

ANNA UNIVERSITY :: CHENNAI – 600 025

**DEGREE OF BACHELOR OF TECHNOLOGY**  
(8 SEMESTER PROGRAMME)

**BRANCH: B.TECH. POLYMER TECHNOLOGY**  
*CURRICULUM*

Code No.	Course Title	L	T	P	M
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**SEMESTER 1**

(Applicable to candidates to be admitted in 2003–2004)

**THEORY**

CM125	Chemistry I	3	0	0	100
GE131	Engineering Mechanics	3	1	0	100
L1	Language Elective I	3	1	0	100
MA131	Mathematics I	3	1	0	100
PH125	Physics I	3	0	0	100

**PRACTICAL**

GE132	Computer Practice I	1	0	3	100
GE133	Workshop Practice	0	0	4	100
CM126	Chemistry Laboratory	0	0	2	100
PH126	Physics Laboratory	0	0	2	100

Code No.	Course Title	L	T	P	M
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**SEMESTER 2**

(Applicable to candidates to be admitted in 2003–2004)

**THEORY**

CH131	Chemistry II	2	1	2	100
EE151	Electrical Engineering	2	0	0	100
EC152	Electronics Engineering	2	0	2	100
L2	Language Elective II	3	1	0	100
MA132	Mathematics II	3	1	0	100
PH134	Physics – II	2	1	2	100

**PRACTICAL**

GE135	Computer Practice II	1	0	3	100
GE134	Engineering Graphics	1	0	3	100

The following curriculum is applicable to all candidates studying 2<sup>nd</sup> and 3<sup>rd</sup> year in the academic year 2003- 2004

### SEMESTER 3

#### THEORY

PM305	Fluid Mechanics	3	1	0	100
PM304	Materials Engineering	3	0	0	100
MA231	Mathematics III	3	1	0	100
PM302	Organic Chemistry and Technology	3	1	0	100
PM301	Physical Chemistry of Polymers	3	0	0	100
PM303	Polymer Chemistry	4	0	0	100

#### PRACTICAL

PM307	Electrical and Electronics Engineering Lab	0	0	3	100
PM306	Organic Chemistry Lab	0	0	3	100

### SEMESTER 4

#### THEORY

PM401	Mathematics IV	3	1	0	100
PM403	Mould Engineering	3	1	0	100
PM405	Polymer Structure and Property Relationship	3	0	0	100
PM406	Principles of Chemical Engineering	3	0	0	100
PM402	Strength of Materials	3	0	0	100
PM404	Thermoplastic s Materials	4	0	0	100

#### PRACTICAL

PM408	Chemical Engineering Lab	0	0	3	100
PM407	Mould Engineering Lab	0	0	3	100

### SEMESTER 5

#### THEORY

PM504	Analysis and Characterization of polymers	3	0	0	100
PM503	Computer Programming	4	0	0	100
MA038	Numerical Methods	3	1	0	100
PM505	Polymer Product Design	3	1	0	100
PM501	Processing Technology I	3	0	0	100
PM502	Thermosets and Polymer additives	3	0	0	100

#### PRACTICAL

PM506	Computer Programming Lab	0	0	3	100
PM507	Polymer Preparation and Characterization Lab	0	0	3	100

### SEMESTER 6

#### THEORY

PM605	Mould and Die Design	3	1	0	100
PM602	Polymer Rheology	4	0	0	100
PM606	Polymer Testing Methods	3	0	0	100
PM601	Process Control and Instrumentation	3	0	0	100
PM603	Processing Technology II	3	0	0	100
PM604	Rubber Engineering	4	0	0	100

**PRACTICAL**

PM607	Polymer Testing Lab I	0	0	3	100
PM608	Processing Technology Lab	0	0	3	100

**SEMESTER 7****THEORY**

PM703	Polymer Blends and Composites	4	0	0	100
PM701	Polymer Reaction Engineering	3	1	0	100
CH431	Process Economics and Industrial Management	3	0	0	100
PM702	Product Design using CAD	3	1	0	100
CE071	Principle of Environmental Science and Engineering	3	0	0	100
GE035	Professional Ethics	3	0	0	100

**PRACTICAL**

PM705	Design and Analysis Practice using CAD, CAE	0	0	3	100
PM704	Polymer Testing Lab II	0	0	3	100

**SEMESTER 8****THEORY**

GE406	Total Quality Management	3	0	0	100
E1***	Elective I	3	0	0	100

**PRACTICAL**

PM801	Project Work	0	0	12	200
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**LIST OF ELECTIVES**

PM001	Polymer Recycling	3	0	0	100
PM002	Plastics Packaging Technology	3	0	0	100
PM003	Nylon Technology	3	0	0	100
PM004	Fibre Technology	3	0	0	100
PM005	Tyre Technology	3	0	0	100
PM006	Bio Degradable Polymers	3	0	0	100
PM007	Paints and Surface Coatings	3	0	0	100
PM008	Specialty Polymers	3	0	0	100
PM009	Non Destructive Testing	3	0	0	100
PM010	Thermoplastic Polyesters	3	0	0	100
PM011	Specialty Elastomers	3	0	0	100
PM012	Bio Medical Polymers	3	0	0	100
PM013	Rubber Product Manufacturing Technology	3	0	0	100
PM014	Polyurethane Technology	3	0	0	100
PM015	Polymer Post Processing Operations	3	0	0	100
PM016	Total Quality Management and Reliability Engg.	3	0	0	100
PM017	Information Technology	3	0	0	100
PM018	Polymer Degradation and Stabilization	3	0	0	100
PM019	Adhesives and surface coating	3	0	0	100

PM020	Fibre Reinforced Plastics	3	0	0	100
PM021	Engineering Economics and Industrial Management	3	0	0	100
PM022	Conducting Polymers	3	0	0	100
HS053	Communication Skills for Engineers	2	0	2	100
GE037	Intellectual Property Right (IPR)	3	0	0	100
GE038	Indian Constitution and Society	3	0	0	100