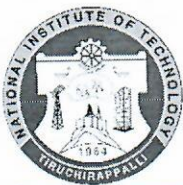




DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

COURSE PLAN – PART I			
Name of the programme and specialization	B.TECH- ELECTRONICS AND COMMUNICATION ENGINEERING		
Course Title	MICROWAVE LABORATORY		
Course Code	ECLR19	No. of Credits	01
Course Code of Pre-requisite subject(s)	ECPC25& ECPC29		
Session	July 2019	Section (if, applicable)	A & B
Name of Faculty	Mrs.V.JEYANTHI	Department	ECE
Official Email	jeyanthi@nitt.edu	Telephone No.	9840965584
Name of Course Coordinator(s) (if, applicable)			
Official E-mail		Telephone No.	
Course Type (please tick appropriately)	<input checked="" type="checkbox"/> Core course	<input type="checkbox"/> Elective course	
Syllabus (approved in BoS)			
<p>List of Experiments:</p> <ol style="list-style-type: none"> 1.Characteristics of Gunn Diode 2.Characteristics of Reflex Klystron 3. Measurement of Directional Coupler parameters 4. Characteristics of Isolator and Circulator 5.Characteristics of Waveguide Tees 6. Frequency and Wavelength Measurement 7. Impedence Measurement 8. Antenna Measurement 9. Propagation of Microwaves 10. VSWR Measurement 			
COURSE OBJECTIVES			
<ol style="list-style-type: none"> 1. To know about the behaviour of microwave components 2. To deal with the microwave generation 3. To instill knowledge on the properties for various microwave components 4. To practice various microwave measurement procedures 5. To develop the basic skills to learn software for antenna design and measurement 			



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MAPPING OF COs with POs			
	Course Outcomes		Programme Outcomes (PO) (Enter Numbers only)
	1. Understand the active and passive microwave components used in microwave communication system		3,4
	2. Can setup a bench for different microwave components		3,4
	3. Measure and analyze microwave signal and parameters		1,3,4
	4. Test the characteristics of different microwave components		6,11
	5. Analyze the radiation pattern of antenna		5
COURSE PLAN – PART II			
COURSE OVERVIEW			
To provide a depth knowledge about the Microwave components and analyzing the microwave signal .The laboratory exercises are designed to give students ability to design, build, test and analyze the different microwave components.			
COURSE TEACHING AND LEARNING ACTIVITIES			(Add more rows)
S.No.	Week/Contact Hours	Topic	Mode of Delivery
1	I	1. Characteristics of Gunn Diode	Lab Exercise
2	II	2. Characteristics of Reflex Klystron	Lab Exercise
3	III	3. Measurement of Directional Coupler parameters	Lab Exercise
4	IV	4. Characteristics of Waveguide Tees	Lab Exercise
5	V	5. Frequency and Wavelength Measurement	Lab Exercise



6	VI	6. Characteristics of Isolator and Circulator	Lab Exercise
7	VII	7. Impedence Measurement	Lab Exercise
8	VIII	8. Antenna Measurement	Lab Exercise
9	IX	9. Propagation of Microwaves	Lab Exercise
10	X	10. VSWR Measurement	Lab Exercise

COURSE ASSESSMENT METHODS

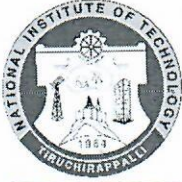
S.No.	Mode of Assessment	Week/Date	Duration	% Weightage
1	Assessment 1 Observation	To be submitted every week while coming to the lab		10
2	Assessment 2 Record	To be submitted every next week after completion of the experiments		20
3	Assessment 3 Oral Viva	Questions will be asked in every lab session		10
4	Assessment 4 Viva voce (MCQ-Written Exam)	One week prior to the end of the semester	60 minutes	30
5	End Semester Examination	3 rd Week of November	90 minutes	30

*mandatory; refer to guidelines on page 5

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

1. Feedback from the students during class committee meetings
2. Individual subject feedback through MIS at the end of the semester

COURSE POLICY (including compensation assessment to be specified)



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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

Any queries send a mail to jeyanthi@nitt.edu

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.