

ELECTRONICS AND INSTRUMENTATION ENGINEERING

SYLLABUS (2006 ADMISSION ONWARDS)

SCHEME FOR I TO VIII SEMESTERS

B.TECH ELECTRONICS & INSTRUMENTATION ENGINEERING

NB: For all practicals from semester I&II to semester VIII, 50% weightage is to be given for continuous evaluation and 50% for end semester examination.

Semester I&II (Common to all branches)

Course Code	Subject Name	Hrs /Week		Marks		
		L	T/D/P	Internal	University	Total
CE/CS/EB/EC/EE/E I/IT/ME/SE/FT 101	Engineering Mathematics I	3		50	100	150
CE/CS/EB/EC/EE/E I/IT/ME/SE/FT 102	Engineering Physics	2		50	100	150
CE/CS/EB/EC/EE/E I/IT/ME/SE/FT 103	Engineering Chemistry	2		50	100	150
CE/CS/EB/EC/EE/E I/IT/ME/SE/FT 104	Engineering Mechanics	3	1	50	100	150
CE/CS/EB/EC/EE/E I/IT/ME/SE/FT 105	Engineering Graphics	1	3	50	100	150
CE/CS/EB/EC/EE/E I/IT/ME/SE/FT 106	Basic Civil & Mechanical Engineering	2		50	100	150
CE/CS/EB/EC/EE/E I/IT/ME/SE/FT 107	Basic Electrical Engineering & Electronics	2		50	100	150
CE/CS/EB/EC/EE/E I/IT/ME/SE/FT 108	Computer Programming	2		50	100	150
CE/CS/EB/EC/EE/E I/IT/ME/SE/FT 109	Technical Communication & Social Sciences	3*		50	100	150
CE/CS/EB/EC/EE/E I/IT/ME/SE/FT 110	Computer Programming Lab		3	100		100
CE/CS/EB/EC/EE/E I/IT/ME/SE/FT 111	Electrical & Mechanical Workshops		3	100		100
	Total	20	10	650	900	1550

*1hour/week for environmental studies

Semester III

Course Code	Subject Name	Hrs /Week		Marks		
		L	T/D/P	Internal	University	Total
CE/CS/EB/EC/EE/E I/IT/ME/SE/FT 301	Engineering Mathematics II	4		50	100	150
EB/EC/EI/IT/ME 302	Electrical Technology	4		50	100	150
EC/EI 303	Network Theory	4		50	100	150
EB/EC/EI304	Digital Electronics	4		50	100	150
EC/EI 305	Solid State Electronics	4		50	100	150
EC/EI 306	Electronic Circuits I	4		50	100	150
EB/EC/EI 307	Basic Electronics Laboratory	-	3	100		100
EB/EC/EI 308	Electrical Machines Laboratory	-	3	100		100
	Total	24	6	500	600	1100

Semester IV

Course Code	Subject Name	Hrs /Week		Marks		
		L	T/D/P	Internal	University	Total
CE/CS/EB/EC/EE/E I/IT/ME/SE/FT 401	Engineering Mathematics III	4		50	100	150
CS/EB/EC/EI 402	Microprocessors	4		50	100	150
EC/EI 403	Electronic Circuits II	4		50	100	150
EC/EI 404	Signals and Systems	4		50	100	150
EI 405	Principles of Measurement and Instrumentation	4		50	100	150
EB/EC/EE/EI 406	Industrial and Power Electronics	4		50	100	150
CS/EB/EC/EE/EI 407	Digital Electronics Laboratory	-	3	100		100
EI 408	Electronic Circuits Laboratory	-	3	100		100
	Total	24	6	500	600	1100

Semester V

Course Code	Subject Name	Hrs /Week		Marks		
		L	T/D/P	Internal	University	Total
CE/CS/EB/EC/EE/E I/IT/ME/SE/FT 501	Engineering Mathematics IV	4		50	100	150
EI 502	Industrial Instrumentation I	4		50	100	150
EC/EI 503	Digital System Design	4		50	100	150
EC/EI 504	Advanced Microprocessors	4		50	100	150
EC/EI 505	Micro Electronics & Integrated Circuits	4		50	100	150
EC/EI 506	Digital Signal Processing	4		50	100	150
CS/EB/EC/EI 507	Microprocessor Laboratory	-	3	100		100
EI 508	Instrumentation Laboratory I	-	3	100		100
	Total	24	6	500	600	1100

Semester VI

Course Code	Subject Name	Hrs /Week		Marks		
		L	T/D/P	Internal	University	Total
EI 601	Communication Engineering	4		50	100	150
EI 602	Process Control Instrumentation I	4		50	100	150
EC/EI 603	VLSI Design	4		50	100	150
EI 604	Industrial Instrumentation II	4		50	100	150
CS/EB/EC/EI 605	Control Systems Engineering	4		50	100	150
EC/EI 606	Embedded Systems	4		50	100	150
EI 607	Instrumentation Laboratory II	-	3	100		100
EI 608	Mini Project	-	3	100		100
	Total	24	6	500	600	1100

Semester VII

Course Code	Subject Name	Hrs /Week		Marks		
		L	T/D/P	Internal	University	Total
CS/EB/EC/EE/EI/ IT 701	Industrial Organization & Management	4		50	100	150
EI 702	Process Control Instrumentation II	4		50	100	150
EC/EI 703	Computer Commucation.& Networks	4		50	100	150
EI 704	Analytical Instrumentation	4		50	100	150
EI 705	Elective I	4		50	100	150
EC/EI 706	Signal Processing Laboratory	-	3	100		100
EI 707	Process Control Laboratory	-	3	100		100
EI 708	Seminar	-	2	50		50
EI 709	Project Design	-	2	50		50
	Total	20	10	550	500	1050

ELECTIVE I

EC/EI 705A : Intelligent Systems

EI 705B : Telemetry and Remote Control

EI 705C : Power Plant Instrumentation

EB/EC/EI 705D : Mechatronics

EI 705E : Artificial Intelligence and Expert Systems

Semester VIII

Course Code	Subject Name	Hrs /Week		Marks		
		L	T/D/P	Internal	University	Total
EI 801	Instrumentation System Design	4		50	100	150
EI 802	Biomedical Instrumentation	4		50	100	150
EI 803	Optoelectronic Instrumentation	4		50	100	150
EI 804	Elective II	4		50	100	150
EI 805	Project Work		14	300		300
EI 806	Viva -Voce				100	100
Total		16	14	500	500	1000
Grand Total				3700	4300	8000

ELECTIVE II

CS/EC/EE/EI 804A : Digital Image Processing

EI 804B : Advanced Analytical Techniques

EC/EI 804C : ASIC Design

EI 804 D: Audio and Video Systems

EI 804E : Advanced Biomedical Instruments