



**DEPARTMENT OF PRODUCTION ENGINEERING**

<b>COURSE PLAN – PART I</b>			
<b>Name of the programme and specialization</b>	<b>M. Tech INDUSTRIAL ENGINEERING AND MANAGEMENT</b>		
<b>Course Title</b>	<b>PROJECT MANAGEMENT</b>		
<b>Course Code</b>	<b>PR674</b>	<b>No. of Credits</b>	<b>3</b>
<b>Course Code of Pre-requisite subject(s)</b>	<b>Nil</b>		
<b>Session</b>	<b>January 2021</b>	<b>Section (if, applicable)</b>	
<b>Name of Faculty</b>	<b>Dr. S. PrasannaVenkatesan</b>	<b>Department</b>	<b>Production Engg.</b>
<b>Email</b>	<a href="mailto:prasanna@nitt.edu">prasanna@nitt.edu</a>	<b>Telephone No.</b>	<b>2503514</b>
<b>Name of Course Coordinator(s) (if, applicable)</b>	---		
<b>E-mail</b>	--	<b>Telephone No.</b>	---
<b>Course Type</b>	<input type="checkbox"/> <b>Core course</b> <input checked="" type="checkbox"/> <b>Elective course</b>		
<b>Syllabus (approved in BoS)</b>			
<p>Introduction - Project Management: An Overview – Types, Characteristics of Projects – Project life cycle. Identification of investment opportunities - Screening and Selection,</p> <p>Project Appraisal, Market and demand analysis- market survey-demand forecasting methods- Technical analysis – manufacturing process, materials-product mix, plant location-project charts and layouts.</p> <p>Financial analysis – cash flows for project appraisal- Investment evaluation using capital budgeting techniques - net present value, profitability index internal rate of return, payback period, accounting rate of return</p> <p>Mathematical Techniques for project evaluation – Linear programming, goal programming, Network technique for Project Management – CPM, PERT, Multiple projects and constraints, scheduling. Performance metrics for project evaluation.</p> <p>Organization systems for project implementation- Work Breakdown-coordination and control- Project Management Soft wares, Role of AI in project management</p>			
<b>Course objectives</b>			
<ol style="list-style-type: none"> <li><b>To enable the students to understand the methods for project identification and appraisal.</b></li> <li><b>To plan and schedule a project with resource and environmental constraints.</b></li> <li><b>To develop quantitative methods for project selection, risk assessment, monitoring and control.</b></li> </ol>			



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<b>MAPPING OF COs with POs</b>			
<b>Course Outcomes</b>			<b>Programme Outcomes (PO) (Enter Numbers only)</b>
1. Understand the process and approaches for executing projects			<b>3, 5, 6, and 7</b>
2. Develop and analyze quantitative models for project selection and scheduling			
3. Apply engineering and management principles to manage real time projects considering constraints			
<b>COURSE PLAN – PART II</b>			
<b>COURSE OVERVIEW</b>			
Project Management deals with the methods and techniques that helps in effective planning and execution of tasks or a group of tasks from the concept to successful commissioning within a predetermined cost and time.			
<b>COURSE TEACHING AND LEARNING ACTIVITIES</b>			
S.No.	Week/Contact Hours	Topic	Mode of Delivery
1	1	Project Management: An Overview, Types, Characteristics of Projects,	Online in MS Teams using one note and digital pad
	2	Project life cycle, Identification of investment opportunities - Screening and Selection, Project Appraisal,	
	3	Market appraisal, market survey	
	4	Demand forecasting methods	Using Excel solver and OM explorer
	5	Demand forecasting methods, Technical appraisal, Financial appraisal introduction	Online in MS Teams using one note and digital pad
2	<b>Test I</b>		
3	6	Financial analysis- cash flows for project appraisal	Online in MS Teams using one note and digital pad
	7	Investment evaluation using capital budgeting techniques, NPV, IRR	
	8	PBP, PI, ARR,	
	9	Quantitative models for project selection	Online in MS Teams using one note and digital pad, GAMS tutorial
	10	Network techniques for project management, crashing	
4	<b>Test II</b>		
5	11	Project implementation, risk management	PPT



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6	12	Work break down structure		
7	13	Performance measures, softwares		
8	<b>End Semester</b>			
<b>COURSE ASSESSMENT METHODS (shall range from 4 to 6)</b>				
S.No.	Mode of Assessment	Week/Date	Duration	% Weightage
1	Test 1	End of 5 week	1hr	25
2	Test 2	End of 10 week	1hr	25
3	Objective test	End of week 12	30 min	20
4	Final Assessment*	End of week 13	3hr	30
<b>ESSENTIAL READINGS : Textbooks, reference books Website addresses, journals, etc</b>				
<ol style="list-style-type: none"> <li>1. S.Choudry "Project Management", ", Tata McGraw Hill,27th Ed, 2006</li> <li>2. Prasanna Chandra, "Projects – Planning, Analysis, Financing, Implementation and Review", Tata McGraw Hill,4th Ed, 1997</li> <li>3. Mike Field and Laurie Keller, "Project Management", Thompson Business press, 2002</li> <li>4. Gido and Clements, "Successful project management", 2nd edition; Thompson south-western, 2003</li> <li>5. John M Nicholas, "Project Management for business and technology", 2nd edition, Pearson Education Asia, 2001</li> <li>6. <a href="http://nptel.ac.in/courses/110104073/">http://nptel.ac.in/courses/110104073/</a></li> </ol>				
<b>COURSE EXIT SURVEY (mention the ways in which the feedback about the course shall be assessed)</b>				
<p><b>Course Exit survey will be collected at the end of the semester before the start of semester examination through online. Students can log in their MIS account to give the feedback. Mid-semester anonymous feedback shall be collected to improve the teaching-learning process. Apart from this, students can share feedback during class committee meetings.</b></p>				
<b>COURSE POLICY (including compensation assessment to be specified)</b>				
<p>Attending online classes regularly and continuously is required for the students to understand the concepts. The recorded lectures of online teaching are made available for a limited period in MS teams to download.</p> <p>Meaningful engagement with the faculty member and participation in the discussions is encouraged during remote learning.</p>				



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If any student is not able to attend any of the continuous assessments (1 and 2) due to **genuine reason**, the student is permitted to attend a compensation assessment with 20% weightage. A candidate may appear for a compensation assessment only once. Attending the final assessment is a must. Final assessment will be on the entire syllabus.

### **ATTENDANCE POLICY** (A uniform attendance policy as specified below shall be followed)

- Attendance for students will be considered as per institute policy.

### **ACADEMIC DISHONESTY & PLAGIARISM**

- Copying the content directly from the online source and submitting it as a part of assessment/online test.

### **ADDITIONAL INFORMATION, IF ANY**

### **FOR APPROVAL**

Course Faculty  04-02-21 CC- Chairperson  05.02.2021 HOD 