

Metal Working

NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI DEPARTMENT OF PRODUCTION ENGINEERING

COURSE PLAN – PART I					
Name of the programme and specialization	B.Tech Instrumentation and Control Engineering, I Semester				
Course Title	Engineering Practice				
Course Code	PRIR11	2			
Course Code of Pre- requisite subject(s)					
Session	JULY 2019	Section (if, applicable)	Α		
Name of Faculty	Dr. P. Senthil	Department	Production Engineering		
Official Email	senthil@nitt.edu	Telephone No.	3513		
Name of Course Coordinator(s) (if, applicable)	-				
Official E-mail	-	Telephone No.	-		
Course Type (please	Cama aassumaa	Floating	J		
tick appropriately)	Core course	Elective cou	rse Lab		
Syllabus (approved in	BoS)				
Carpentry	200)				
Wood sizing exercise in planning, marking, sawing, chiseling and grooving to make					
1. T through half la		<i>.</i>	O		
Scarf with Tenon					
Welding					
Exercise in arc welding for making					
1. Lap joint					
2. Butt joint					
Foundry					
Preparation of sand mould for the following					
1. Flange					
2. Hand wheel					
Fitting					
Preparation of joints, markings, cutting and filling for making					
1. Square Fitting					
2. V Fitting					
Sheet metal					
Making of small parts using sheet metal					
1. Square Tray					
2. Dust Pan					
COURSE OBJECTIVES)				

Introduction to the use of tools and machinery in Carpentry, Welding, Foundry, Fitting and Sheet



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001104		COUR	SE PLAN - PART				
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	e of Delivery	
1	1st Week	Introduction to EP/ Demonstration on Experiment					
	FITTING						
2	2 nd Week	Square	Square Fitting			Practical	
3	3 rd Week	V Fitting			Practical		
WELDING							
4	4 th Week	Lap Joint				Practical	
5	5 th Week	Butt Joint				Practical	
CARPENTRY							
6	6 th Week	T through half lap halving joint				Practical	
7	7 th Week	Scarf with Tenon joint				Practical	
FOUNDRY							
8	8 th Week	Flange pattern			Practical		
9	9 th Week	Hand wheel pattern			Practical		
SHEET METAL OPERATION							
10	10 th Week	Square tray		Practical			
11	11 th Week	Dust pan		Practical			
12	12 th Week	Compensation Lab			Practical		
COURSE ASSESSMENT METHODS (shall range from 4 to 6)							
S.No.	Mode of Assessm	ssment Week/Date Durati		Duratio	on	% Weightage	
1	Regular Practical I	Lab Every Lab class 150 mi		ns	70%		



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	End Practical Examination *	End of semester	180 mins	30%
mand	datory; refer to guidelines on pa	age 4		
COUR	RSE EXIT SURVEY (mention the sed)	ways in which the fe	edback about the	e course shall be
Online	Feedback will be collected at the	e end of semester		
COUF	SE POLICY (including compensation)	ation assessment to b	e specified)	
	OF CORRESPONDENCE (emants can contact in person or throu		doubts.	
If any	PENSATION ASSESSMENT POL student is not able to attend any of ted to attend one compensation is	of the lab session due		on, student is
ATTE	NDANCE POLICY (A uniform atte	endance policy as spe	cified below shal	l be followed)
>	At least 75% attendance in each	course is mandatory		
>	A maximum of 10% shall be allo	wed under On Duty (OD) category.	
>	Students with less than 65% cassessment and shall be award		e prevented from	writing the final
ACAD	EMIC DISHONESTY & PLAGIA	RISM		
>	Possessing a mobile phone, carrothers during an assessment wi			
>	Zero mark to be awarded for to students get the same penalty of		pying from anotl	ner student, both
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 punishment if the student			
A	the punishment if the student	is found guilty. The	report shall be	submitted to the
>	the punishment if the student Academic office. The above policy against ac	is found guilty. The	report shall be	submitted to the
>	the punishment if the student Academic office. The above policy against ac programmes.	is found guilty. The	report shall be	submitted to the



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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) Average/2) lower	or (Class whichever is	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.