

NATIONAL INSTITUTE OF TECHNOLOGY CALICUT
Curriculum of B.Tech. Degree programme in
Production Engineering
(from 2004 admissions)

Semester - I								
	Category	Code	Title	L	T	P	D	Cr
1	BS	MA101T	Mathematics I	3	1	0	0	4
2	BS	SH101T	Physics I	3	0	0	0	3
3	ES	ZZ101T	Engineering Mechanics I	2	1	0	0	3
4	TA	ZZ103D	Engineering Graphics I	1	0	0	3	3
5	BS	SH103C	Chemistry	2	0	2	0	3
6	HL	SH106T	Professional Communication	3	0	0	0	3
7	TA	ME103L/ CE101L	Mechanical Engineering Workshop/ Civil Engineering Workshop	0	0	2	0	1
8	OT	OT	Ph. Edn.(1Cr.),Value Education (1Cr.) National Service Scheme (1Cr.).					3*
Total								23

Semester - II								
	Category	Code	Title	L	T	P	D	Cr
1	BS	MA102T	Mathematics II	3	1	0	0	4
2	BS	SH102C	Physics II	2	0	2	0	3
3	ES	ZZ102T	Engineering Mechanics II	2	1	0	0	3
4	TA	ZZ104D	Engineering Graphics II	1	0	0	3	3
5	ES	EE101T	Basic Electrical Engineering	2	1	0	0	3
6	ES	EC101T	Basic Electronics Engineering	2	1	0	0	3
7	ES	CS102T	Introduction to computing	2	1	0	0	3
8	TA	ME103L/ CE101L	Mechanical Engineering Workshop/ Civil Engineering Workshop	0	0	2	0	1
Total								23

Semester - III								
	Category	Code	Title	L	G	P	D	Cr
1	BS	MA201T	Mathematics III	3	1	0	0	3
2	PT	ME210T	Fluid Mechanics and Machinery	3	1	0	0	3
3	PT	ME212T	Elements of Solid Mechanics	3	0	0	0	3
4	PT	PE213T	Metallurgy and Material Science	0	0	0	0	3
5	PT	EE216T	Electrical Measurements and Machines	3	0	0	0	3
6	PT	ME214D	Machine Drawing	0	0	0	3	2
7	PT	PE216L	Production Technology Lab I	0	0	3	0	1
8	PT	ME256L	Fluid Mechanics and Fluid Machinery Laboratory	0	0	3	0	1
Total								19

Semester - IV								
	Category	Code	Title	L	G	P	D	Cr
1	BS	MA202T	Mathematics IV	3	1	0	0	3
2	PT	ME258T	Thermodynamics and Heat transfer	3	1	0	0	3
3	PT	ME252T	Mechanics of Machinery	3	0	0	0	3
4	PT	PE253T	Theory of Elasticity and Plasticity	3	0	0	0	3
5	PT	PE255T	Metrology and Computer Aided Inspection	3	0	0	0	3
6	PT	PE215T	Metal casting and joining	3	0	0	0	3
7	PT	CE294L	Strength of Materials Laboratory	0	0	3	0	1
8	PT	ME294L	Metrology and Instrumentation Laboratory	0	0	3	0	1
Total								20

Semester - V								
	Category	Code	Title	L	G	P	D	Cr
1	HL	ME301T	Principles of Management	3	0	0	0	3
2	OT	ZZ301Z	Environmental Studies	3	0	0	0	3
3	PT	PE 312T	CAD/CAM	3	0	0	0	3
4	PT	PM354T	Thermal Engineering	3	0	0	0	3
5	PT/GE		Elective 1	3	0	0	0	3
6	PT/GE		Elective 2	3	0	0	0	3
7	PT	PE 316L	Production Technology Lab II	0	0	3	0	1
8	PT	ME313L	Thermal Engineering Laboratory	0	0	3	0	1
Total								20

Semester - VI								
	Category	Code	Title	L	G	P	D	Cr
1	PT	ME312T	Dynamics of Machinery	3	0	0	0	3
2	PT	PE352T	Industrial Engineering	3	0	0	0	3
3	PT	ME351T	Operations Research	3	0	0	0	3
4	PT	PE 354T	Machine Tools	3	0	0	0	3
5	PT	ME355T	Design of Machine Elements	3	1	0	0	4
6	PT/GE		Elective	3	0	0	0	3
7	PT	PE361L	CAD CAM Lab	0	0	3	0	1
8	PR	PE398P/	Mini Project /	0	0	3	0	1 \$
		PE399P	Industrial Training	0	0	3		1 \$
Total								21

Semester - VII								
	Category	Code	Title	L	G	P	D	Cr
1	PT	PE401T	Mechatronics	3	0	0	0	3
2	PT	PE402T	Theory of Metal Cutting	3	0	0	0	3
3	PT/GE		Elective	3	0	0	0	3
4	PT/GE		Elective	3	0	0	0	3
5	PT/GE		Elective	3	0	0	0	3
6	PR	PE451S	Seminar	0	0	3	0	1
7	PT	PE441L	Management Science Laboratory	0	0	3	0	1
8	PT	PE416	Metal Cutting Laboratory	0	0	3	0	1
9	PR	PE498P	Project	0	0	3	0	3
Total								21

Semester - VIII								
	Category	Code	Title	L	G	P	D	Cr
1	PT	PE451T	Operations Management	3	1	0	0	3
2	PT	PE452T	Tool Engineering & Design	3	1	0	0	3
3	HL	SH341T	Industrial Economics	3	0	0	0	3
4	PT/GE		Elective 1	3	0	0	0	3
5	PT/GE		Elective 2	3	0	0	0	3
6	PR	PE499P	Project	0	0	6	0	5
Total								20

Electives

ME322T: Unconventional Energy Systems
 ME324T: Introduction to Finite Element Methods
 ME326T: Marketing Concepts
 ME327T: Management Information Systems
 ME328T: Experimental Stress Analysis
 ME371T: Fluid Power Control
 PM375T: Human Factors in Engineering and Design
 ME376T: Technology Management
 ME377T: Theory of Metal Forming
 ME421T: Mechanical Behavior and Testing of Materials
 ME422T: Computational Methods in Fluid Mechanics and Heat transfer
 ME423T: Automobile Engineering
 ME424T: Industrial Tribology
 ME425T: Supply chain Management
 PM426T: Cost Analysis and Control
 ME427T: Aerodynamics
 ME430T: Computer Graphics
 ME432T: Organizational Behavior
 ME433T: Consumer Behavior
 PE434T : Product Design for Manufacturability
 PE435T : Quality Planning And Analysis
 PE436T : Advanced Materials Processing
 ME471T: Powder Metallurgy
 ME472T: Refrigeration and Air Conditioning
 ME474T: Manufacturing Planning and Control
 ME475T: Accounting and Finance for Engineers
 ME478T: Introduction to Robotics
 ME479T: Discrete Events System Simulation
 ME481T: Human Resource Management
 ME482T: Design of Mechanical Systems