



DEPARTMENT OF PRODUCTION ENGINEERING

COURSE PLAN – PART I			
Name of the programme and specialization	B.Tech. – Metallurgical and Materials Engineering, II Semester		
Course Title	Engineering Practice Lab.		
Course Code	PRIR11	No. of Credits	2
Course Code of Pre-requisite subject(s)	-		
Session	Jan 2022	Section (if, applicable)	-
Name of Faculty	Dr.V.Satheeshkumar	Department	Production Engineering
Official Email	<a href="mailto:satheeshv@nitt.edu">satheeshv@nitt.edu</a>	Telephone No.	0431-2503503
Name of Course Coordinator(s) (if, applicable)	-		
Official E-mail	-		
Course Type (please tick appropriately)	<input type="checkbox"/> Core course	<input type="checkbox"/> Elective course	Telephone No.
<b>Syllabus (approved in BoS)</b>			
Foundry Preparation of sand mould for the following 1. Flange 2. Hand Wheel			
Welding Exercise in arc welding for making 1. Butt Joint 2. Lap Joint			
Carpentry Wood sizing exercise in planning, marking, sawing, chiseling and grooving to make 1. Tee Through Halving Joint 2. Dovetail Scarf Joint			
Fitting Preparation of joints, markings, cutting and filling for making 1. Semi-circle Part 2. Dovetail Part			
Sheet metal Making of small parts using sheet metal 1. Dust Pan 2. Corner Tray			



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<b>COURSE OBJECTIVES</b>	
<ul style="list-style-type: none"> <li>• To use hand tools and machinery in Carpentry, welding shop, Foundry, Fitting shop and Sheet Metal work.</li> <li>• To manufacture engineering products or prototypes.</li> </ul>	
<b>MAPPING OF COs with POs</b>	
Course Outcomes	Programme Outcomes (PO) (Enter Numbers only)
1. Know to utilize hand tools and machineries in Carpentry, Welding shop, Foundry, Fitting shop and Sheet Metal work.	1, 3, 6, 7, 8, 9, 11, 12
2. Produce simple engineering products or prototypes	1, 3, 6, 7, 8, 9, 11, 12

<b>COURSE PLAN – PART II</b>				
<b>COURSE OVERVIEW</b>				
<ul style="list-style-type: none"> <li>• Knowledge of contextual factors impacting the engineering discipline.</li> <li>• Understanding of the scope, principles, norms, accountabilities and bounds of contemporary engineering practice in the specific discipline.</li> <li>• Application of systematic engineering synthesis and design processes.</li> </ul>				
<b>COURSE TEACHING AND LEARNING ACTIVITIES</b>				
S.No.	Week/Contact Hours	Topic	Mode of Delivery	
1	1 <sup>st</sup> Week	Introduction to EP/ Demonstration on Experiment		
Fitting				
2	2 <sup>nd</sup> Week	Semi-circle Part	Practical	
3	3 <sup>rd</sup> Week	Dovetail Part	Practical	
WELDING				
4	4 <sup>th</sup> Week	Lap Joint	Practical	
5	5 <sup>th</sup> Week	Butt Joint	Practical	
CARPENTRY				
6	6 <sup>th</sup> Week	T through Halving Joint	Practical	
7	7 <sup>th</sup> Week	Dovetail Scarf Joint	Practical	
FOUNDRY				
8	8 <sup>th</sup> Week	Flange	Practical	
9	9 <sup>th</sup> Week	Hand Wheel	Practical	
SHEET METAL OPERATION				
10	10 <sup>th</sup> Week	Corner Tray	Practical	
11	11 <sup>th</sup> Week	Dust Pan	Practical	
12	12 <sup>th</sup> Week	Compensation Lab	Practical	
<b>COURSE ASSESSMENT METHODS</b>				
S.No.	Mode of Assessment	Week/Date	Duration	% Weightage
1	Regular Practical Lab	Every Lab class	150 mins	70%
2	End Practical Examination	End of semester	180 mins	30%



**COURSE EXIT SURVEY**

Online Feedback will be collected at the end of semester

**COURSE POLICY**

**MODE OF CORRESPONDENCE**

Students can contact in person or through emails [satheeshy@nitt.edu](mailto:satheeshy@nitt.edu), [krishna@nitt.edu](mailto:krishna@nitt.edu) / phone 9842167599 for clarifying doubts.

**COMPENSATION ASSESSMENT POLICY**

If any student is not able to attend any of the lab session due to genuine reason, student is permitted to attend one compensation lab before end semester exam

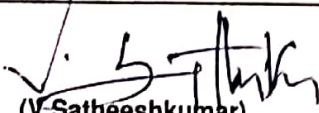

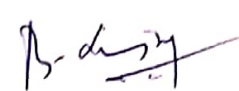
**ATTENDANCE POLICY** (A uniform attendance policy as specified below shall be followed)

- 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.

**FOR APPROVAL**

 (V. Satheeshkumar) Course Faculty	 CC- Chairperson	 HOD
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### 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.