

**Curriculum for Bachelor of Engineering in Instrumentation & Electronics Engineering
Department of Instrumentation & Electronics Engg**

(Effective from session 2014-18)

FIRST YEAR FIRST SEMESTER						
<i>Code no.</i>	<i>Subject</i>	<i>Pds/week</i>		<i>Credit</i>	<i>Marks</i>	
		<i>L</i>	<i>S</i>		<i>Exam</i>	<i>Sessional</i>
IEBE/PE/T/111	Engineering Mechanics I	4		3	100	
IEBE/Chem/T/112	Chemistry I	3		3	100	
IEBE/Math/T/113	Mathematics I-J	3		3	100	
IEBE/Math/T/114	Mathematics II-J	3		3	100	
IEBE/Hum/T/A	Humanities A	3		3	100	
IEBE/Ph/T/1A	Physics I-A	4		3	100	
IEBE/Ph/S/111	Physics Lab I		3	3		100
IEBE/Chem/S/112	Chemistry Lab I		3	3		100
IEBE/PE/S/113	Engineering Drawing I		3	3		100
IEBE/PE/S/114	Workshop I		3	3		100
	Sub - Total	20	12	30	600	400
	Total	32			1000	
FIRST YEAR SECOND SEMESTER						
<i>Code no.</i>	<i>Subject</i>	<i>Pds/week</i>		<i>Credit</i>	<i>Marks</i>	
		<i>L</i>	<i>S</i>		<i>Exam</i>	<i>Sessional</i>
IEBE/PE/T/121	Engineering Mechanics II	4		3	100	
IEBE/PE/T/122	Applied Thermodynamics	4		3	100	
IEBE/Math/T/123	Maths III-J	3		3	100	
IEBE/Math/T/124	Mathematics IV-J	4		3	100	
IEBE/CSE/T/125	Num. Methods & Comp. Prog	4		3	100	
IEBE/Ph/T/2A	Physics II-A	4		3	100	
IEBE/Ph/S/121	Physics Lab II		3	3		100
IEBE/CSE/S/122	Computer Programming Lab I		3	3		100
IEBE/PE/S/123	Engineering Drawing II		3	3		100
	Sub - Total	23	9	27	600	300
	Total	32			900	

SECOND YEAR FIRST SEMESTER						
<i>Code no.</i>	<i>Subject</i>	<i>Pds/week</i>		<i>Credit</i>	<i>Marks</i>	
		<i>L</i>	<i>S</i>		<i>Exam</i>	<i>Sessional</i>
IEBE/ET/T/211	Electronic Devices	4		3	100	
IEBE/T/212	Circuit Theory	4		3	100	
IEBE/ET/T/213	Material Science	3		3	100	
IEBE/T/214	Fundamentals of Instrumentation	4		3	100	
IEBE/PE/T/215	Electrical Machines I	3		3	100	
IEBE/PE/T/216	Applied Fluid Mechanics	3		3	100	
IEBE/S/211	Electronic and Instrument Workshop		3	3		100
IEBE/PE/S/212	Electrical Engg Lab I		3	3		100
IEBE/PE/S/213	Workshop II		3	3		100
	Sub - Total	21	9	27	600	300
	Total		30			900
SECOND YEAR SECOND SEMESTER						
<i>Code no.</i>	<i>Subject</i>	<i>Pds/week</i>		<i>Credit</i>	<i>Marks</i>	
		<i>L</i>	<i>S</i>		<i>Exam</i>	<i>Sessional</i>
IEBE/T/221	Process Instrumentation I	4		4	100	
IEBE/ET/T/222	Electronic Circuits I	3		3	100	
IEBE/PE/T/223	Electrical Machines II	3		3	100	
IEBE/PE/T/224	Electrical Measurements	3		3	100	
IEBE/T/225	Digital Electronics	3		3	100	
IEBE/T/226	Linear Control Systems	4		3	100	
IEBE/PE/S/221	Electrical Engg. Lab II		3	3		100
IEBE/PE/S/222	Elec. Measurements Laboratory		3	3		100
IEBE/S/223	Digital Electronics Lab		3	3		100
	Sub - Total	20	9	28	600	300
	Total		29			900

THIRD YEAR FIRST SEMESTER						
<i>Code no.</i>	<i>Subject</i>	<i>Pds/week</i>		<i>Credit</i>	<i>Marks</i>	
		<i>L</i>	<i>S</i>		<i>Exam</i>	<i>Sessional</i>
IEBE/T/311	Electronic Circuits II	4		3	100	
IEBE/T/312	Analog Integrated Circuits	4		3	100	
IEBE/T/313	Process Instrumentation II	4		4	100	
IEBE/IT/T/314	Data Structures & OOP	4		4	100	
IEBE/T/315	Microprocessors & microcontrollers– Theory & App	4		4	100	
IEBE/S/311	Electronic Circuits Lab		3	3		100
IEBE/IT/S/312	Comp. Prog Lab II		3	3		100
IEBE/S/313	Control Engineering Lab.		3	3		100
IEBE/S/314	Seminar		3	3		100
	Sub - Total	20	12	30	500	400
	Total		32			900
THIRD YEAR SECOND SEMESTER						
<i>Code no.</i>	<i>Subject</i>	<i>Pds/week</i>		<i>Credit</i>	<i>Marks</i>	
		<i>L</i>	<i>S</i>		<i>Exam</i>	<i>Sessional</i>
IEBE/T/321	Process control I	4		4	100	
IEBE/T/322	Analytical Instrumentation	4		3	100	
IEBE/T/323	Digital Signal Processing	4		4	100	
IEBE/T/324	Sig Proc & Transmission	4		3	100	
IEBE/IT/T/325	Computer Organization and Networking	4		3	100	
IEBE/S/321	Electronic Design Lab.		3	3		100
IEBE/S/322	Process Instru Lab. I		3	3		100
IEBE/S/323	Process Control Laboratory I		3	3		100
IEBE/S/324	Microprocessor & Microcontroller Lab		3	3		100
	Sub - Total	20	12	29	500	400
	Total		32			900

FOURTH YEAR FIRST SEMESTER						
<i>Code no.</i>	<i>Subject</i>	<i>Pds/week</i>		<i>Credit</i>	<i>Marks</i>	
		<i>L</i>	<i>S</i>		<i>Exam</i>	<i>Sessional</i>
IEBE/T/411	Electronic Instrumentation	3		3	100	
IEBE/T/412	Process Control II	4		3	100	
IEBE/T/413	Power Electronics	4		3	100	
IEBE/T/414	Elective I A. POWER PLANT INSTRUMENTATION B. OPERATING SYSTEMS C. AI AND EXPERT SYSTEMS D. SENSOR TECHNOLOGY E. DIGITAL SYSTEM DESIGN USING VHDL F. NON-LINEAR CONTROL THEORY G. ELECTRONIC OLFACTION H. OPTICAL INSTRUMENTS AND OPTO-ELECTRONICS I. ELECTROMAGNETIC THEORY	3		3	100	
IEBE/S/411	Process Instru Lab. II		3	3		100
IEBE/S/412	Signal Processing Lab.		3	3		100
IEBE/S/413	Project		4	4		100
	Sub - Total	14	10	22	400	300
	Total	24			700	
FOURTH YEAR SECOND SEMESTER						
<i>Code no.</i>	<i>Subject</i>	<i>Pds/week</i>		<i>Credit</i>	<i>Marks</i>	
		<i>L</i>	<i>S</i>		<i>Exam</i>	<i>Sessional</i>
IEBE/Prod/T/421	Industrial Management	4		3	100	
IEBE/T/422	Telemetry & Remote Control	3		3	100	
IEBE/T/423	Elective II A. BIOMEDICAL INSTRUMENTATION B. SOFTWARE ENGINEERING C. NEURAL NETWORKS: THEORY AND APPLICATIONS D. QUALITY CONTROL & RELIABILITY E. ENVIRONMENTAL INSTRUMENTATION F. INSTRUMENTATION FOR OIL AND GAS INDUSTRIES	3		3	100	
IEBE/T/424	General Viva Voce			3	100	
IEBE/S/421	Power Electronics Lab.		3	3		100
IEBE/S/422	Telemetry & Remote Control Lab.		3	3		100
IEBE/S/423	Process Control Laboratory II		3	3		100
IEBE/S/424	Project		4	3		100
	Sub - Total	10	13	24	400	400
	Total	23			800	

