

**COURSE STRUCTURE FOR B. TECH IN
ELECTRONICS & CONTROL SYSTEM ENGINEERING
(SECOND YEAR TO FOURTH YEAR)**

SEMESTER-III

Theory							
Sl. No	Subject Code	Course Title	L	T	P	Total	Credit
1.	MA2001	Mathematics-III	3	1	0	4	4
2.	EC2003	Signals & Systems	3	0	0	3	3
3.	EC2013	Analog Electronics	3	1	0	4	4
4.	EE2007	Network Theory	3	0	0	3	3
5.	EC2005	Semiconductor Devices	3	0	0	3	3
6.	EI2005	Electrical & Electronic Measurements	3	1	0	4	4
Total of Theory						21	21
Practical							
1.	EC2091	Electronic Circuits & Networks Lab	0	0	3	3	2
2.	EI2095	Electrical & Electronic Measurements Lab	0	0	3	3	2
Sessional							
1.	HS2081	Business Communication	0	0	3	3	2
Total of Practical & Sessional						9	6
Semester Total						30	27

SEMESTER-IV

Theory							
Sl. No	Subject Code	Course Title	L	T	P	Total	Credit
1.	MA2002	Mathematics-IV	3	1	0	4	4
2.	EI2006	Instrumentation-I	3	1	0	4	4
3.	EC2011	Digital Electronics	3	0	0	3	3
4.	CS2001	Data Structures & Algorithm	3	1	0	4	4
5.	EE2008	Electrical Machines	3	1	0	4	4
6.	ME2018	Thermodynamics & Fluid Mechanics	3	1	0	4	4
Total of Theory						23	23
Practical							
1.	EC2096	Digital & Linear IC Lab	0	0	3	3	2
2.	CS2091	Data Structures Lab	0	0	3	3	2
3.	EE2096	Electrical Machine Lab	0	0	3	3	2
Sessional							
Total of Practical & Sessional						9	6
Semester Total						32	29

SEMESTER-V

Theory							
Sl. No	Subject Code	Course Title	L	T	P	Total	Credit
1.	EC3007	Digital Signal Processing	3	1	0	4	4
2.	EC3011	VLSI Design	3	0	0	3	3
3.	E13005	Instrumentation-II	3	1	0	4	4
4.	EC2016	Communication Engineering	3	1	0	4	4
5.	EL3001	Control Systems	3	1	0	4	4
6.		Inst. Elective-I	3	0	0	3	3
Total of Theory						22	22
Practical							
1.	EC3096	DSP Lab	0	0	3	3	2
2.	EI3091	Instrumentation Lab	0	0	3	3	2
3.	EL3091	Control Systems Lab	0	0	3	3	2
Sessional							
1.	TP-3081	Cognitive Aptitude test-I	0	0	2	2	1
Total of Practical & Sessional						11	7
Semester Total						33	29

SEMESTER-VI

Theory							
Sl. No	Subject Code	Course Title	L	T	P	Total	Credit
1.	EC3003	Microprocessors & Microcontrollers	3	1	0	4	4
2.	EL3022	Advanced Control Systems	3	0	0	3	3
3.	EL3024	Industrial Automation and Control	3	0	0	3	3
4.		Dept. Elective-I	3	0	0	3	3
5.		Dept. Elective-II	3	0	0	3	3
6.		Open. Elective-I	3	0	0	3	3
Total of Theory						19	19
Practical							
1.	EL3092	Advanced Control System Lab	0	0	3	3	2
2.	EC3093	Microprocessor & Microcontroller Lab	0	0	3	3	2
Sessional							
1.	EN3082	Minor Project	0	0	3	3	2
2.	TP3082	Cognitive Aptitude Test-II	0	0	2	2	1
Total of Practical & Sessional						11	7
Semester Total						30	26

SEMESTER-VII

Theory							
Sl. No	Subject Code	Course Title	L	T	P	Total	Credit
1.		Dept. Elective-III	3	0	0	3	3
2.		Dept. Elective-IV	3	0	0	3	3
3.		Open. Elective-II	3	0	0	3	3
4.		Inst. Elective-II	3	0	0	3	3
Total of Theory						12	12
Practical							
1.	EN4091	Industrial Automation and control Lab	0	0	3	3	2
Sessional							
1.	EN4083	Practical Training	0	0	0	0	2
2.	EN4081	Project(Part-I)	0	0	3	3	2
Total of Practical & Sessional						6	6
Semester Total						18	18

SEMESTER-VIII

Theory							
Sl. No	Subject Code	Course Title	L	T	P	Total	Credit
1.		Dept. Elective –V	3	0	0	3	3
2.		Open Elective-III	3	0	0	3	3
Total of Theory							
						6	6
Sessional							
1.	EN4084	Seminar	0	0	3	3	2
2.	EN4086	General Viva Voice	0	0	0	0	2
3.	EN4082	Project(Part-II)	0	0	9	9	6
Total of Sessional						12	10
Semester Total						18	16

LIST OF INSTITUTE ELECTIVES

Institute Elective-I

SI. No	Subject Code	Subject Name	Credit
1.	HS2002	Engineering Economics	3
2.	HS2006	International Economics	3
3.	HS2004	Public Finance	3

Institute Elective-II

1.	HS3006	Entrepreneurship	3
2.	HS3008	Management Concepts & Practices	3
3.	HS3002	Organizational Behaviour	3
4.	HS3004	Human Resource Management	3

LIST OF DEPARTMENT ELECTIVES

Dept. Elective-I

1.	EE3028	Power Electronic Circuits	3
2.	EC3024	Embedded Systems	3
3.	EI3021	Material Science	3
4.	EI3022	Bio-medical Instrumentation	3

Dept. Elective-II

1.	EC3034	Industrial Data Networks	3
2..	EI3024	Virtual Instrumentation	3
3.	EE3006	Electric Drives and Control	3
4.	EC6224	Low Power VLSI Design	3

Dept. Elective-III & IV

1.	EI3023	Neural Network & Fuzzy Logic Control	3
2.	EI4023	Process dynamics and Control	3
3.	EI3026	Fiber Optic Instrumentation	3
4.	EC3032	Telemetry and Remote Control	3

Dept. Elective-V

1.	EI4028	Power Plant Instrumentation	3
2.	EC6108	Digital Image Processing	3
3.	EC6313	Optimization Techniques in Engineering	3
4.	EI4033	Nonlinear Control theory	3