

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

| COURSE PLAN- PART I   |  |                          |              |
|---|--|--------------------------|--------------|
| Course Title  | MANUFACTURING PROCESSES LAB- II  |                          |              |
| Course Code   | PRLR12   | No. of Credits           | 03           |
| Course Code of Pre-requisite subject(s)   | PRPC12   |                          |              |
| Session   | Jan. 2018  | Section (if, applicable) | A            |
| Name of Faculty   | Dr. V. Anandkrishnan   | Department               | Production   |
| Email   | krishna@nitt.edu   | Telephone No.            | 0431-2503521 |
| Name of Course Coordinator(s) (if, applicable)  | -  |                          |              |
| E-mail  |  | Telephone No.            |              |
| Course Type   | <input checked="" type="checkbox"/> Core course <input type="checkbox"/> Elective course |                          |              |
| <b>Syllabus (approved in BoS)</b>   |  |                          |              |
| <b>COURSE OBJECTIVES</b>  |  |                          |              |
| <ul style="list-style-type: none"> <li>➤ To perform various operations on special machines like milling machine, drilling machine, grinding machine and slotting machine</li> </ul> |  |                          |              |
| <b>COURSE OUTCOMES (CO)</b>   |  |                          |              |
| Course Outcomes   | Aligned Programme Outcomes (PO)  |                          |              |
| 1. Hands on Experience on lathe machine, Milling machine, drilling machine  | 1, 3   |                          |              |
| 2. Hands on experience on casting methods.  | 1  |                          |              |
| 3. Hands on experience on welding   | 1,5  |                          |              |

| COURSE PLAN - PART II  |  |
|--|--|
| <b>COURSE OVERVIEW</b>   |  |
| <p>This course will provide knowlegde about fundamental of special machines and its functions. It explores the operations that can be performed in special machines.</p> |  |

| <b>COURSE TEACHING AND LEARNING ACTIVITIES</b>   |                           |  |                         |
|--|---------------------------|--|-------------------------|
| <b>S.No.</b>   | <b>Week/Contact Hours</b> | <b>Topic</b>   | <b>Mode of Delivery</b> |
| 1  | Week 1                    | Shaping rectangular block or cube  | Practical               |
| 2  | Week 2                    | Slot cutting/ Step-cutting/ V-lock   |                         |
| 3  | Week 3                    | Milling rectangular block or cube  |                         |
| 4  | Week 4                    | T -Slot milling  |                         |
| 5  | Week 5                    | Spur gear cutting  |                         |
| 6  | Week 6                    | Surface grinding   |                         |
| 7  | Week 7                    | Single point tool grinding   |                         |
| 8  | Week 8                    | Spur and Helical gear generation on hobbing machine  |                         |
| 9  | Week 9                    | Complex shaped component production using EDM  |                         |
| 10   | Week 10                   | Drilling   |                         |
| <b>COURSE ASSESSMENT METHODS (shall range from 4 to 6)</b>   |                           |  |                         |
| <b>S.No.</b>   | <b>Mode of Assessment</b> | <b>Duration</b>  | <b>% Weightage</b>      |
| 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.          | 75 %                    |
| 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 | 25 %                    |
| <b>COURSE EXIT SURVEY (mention the ways in which the feedback about the course shall be assessed)</b>  |                           |  |                         |
| 1. Class committee meetings<br>2. Feedback through MIS   |                           |  |                         |
| <b>COURSE POLICY (preferred mode of correspondence with students, policy on attendance, compensation assessment, academic honesty and plagiarism etc.)</b> |                           |  |                         |
| <b>MODE OF CORRESPONDENCE (email/ phone etc)</b><br>krishna@n,itt.edu<br>0431-2503521  |                           |  |                         |
| <b>ATTENDANCE</b>  |                           |  |                         |
| 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.

### COMPENSATION ASSESSMENT

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

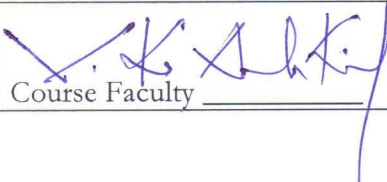
### ACADEMIC HONESTY & PLAGIARISM

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 INFORMATION

Contact the Course Teacher : Dr.V.Anandkrishnan  
Room No.: MTB304 / 2nd Floor / Manufacturing Technology Building  
Timings: Office Hours  
Email ID: krishna@nitt.edu  
Telephone No.: 0431-250-3521

### FOR APPROVAL

  
Course Faculty \_\_\_\_\_

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

HOD  \_\_\_\_\_