

ANNA UNIVERSITY :: CHENNAI – 600 025

DEGREE OF BACHELOR OF ENGINEERING
(8 SEMESTER PROGRAMME)

BRANCH: B.E. INSTRUMENTATION AND CONTROL ENGINEERING
CURRICULUM

SEMESTER – I

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

Sl. No.	Code No.	Course Title	L	T	P	M
THEORY						
1.	MA131	Mathematics I	3	1	0	100
2.	PH125	Physics I	3	0	0	100
3.	CM125	Chemistry I	3	0	0	100
4.	GE131	Engineering Mechanics	3	1	0	100
5.	L1	Language Elective I	3	1	0	100
PRACTICAL						
1.	PH126	Physics Laboratory	0	0	2	100
2.	CM126	Chemistry Laboratory	0	0	2	100
3.	GE132	Computer Practice I	1	0	3	100
4.	GE133	Workshop Practice	0	0	4	100

SEMESTER – II

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

THEORY						
1.	MA132	Mathematics II	3	1	0	100
2.	PH137	Material Science	3	0	2	100
3.	EI131	Electric Circuit Analysis	3	1	0	100
4.	EI132	Electron Devices	3	0	0	100
5.	ME152	Mechanical Engineering	3	0	0	100
6.	CM132	Chemistry II	3	0	0	100
7.	L2	Language Elective II	3	1	0	100
PRACTICAL						
1.	GE135	Computer Practice II	1	0	3	100
2.	GE134	Engineering Graphics	1	0	3	100
3.	EI141	Circuits and Devices Laboratory	0	0	3	100

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

THEORY

1.	MA231	Mathematics III	3	1	0	100
2.	ME255	Thermodynamics and Fluid Mechanics	4	0	0	100
3.	EI234	Electronic Circuits	3	0	0	100
4.	EE256	Electrical Machines	3	0	0	100
5.	EI233	Digital Logic Theory and Design	3	0	0	100
6.	CS252	Algorithms and Data Structures	3	0	0	100

PRACTICAL

1.	EE257	Electrical Machines Laboratory	0	0	3	100
2.	ME254	Thermodynamics and Fluid Mechanics Laboratory	0	0	3	100
3.	CS253	Data Structure Laboratory	0	0	4	100

SEMESTER IV**THEORY**

1.	MA 038	Numerical Methods	3	1	0	100
2.	EI 237	Electrical Measurements and Instruments	3	0	0	100
3.	EI 235	Transducer Engineering	3	1	0	100
4.	IL 231	Control Systems	3	0	0	100
5.	EI 236	Industrial Chemical Process	3	0	0	100
6.	EC 256	Communication Engineering	3	0	0	100

PRACTICAL

1.	EI 243	Transducer Laboratory	0	0	3	100
2.	IL 241	Control System Laboratory	0	0	3	100

SEMESTER V**THEORY**

1.	EI 332	Linear and Digital Integrated Circuits	3	0	0	100
2.	EI 331	Microprocessors and Micro controllers	3	0	0	100
3.	EI 335	Digital Signal Processing	3	0	0	100
4.	IL 331	Network Analysis and Synthesis	3	0	0	100
5.	IL 332	Control System Components	3	0	0	100
6.	EI 334	Industrial Instrumentation-I	3	0	0	100

PRACTICAL

1.	EI 341	Microprocessor Laboratory	0	0	3	100
2.	EI 342	Electrical and Electronic Measurements Laboratory	0	0	3	100
3.	EI 344	Integrated Circuit Laboratory	0	0	3	100

SEMESTER VI**THEORY**

1.	IL 333	Modern Control Systems	3	0	0	100
2.	EI 338	Analytical Instruments	3	0	0	100

LIST OF ELECTIVE COURSES

ELECTIVE – I – VI SEMESTER

Sl. No.	Code No.	Course Title	L	T	P	M
1.	IL 002	Intelligent Controllers	3	0	0	100
2.	IL 003	Industrial Drives and Control	3	0	0	100
3.	EI 002	Neural and Fuzzy Logic Control	3	0	0	100
4.	EI 001	Artificial Intelligence and Expert Systems	3	0	0	100
5.	EI 011	Computer Architectures	3	0	0	100
6.	EI 007	Power Plant Instrumentation	3	0	0	100
7.	EI 010	Instrumentation in Petrochemical Industry	3	0	0	100

ELECTIVE – II – VIII SEMESTER

Sl. No.	Code No.	Course Title	L	T	P	M
1.	IL 004	Adaptive Control	3	0	0	100
2.	EI 005	Robotics and Automation	3	0	0	100
3.	EI 013	Real Time and Embedded Systems	3	0	0	100
4.	EI 014	Micro controller based system Design	3	0	0	100
5.	EI 004	Bio-Medical Instrumentation	3	0	0	100
6.	EI 015	Fibre Optics and Laser Instruments	3	0	0	100
7.	EI 006	Data Base Management Systems	3	0	0	100
8.	EI 012	Parallel and Distributed Processing	3	0	0	100

GENERAL ELECTIVES

Sl. No.	Code No.	Course Title	L	T	P	M
1.	GE037	Intellectual Property Rights (IPR)	3	0	0	100
2.	GE038	Indian Constitution and Society	3	0	0	100
3.	HS053	Communication Skills for Engineers	2	0	2	100

LANGUAGE ELECTIVES

1.	HS 034	Technical Tamil	2	0	2	100
2.	HS 035	Technical German – I	3	1	0	100
3.	HS 036	Technical German - II	3	1	0	100
4.	HS 037	Technical Japanese – I	3	1	0	100
5.	HS 038	Technical Japanese – II	3	1	0	100
6.	HS 039	Technical French – I	3	1	0	100
7.	HS 040	Technical French – II	3	1	0	100
8.	HS 041	English – I	3	1	0	100
9.	HS 042	English – II	3	1	0	100