

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

COURSE PLAN – PART I

COURSE PLAN – PART I			
Name of the programme and specialization	B. Tech - Production Engineering		
Course Title	PRODUCTION DRAWING AND COST ESTIMATION		
Course Code	PRLR15	No. of Credits	2
Course Code of Pre-requisite subject(s)	Machine Drawing, Design of machine elements		
Session	Jan. 2018	Section (if, applicable)	B
Name of Faculty	D SIMSON	Department	Production Engineering
Email	Simson@nitt.edu	Telephone No.	9080972352
Name of Course Coordinator(s) (if, applicable)			
E-mail		Telephone No.	
Course Type	<input checked="" type="checkbox"/> Core course	<input type="checkbox"/> Elective course	
Syllabus (approved in BoS)			
<ul style="list-style-type: none"> • Review of Current international standards (ISO) and Indian Standards (IS) - Geometric Dimensioning and Tolerancing-Centrality Analysis-Compound Assembly. • Process Sheet -Fundamentals-Contents -Preparation of process sheet for various components. Manufacturing Drawings: Surface texture indication on drawing-welds symbolic representation of drawings. Given a sub-assembly/assembly to prepare manufacturing drawings of components, Sample exercises on CAD-preparation of manufacturing Drawings. • Re-dimensioning and Tolerance Charting: Introduction to re-dimensioning to suit manufacturing requirements-manufacturing datum-functional datum. Introduction to tolerance charting • Cost Estimation: Preparation of Process chart for a given component-estimation of setting time and machining time-estimation of material cost, labour cost and overhead cost based on supplied data-Kaizen costing-Activity Based costing Lifecycle costing. 			
COURSE OBJECTIVES			
<ul style="list-style-type: none"> • To understand the fundamentals of manufacturing drawings • To develop process sheets and production drawing for various assemblies • To perform cost and time estimation 			
COURSE OUTCOMES (CO)			
Course Outcomes	Aligned Programme Outcomes (PO)		
1. Interpretation of contents of production drawing	1,4,6		

2. Development of process sheet and manufacturing drawings	1,3,6
3. Systematic estimation of cost and time	1,4,6

COURSE PLAN – PART II			
COURSE OVERVIEW			
COURSE TEACHING AND LEARNING ACTIVITIES			
S.No.	Week	Topic	Mode of Delivery
1	1	Review of Current international standards (ISO) and Indian Standards (IS)	PPT/PRACTICAL
2	2	Geometric Dimensioning and Tolerancing	PPT/PRACTICAL
3	3	Centrality Analysis and Compound Assembly	PPT/PRACTICAL
4	4	Process Sheet fundamentals	PPT/PRACTICAL
5	5	Preparation of process sheet for various components	PPT/PRACTICAL
6	6	Manufacturing Drawings	PPT/PRACTICAL
7	7	sub-assembly/assembly to prepare manufacturing drawings of components	PPT/PRACTICAL
8	8	Re-dimensioning and Tolerance Charting	PPT/PRACTICAL
9	9	Re-dimensioning to suit manufacturing requirements	PPT/PRACTICAL

10	10	Manufacturing datum and functional datum	PPT/PRACTICAL
11	11	Preparation of Process chart for a given component	PPT/PRACTICAL
12	12	Estimation of setting time and machining time	PPT/PRACTICAL
13	13	Kaizen costing, Activity Based costing and Life cycle costing	PPT/PRACTICAL

COURSE ASSESSMENT METHODS (shall range from 4 to 6)

S.No.	Mode of Assessment	Week/Date	Duration	% Weightage
1	Regular practice	Every week	2 Hr	50
2	Assessment	Week 10	3 Hr	25
CPA	Compensation Assessment*		2 Hr	
4	Final Assessment *	End semester	3 Hr	25

*mandatory; refer to guidelines on page 4

COURSE EXIT SURVEY (mention the ways in which the feedback about the course shall be assessed)

Course exit survey will be collected at the end of the semester before the start of semester examination. Student can give feedback anytime to improve the teaching learning process. Apart from this, students can share feedback during class committee meetings.

COURSE POLICY (preferred mode of correspondence with students, compensation assessment policy to be specified)

MODE OF CORRESPONDENCE (email/ phone etc)

Simson@nitt.edu

COMPENSATION ASSESSMENT POLICY

If any students is not able to attend any of the assessments (regular lab work) due to genuine reason, student is permitted to attend ONE experiment/exercise as compensation assessment at the end of semester.

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.

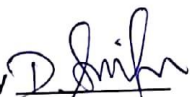
The above policy against academic dishonesty shall be applicable for all the programmes.

ADDITIONAL INFORMATION

Students should refer more books and do more practice for in-depth knowledge about the course.

FOR APPROVAL

Course Faculty



CC-Chairperson



HOD



Guidelines:

- a) The number of assessments for a course shall range from 4 to 6.
- b) Every 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.

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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%

- c) **Attendance policy and the policy on academic dishonesty & plagiarism by students are uniform for all the courses.**
- d) **Absolute grading policy shall be incorporated if the number of students per course is less than 10.**
- e) Necessary care shall be taken to ensure that the course plan is reasonable and is objective.