

ANNA UNIVERSITY :: CHENNAI – 600 025

DEGREE OF BACHELOR OF ENGINEERING
(8 SEMESTER PROGRAMME)

BRANCH: B.E. MECHATRONICS ENGINEERING
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

CM132	Chemistry II	3	0	0	100
EE151	Electrical Engineering	2	0	0	100
EC153	Electronics Devices and Circuits	3	0	0	100
PH138	Physics II	3	0	0	100
L2	Language Elective II	3	1	0	100
MA132	Mathematics II	3	1	0	100
CE251	Strength of Materials	3	0	0	100

PRACTICAL

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

1. The Syllabi for other courses of I and II semester may be followed as communicated earlier.
2. The Revised Syllabi for MA131, MA132 should be followed.

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

Code No.	Course Title	L	T	P	M
SEMESTER 3					
THEORY					
EC154	Digital Electronics	3	0	0	100
EE252	Electrical Machines and Drives	2	0	2	100
CE253	Fluid Mechanics and Machinery	3	1	0	100
ME232	Kinematics of Machines	3	1	0	100
MA231	Mathematics III	3	1	0	100
PRACTICAL					
ME238	Computer Graphics and Drafting	1	0	3	100
EC258	Electronics Laboratory	0	0	3	100
CE254	Fluid Mechanics and Machinery Lab	0	0	3	100
SEMESTER 4					
THEORY					
EE235	Control Systems	3	1	0	100
ME236	Dynamics of Machines	3	1	0	100
MF131	Machine Tools and Processes	3	0	0	100
EE238	Microprocessors and Interfacing	3	0	0	100
MA038	Numerical Methods	3	1	0	100
EE332	Power Electronics	3	1	0	100
PRACTICAL					
ME434	Microprocessor Lab	0	0	4	100
EE342	Power Electronics Laboratory	0	0	3	100
SEMESTER 5					
THEORY					
MF332	CNC Technology	3	0	0	100
ME335	Computer Aided Design	2	0	2	100
MF331	Engineering Metrology	2	0	2	100
EC340	Modeling and Simulation	3	0	0	100
ME330	Robotics and Vision System	3	0	0	100
EC339	Sensor and Signal Processing	3	0	0	100
PRACTICAL					
MF335	CNC Machine Tools Lab	0	0	4	100
EC344	Sensor and Signal Processing Lab	0	0	3	100
SEMESTER 6					
THEORY					
IF254	Database Management System	3	0	2	100
ME345	Design of Mechatronics System	3	0	0	100
EE337	Digital Signal Processing	3	0	0	100
ME341	Hydraulic and Pneumatic Controls	3	0	0	100

EC348	Microcontroller and Applications	3	0	0	100
EC349	Programmable Logic Control	3	0	0	100

PRACTICAL

EC352	Digital Micro Controller and PLC Lab	0	0	4	100
ME346	Hydraulic and Pneumatic Control Lab	0	0	3	100

SEMESTER 7

THEORY

EC430	Automotive Electronics	3	0	0	100
E1***	Elective I	3	0	0	100
ME435	Engineering Management	3	0	0	100
CE071	Principles of Environmental Science and Engineering	3	0	0	100
MF042	Product Design and Development	3	0	0	100
GE035	Professional Ethics	3	0	0	100

PRACTICAL

EC439	Comprehension	0	0	3	100
MF434	Design and Fabrication Project	0	0	8	100

SEMESTER 8

THEORY

EE049	Computer Networks	3	0	0	100
E2***	Elective II	3	0	0	100
EC041	Medical Electronics	3	0	0	100
GE406	Total Quality Management	3	0	0	100

PRACTICAL

ME444	Project Work	0	0	12	200
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ELECTIVES FOR B.E. MECHATRONICS ENGINEERING

ELECTIVES FOR VII SEMESTER

Code No.	Course Title	L	T	P	M
CS035	Design of Algorithms	3	0	0	100
EC053	Internet and Java	3	0	0	100
ME046	Finite Element Techniques	3	0	0	100
ME048	Mechanical Vibrations	3	0	0	100
ME050	Design for Manufacture	3	0	0	100
ME052	Composite Materials Technology	3	0	0	100
ME436	Operations Research	3	1	0	100
MF038	Artificial Intelligence	3	0	0	100
MF039	Rapid Prototyping	3	0	0	100
MH002	Statistical Quality Control	3	0	0	100
CS064	Embedded System and Design	3	0	0	100
EC064	Linear IC's and Application	3	0	0	100
EC066	Electronics Manufacturing Technology	3	0	0	100
HS053	Communication Skills for Engineers	2	0	2	100

ELECTIVES FOR VIII SEMESTER

Code No.	Course Title	L	T	P	M
EC046	Very Large Scale Integrated Circuit Design	3	0	0	100
EC056	Digital Image Processing	3	0	0	100
EC063	Neural Networks	3	0	0	100
EE044	Intelligent Controllers	3	0	0	100
EE045	Bio-Medical Instrumentation	3	0	0	100
ME049	Industrial Tribology	3	0	0	100
ME056	Entrepreneurship Development	3	0	0	100
ME058	Marketing Management	3	0	0	100
GE037	Intellectual Property Rights (IPR)	3	0	0	100
GE038	Indian Constitution and Society	3	0	0	100
MH001	Real Time Operating System	3	0	0	100
EC062	Medical Informatics	3	0	0	100

LANGUAGE ELECTIVES

Code No.	Course Title	L	T	P	M
HS035	Technical German I	3	1	0	100
HS036	Technical German II	3	1	0	100
HS037	Technical Japanese I	3	1	0	100
HS038	Technical Japanese II	3	1	0	100
HS039	Technical French I	3	1	0	100
HS040	Technical French II	3	1	0	100
HS041	English I	3	1	0	100
HS042	English II	3	1	0	100