



DEPARTMENT OF PRODUCTION ENGINEERING

COURSE PLAN – PART I			
Name of the programme and specialization	B.Tech.- ELECTRONICS AND COMMUNICATION ENGINEERING		
Course Title	ENGINEERING PRACTICE		
Course Code	PRIR11	No. of Credits	2
Course Code of Pre-requisite subject(s)	-		
Session	July 2023	Section (if, applicable)	A
Name of Faculty	Dr. C. Sathiya Narayanan	Department	Production Engineering
Official Email	csathiya@nitt.edu	Telephone No.	0431-250-3511
Name of Course Coordinator(s) (if, applicable)	-		
Official E-mail	-	Telephone No.	-
Course Type (please tick appropriately)	<input type="checkbox"/> Core course	<input type="checkbox"/> Elective course	<input checked="" type="checkbox"/> Lab course
Syllabus (approved in BoS)			
<p>Foundry: Mould preparation for Flange and Hand Wheel, Plastic moulding / Wax moulding.</p> <p>Welding: Fabrication of Butt Joint and Fabrication of Lap Joint.</p> <p>Carpentry: Wood sizing exercise in planning, marking, sawing, chiseling and grooving to make; Tee Through Halving Joint and Dovetail Scarf Joint.</p> <p>Fitting: Preparation of joints, markings, cutting and filling for making; Semi-circle part with the given work piece, Dovetail part with the given work piece.</p> <p>Sheet metal: Fabrication of Dust Pan and Fabrication of Corner Tray.</p>			
COURSE OBJECTIVES			
<ul style="list-style-type: none"> To use hand tools and machinery in Carpentry, welding shop, Foundry, Fitting shop and Sheet Metal work. To manufacture engineering products or prototypes. 			
MAPPING OF COs with Pos			
Course Outcomes	Programme Outcomes (PO) (Enter Numbers only)		
1. To impart knowledge on selection of suitable manufacturing process for the typical component.	1, 2, 3, 5, 6 and 9		
2. To learn the various methods and types of welding, sheet metal and foundry processes.	1, 2, 4, 7, 8 and 10		
3. To enable students to solve practical work related to Carpentry and Fitting.	1, 2, 5, 9, 10 and 11		



4. Produce simple engineering products or prototypes.	1, 2, 4, 7, 8 and 10
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COURSE PLAN – PART II			
COURSE OVERVIEW			
1. Making of Mould using foundry technique			
2. Joining of Metal by welding process			
3. Working on wood, metal and sheet metal to make some shapes			
COURSE TEACHING AND LEARNING ACTIVITIES			
S.No.	Week/Contact Hours	Topic	Mode of Delivery
1	1 st Week	Introduction to EP/ Demonstration on Experiment	Demonstration/ Practical
FOUNDRY			
2	2 nd Week	Flange pattern	Demonstration/ Practical
3	3 rd Week	Hand wheel Pattern	Demonstration/ Practical
WELDING			
4	4 th Week	Lap Joint	Demonstration/ Practical
5	5 th Week	Butt Joint	Demonstration/ Practical
CARPENTRY			
6	6 th Week	T-Joint	Demonstration/ Practical
7	7 th Week	Dovetail Scarf Joint.	Demonstration/ Practical
FITTING			
8	8 th Week	Square Fitting,	Demonstration/ Practical
9	9 th Week	V Fitting	Demonstration/ Practical
SHEET METAL OPERATION			
10	10 th Week	Square tray	Demonstration/ Practical
11	11 th Week	Dust pan	Demonstration/ Practical
12	12 th Week	Compensation Lab	Demonstration/ Practical



COURSE ASSESSMENT METHODS				
S.No.	Mode of Assessment	Week/Date	Duration	% Weightage
1	Practical / Assignments and Viva	Every lab class / Discussion	-	70
2	End Semester Exam *	End of Semester	-	30
*mandatory; refer to guidelines on page 4				
COURSE EXIT SURVEY				
1. Feedback from the students during class committee meeting. 2. End semester feedback on course outcomes.				
COURSE POLICY (including compensation assessment to be specified)				
<u>MODE OF CORRESPONDENCE</u>				
The course faculty is available for discussion based on prior appointment by email.				
<u>COMPENSATION ASSESSMENT POLICY</u>				
<ul style="list-style-type: none"> ➤ Attending online/practical classes regularly and continuously is required for the students to understand the concepts and gain hands on experience. ➤ Interaction and participation in the discussions is encouraged during practical classes. ➤ Completing the observation and record, attending Viva and final assessment is mandatory. 				
<u>ATTENDANCE POLICY (A uniform attendance policy as specified below shall be followed)</u>				
<ul style="list-style-type: none"> ➤ 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. 				
<u>ACADEMIC DISHONESTY & PLAGIARISM</u>				
<ul style="list-style-type: none"> ➤ 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. 				



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➤ The above policy against academic dishonesty shall be applicable for all the programmes.

ADDITIONAL INFORMATION, IF ANY

FOR APPROVAL

c.s.dj. NLS
Course Faculty _____

G. Tharani Raja 14/9/23
CC- Chairperson _____
(G. Tharani Raja)
E.C.E

HOD *M. J.* 14/9/23



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.