

Information of every subject	
1	Unit name: -Production Technology
2	Code: ME-31022 & ME-32022
3	Classification: Engineering subject
4	Credit value: 3
5	Semester/ Year Offered: 1/2
6	Pre-requisite: Basic Machines and Equipment in Workshop
7	Mode of delivery: Lecture, Practical, Tutorial, Viva
8	Practical 20%
	Tutorials 5%
	Viva 5%
	Mid-term/ final Examination 35% / 35%
9	Academic staff teaching unit: 7+12
10	<p>Course outcome of unit:</p> <p>In this course, students will be able</p> <p>Semester (I)</p> <ul style="list-style-type: none"> a. Understand the basic production processes and production time b. Understand the principles of foundry and casting c. To apply the basic operations of machining processes <p>Semester (II)</p> <ul style="list-style-type: none"> d. Understand the statistical quality control , costing and estimation e. Well experience in measurement and gauging tolerances f. To write programs and understand for basic operations of NC and CNC machines
11	<p>Synopsis of unit :</p> <p>This unit deals with the characteristics of special interest to properly designed casting and the basic ingredients that combined in sequence for the production of Modern Concept of Production System , Properties and Testing of Materials, Inspection and Quality Control, Costing Introduction to CNC programming.</p>

12	<p>Topic:</p> <p>Semester (I)</p> <ol style="list-style-type: none"> 1. Foundry Processes 2. Hard Mold Casting Processes 3. Machining Processes and Machining Tools 4. Materials and Geometry of Cutting Tools 5. Mechanics of Machining Processes 6. Economics of Machining Processes 7. Metrology <p>Semester (II)</p> <ol style="list-style-type: none"> 8. Introduction and Overview of Manufacturing 9. Dimensions, Surfaces and Their Measurements 10. Metal Forming and Sheet Metal Working 11. Fundamentals of Metal Forming 12. Bulk Deformation Processes In Metal Working 13. Sheet Metal Working 14. Grind and other Abrasive Processes 15. Manufacturing Support System 16. Industrial Safety 17. Inspection and Quality Control 18. Quality Control 19. Numerical Control and Machine tools
14	<p>Main references:</p> <ol style="list-style-type: none"> 1. Production Technology by W. Balton, 1988 2. A Text book of Production Engineering by Dr. Suresh Dalela, 2000 3. Fundamental of Metal Cutting and Machine Tools by B.L. Juneja+2, 2003
15	<p>Additional references:</p> <ol style="list-style-type: none"> 1. Introduction to Basic Manufacturing Processes and Workshop Technology by Rajender Singh 2. Manufacturing Technology by P.N Rao