



DEPARTMENT OF PRODUCTION ENGINEERING

COURSE PLAN – PART I			
Name of the programme and specialization	B.Tech., Production Engineering		
Course Title	Total Quality Engineering		
Course Code	PRHO13	No. of Credits	3
Course Code of Pre-requisite subject(s)	Quality, Reliability and Safety Engineering		
Session	July / July 2019	Section (if, applicable)	A & B
Name of Faculty	S. Dinesh	Department	Production Engineering
Official Email	sdinesh@nitt.edu	Telephone No.	+91-99946 96105
Name of Course Coordinator(s) (if, applicable)			
Official E-mail		Telephone No.	
Course Type (please tick appropriately)	<input type="checkbox"/> Core course	<input checked="" type="checkbox"/> Elective course [honors]	
Syllabus (approved in BoS)			
<p>Principles of TQM–Quality Gurus and their contributions–Old and New Quality Control tools–Quality Function Deployment–Failure Modes and Effect Analysis–Vendor relations–vendor qualification process–vendor quality surveys–Vendor quality improvement–vendor quality rating and evaluation-ISO9000 standards–ISO14000 standards–Quality Costing–Quality Audit–Product and Process audit–Six Sigma–Benchmarking-TQM in Service Sector–Application case studies on TQM.</p> <p>Text Books & Reference books</p> <ol style="list-style-type: none"> 1. Dale H.Besterfield, “TotalQualityManagement”,PearsonEducationAsia,(Indianreprint 2002) 2. Rose, J.E. Total Quality Management, Kogan PageLtd. 1993. 3. John Bank, The essenceof total quality management, PHI1993. 4. Greg Bounds, Lyle Yorkset al, Beyond Total Quality Management, McGraw Hill,1994. 			



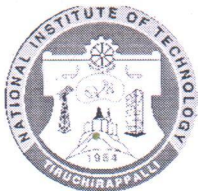
COURSE OBJECTIVES	
<ul style="list-style-type: none"> To study the quality control tools and ISO Standards To understand TQM applications in service sector 	
MAPPING OF COs with POs	
Course Outcomes	Programme Outcomes (PO) (Enter Numbers only)
1. Apply TQM principle for continuous process improvement	1, 2, 7
2. Lead teams for quality production	1, 7, 9
3. Utilization of modern tool like QFD, FMECA to design and manage the business	1, 5

COURSE PLAN – PART II			
COURSE OVERVIEW			
<ul style="list-style-type: none"> TQM concepts, Quality Improvement Quality control, Quality Function Deployment Vendor quality improvement ISO14000 standards. Six Sigma, Application case studies on TQM. 			
COURSE TEACHING AND LEARNING ACTIVITIES			(Add more rows)
S.No.	Week/Contact Hours	Topic	Mode of Delivery
1	Week 4 – 3 hours	Principles of TQM, Quality Gurus and their contributions	Power point presentation, Chalk & practical
2	Week 5 – 4 hours	Quality Control tools, Quality Function Deployment	
3	Week 6 – 4 hours	Failure Modes and Effect Analysis	
4	Week 7 – 4 hours	Vendor relations, vendor qualification process	
5	Week 8 – 4 hours	Vendor quality surveys, Vendor quality improvement	
6	Week 9 – 4 hours	Vendor quality rating and evaluation	



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7	Week 10 – 4 hours	ISO 9000 & ISO 14000 standards		
8	Week 11 – 4 hours	Quality Costing, Quality Audit		
9	Week 12 – 4 hours	Product and Process audit		
10	Week 13 – 4 hours	Six Sigma		
11	Week 14 – 4 hours	Benchmarking, TQM in Service Sector		
12	Week 15 – 4 hours	Application case studies on TQM		
14	3 hours	End Semester Examination		
COURSE ASSESSMENT METHODS (shall range from 4 to 6)				
S.No.	Mode of Assessment	Week/Date	Duration	% Weightage
1	Cycle Test - 1	Week 8	1 hour	20
2	Cycle Test - 2	Week 12	1 hour	20
3	Assignment	Week 14		10
4				
CPA	Compensation Assessment*			
5				
6	Final Assessment *	Week 16	3 hours	50
*mandatory; refer to guidelines on page 4				
COURSE EXIT SURVEY (mention the ways in which the feedback about the course shall be assessed)				
Class committee meetings, periodical interaction with students and the Class Representative, feedback through MIS				
COURSE POLICY (including compensation assessment to be specified)				
As per NITT rules and regulations				



MODE OF CORRESPONDENCE (email/ phone etc)

The Course Coordinator/teacher is available for consultation at times that is displayed on the coordinator's office notice board. Queries may also be emailed to the Course teacher directly at **sdinesh@nitt.edu**

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

- At least 75% attendance in each course is mandatory.
- A maximum of 10% shall be allowed under On Duty (OD) category.
- Students with less than 65% of attendance shall be prevented from writing the final 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, IF ANY

FOR APPROVAL

Course Faculty


CS Dinesh

CC- Chairperson


(Dr. P. Parthiban)

HOD


Dr. P. Sathya



Guidelines

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

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%

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