

NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI



DEPARTMENT OF PRODUCTION ENGINEERING

	COURSE PLAN - I	PARTI	
Name of the programme and specialization	B.Tech - Mechanic	al Engineering	
Course Title	ENGINEERING PRACTICE		
Course Code	PRIR11 .	No. of Credits	02
Course Code of Pre-requisite subject(s)	-		
Session	Jan 2023	Section (if, applicable)	В
Name of Faculty	Dr. Pintu Kumar	Department	Production Engineering
Official Email	pintu@nitt.edu	Telephone No.	6202431305
Name of Course Coordinator(s) (if, applicable)			
Official E-mail		Telephone No.	
Course Type (please tick appropriately)	Core course	Elective course	Lab 🗸

Syllabus (approved in BoS)

- Foundry: Mould preparation for Flange and Hand Wheel, Plastic moulding / Wax moulding.
- Welding: Fabrication of Butt Joint and Fabrication of Lap Joint.
- Carpentry: Wood sizing exercise in planning, marking, sawing, chiseling and grooving to make; Tee Through Halving Joint and Dovetail Scarf Joint.
- · 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.
- Sheet metal: Fabrication of Dust Pan and Fabrication of Corner Tray.

COURSE OBJECTIVES

- To use hand tools and machinery in Carpentry, welding shop, Foundry, Fitting shop and Sheet Metal work.
- To manufacture engineering products or prototypes

Programme Specific Outcomes (PSOs)

- 1. Apply the fundamental knowledge acquired in the area of design, thermal engineering and manufacturing to identify, formulate and solve mechanical engineering problems confronted by the industry and society.
- 2. Develop products and processes by carrying out research and development considering the economic constraints, sustainability, environment, safety, and cultural perceptions.



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MAPPING OF COs with POs	Aligned Programme Outcomes (PO)					
Course Outcomes	i i i	Course Outcomes (COs)			Os)	
			COT	CO2	CO3	CO
		PO1	3	2	2	-
		PO2	1	2	2	-
1. To impart knowledge on selection of suitable		PO3	-	3	3	3
1. To impart knowledge on selection of suitable manufacturing process for the typical	Z	P()4	1	2	2	
component.	(POS)	PO5	-	3	3	-
2. To learn the various methods and types of	Outcomes	PO6	=	.3	3	-
welding, welding processes, sheet metal.	utco	PO7	-	*	-	· ·
 To enable students to solve practical work related to Carpentry and Fitting. 	ne O	PO8	13	ы	-	=
4. Produce simple engineering products or	Programme	PO9	-	150	-	-
prototypes.	Ex -	PO10	-	3	3	-
	24	PO11	-	-	14	-
		PO12	2	2	2	+
		PSO1	.3	1	1	-
		PSO2	-	3	3	3

COURSE PLAN - PART II

COURSE OVERVIEW

- Knowledge of contextual factors impacting the engineering discipline.
- Application of systematic engineering synthesis and design for manuacturing processes.

	OURSE TEACHING AND LEARNING ACTIVITIES		(Add more rows)
S.No.	Week/Contact Hours	Topic	Mode of Delivery (Online)
1	Week 1	Introduction	PPT, chalk board
2	Week 2	Welding	Practical
3	Week 3	Welding	Practical
4	Week 4	Foundry	Practical
5	Week 5	Foundry	Practical
6	Week 6	Carpentry	Practical
7	Week 7	Carpentry	Practical
8	Week 8	Fitting	Practical
9	Week 9	Fitting	Practical
		Quiz Test	
10	Week 10	Sheet Metal	Practical
10	Week 11	Sheet Metal	Practical
12	Week 12	Viva-voce	Practical



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COURSE AS	SSESSMENT METHODS (shall range from 4	1 to 6)
S.No.	Mode of Assessment	% Weightage
5.190.	Continuous Assignment*	70
2	End Examinations*	30

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. End semester feedback on course outcomes

COURSE POLICY (including compensation assessment to be specified)

MODE OF CORRESPONDENCE

Students can contact through email or MS Teams 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.

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

Dr. Pintu kumar

Course Faculty

CC- Chairperson

HOD



NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI DEPARTMENT OF MECHANICAL ENGINEERING

MODE OF CORRESPONDENCE

Email: desu@nitt.edu, Room: 123, OJAS building NITT

COMPENSATION ASSESSMENT POLICY

- Attending all the assessments are mandatory for every student. Flexibility is given to the students to fix the date for each mode of evaluation convenient to majority of the students.
- If any student fails to attend the Mid exam due to genuine reason like medical emergency,
 the student may be permitted to appear the compensation assessment (CPA) on
 submission of appropriate documents as proof. (Not valid for students having attendance
 lag).
- Students not having 75 % minimum attendance at the end of the semester and also didn't attend the Mid exam will be awarded 'V' Grade and have to REDO the course.
- In any case, compensation assessment (CPA) is not considered as an improvement test.
- The minimum marks for passing this course and grading pattern will adhere to the regulations of the institute.

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.

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ADDITIONAL INFORMATION, IF ANY

The faculty is available for consultation at times as per the intimation given by the faculty. Queries (if required) to the course teacher shall only be emailed to the email id specified by the teacher (desu@nitt.edu)

FOR APPROVAL

Course Faculty

CC- Chairperson

HOD