

**DEPARTMENT OF PRODUCTION ENGINEERING  
NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI**

**COURSE OUTLINE**

Course Title	<b>MANUFACTURING PROCESSES LAB- I</b>					
Course Code	<b>PRLR10</b>	No. of Credits	03			
Department	Production Engineering	Faculty	Dr. V. Anandakrishnan Dr-Ing. M.Duraiselvam			
Pre-requisites Course Code	PRIR15, PRIR11					
Course Coordinator(s) (if, applicable)						
Email Id	<a href="mailto:krishna@nitt.edu">krishna@nitt.edu</a> <a href="mailto:durai@nitt.edu">durai@nitt.edu</a>	Contact No.	9842167599 9994373786			
Course Type	Essential Programme Laboratory Requirements	<input checked="" type="checkbox"/>	Program Elective	<input type="checkbox"/>	Open Elective	Minor

**Course overview**

This course will provide knowlegde about fundamental of lathe and its functions. It explores the operations that can be performed in the lathe.

**COURSE OBJECTIVES**

1. To perform all lathe operations to produce a component of their need

**COURSE OUTCOMES (CO)**

**Course Outcomes**

1. Summarize the machine tool construction.
2. Create work pieces by turning, boring using lathe and drilling machine.
3. Utilize different machine tool attachments

**COURSE TEACHING AND LEARNING ACTIVITIES**

S.No.	Week	Topic	Mode of Delivery
1	Week 1	Step turning	Practical experiments
2	Week 2	Taper turning and parting off	Practical experiments
3	Week 3	Knurling	Practical experiments
4	Week 4	Thread cutting	Practical experiments
5	Week 5	Boring	Practical experiments
6	Week 6	Eccentric turning	Practical experiments
7	Week 7	Copy turning	Practical experiments
8		End Semester Practical Examination	

COURSE ASSESSMENT METHODS		
S.No.	Mode of Assessment	% Weightage
1.	Internal assessment	On completion of each experiment the dimensions, accuracy and surface finish of the jobs were analyzed and marks will be awarded out of 10. 50 %
2.	Final Examination	Practical examination will be conducted with viva voce and the dimensions, accuracy and surface finish of the jobs were analyzed and will be awarded 50 %
Total		100 marks
<b>ESSENTIAL READINGS : Textbooks, reference books Website addresses, journals, etc</b>		
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**COURSE EXIT SURVEY (mention the ways in which the feedback about the course is assessed and indicate the attainment also)**

1. Class committee meetings
2. Feedback through MIS

**COURSE POLICY (including plagiarism, academic honesty, attendance, etc.)**

**Attendance:**

1. Attendance will be taken by the faculty in all the contact hours and the students are expected to attend all the hours.
2. Minimum 75% of attendance need to be maintained in the contact hours.
3. Any student, who fails to maintain 75% will not be permitted to attend the final examination.

**Assessment:**

1. Attending all the practical classes are MANDATORY for every student.
2. Relative grading will be adopted for the course.

**Academic Honesty & Plagiarism:**

1. All the students are expected to be genuine during the course work. Taking of information by means of copying simulations, assignments, looking or attempting to look at another student's paper or bringing and using study material in any form (paper, mobile phone etc.,) for copying during any assessments is considered dishonest.
2. Tendering of information such as giving one's program, simulation work, assignments to another student to use or copy is also considered dishonest.
3. Preventing or hampering other students from pursuing their academic activities is also considered as academic dishonesty.

4. Any evidence of such academic dishonesty will result in the loss of marks on that assessment. Additionally, the names of those students so penalized will be reported to the class committee chairperson and HoD of the concerned department.

**ADDITIONAL COURSE INFORMATION**

Contact the Course Teacher :

Dr.V.Anandakrishnan

Room No.: MTB304 / 2<sup>nd</sup> Floor / Manufacturing Technology Building

Timings: Office Hours

Email ID: [krishna@nitt.edu](mailto:krishna@nitt.edu)

Telephone No.: 0431-250-3521

Dr-Ing M.Duraiselvam

Room No.: MTB113 / Ground Floor / Manufacturing Technology Building

Timings: Office Hours

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Telephone No.: 0431-250-3509

**FOR SENATE'S CONSIDERATION**

  
4/7/18  
Course Faculty \_\_\_\_\_

CC-Chairperson \_\_\_\_\_

  
HOD \_\_\_\_\_