

**Curriculum for Bachelor of Technology in Instrumentation & Electronics Engineering (New)**  
**Department of Instrumentation & Electronics Engineering**

<b>FIRST YEAR FIRST SEMESTER</b>						
<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>
IEBT/ET/T/111	Electronic Devices	3		3	100	
IEBT/T/112	Circuit Theory	4		3	100	
IEBT/T/113	Fundamentals of Instrumentation	4		3	100	
IEBT/EE/T/114	Electrical Machines I	3		3	100	
IEBT/CSE/T/115	Num Methods & Comp Programming	4		3	100	
IEBT/MET/116	Basics of Mechanisms	3		3	100	
IEBT/ME/S/111	Basic Engg Drawing		3	3		100
IEBT/ME/S/112	Workshop Practice X		3	3		100
IEBT/S/113	Electronic and Instrument Workshop		3	3		100
IEBT/CSE/S/114	Comp Prog Lab I		3	3		100
	<b>Sub - Total</b>	21	12	30	600	400
	<b>Total</b>	<b>33</b>			<b>1000</b>	
<b>FIRST YEAR SECOND SEMESTER</b>						
<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>
IEBT/T/121	Process Instrumentation I	4		4	100	
IEBT/ET/T/122	Electronic Circuits I	4		3	100	
IEBT/EE/T/123	Electrical Machines II	4		3	100	
IEBT/EE/T/124	Electrical Measurements	4		3	100	
IEBT/T/125	Digital Electronics	4		3	100	
IEBT/T/126	Linear Control Systems	4		3	100	
IEBT/S/121	Digital Electronics Lab		3	3		100
IEBT/EE/S/122	Electrical Measurement Lab		3	3		100
IEBT/EE/S/123	Electrical Machines Lab		3	3		100
IEBT/ME/S/124	Workshop Practice XI		3	3		100
	<b>Sub - Total</b>	24	12	31	600	400
	<b>Total</b>	<b>36</b>			<b>1000</b>	
<b>SECOND YEAR FIRST SEMESTER</b>						
<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>
IEBT/T/211	Electronic Circuits II	4		3	100	
IEBT/T/212	Analog Integrated Circuits	4		3	100	
IEBT/T/213	Process Instrumentation II	4		4	100	
IEBT/IT/214	Data Structures & OOP	4		4	100	
IEBT/T/215	Microprocessors & microcontrollers– Theory & App	4		4	100	
IEBT/S/211	Electronic Circuits Lab		3	3		100
IEBT/IT/S/212	Comp. Prog Lab II		3	3		100
IEBT/S/213	Control Engineering Lab.		3	3		100
IEBT/S/214	Seminar		3	3		100
	<b>Sub - Total</b>	20	12	30	500	400
	<b>Total</b>	<b>32</b>			<b>900</b>	

SECOND YEAR SECOND SEMESTER						
Code no.	Subject	Pds/week		Credit	Marks	
		L	S		Exam	Sessional
IEBT/T/221	Process control I	4		4	100	
IEBT/T/222	Analytical Instrumentation	4		3	100	
IEBT/T/223	Digital Signal Processing	4		4	100	
IEBT/ET/T/224	Sig Proc & Transmission	4		3	100	
IEBT/IT/T/225	Computer Organization and Networking	4		3	100	
IEBT/S/221	Electronic Design Lab.		3	3		100
IEBT/S/222	Process Instru Lab. I		3	3		100
IEBT/S/223	Process Control Laboratory I		3	3		100
IEBT/S/224	Microprocessor & Microcontroller Lab		3	3		100
	Sub - Total	20	12	29	500	400
	<b>Total</b>		<b>32</b>		<b>900</b>	
THIRD YEAR FIRST SEMESTER						
Code no.	Subject	Pds/week		Credit	Marks	
		L	S		Exam	Sessional
IEBT/T/311	Electronic Instrumentation	3		3	100	
IEBT/T/312	Process Control II	4		3	100	
IEBT/T/313	Power Electronics	4		3	100	
IEBT/T/314	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	
IEBT/S/311	Process Instru Lab. II		3	3		100
IEBT/S/312	Signal Processing Lab.		3	3		100
IEBT/S/313	Project		4	4		100
	Sub - Total	14	10	22	400	300
	<b>Total</b>		<b>24</b>		<b>700</b>	
THIRD YEAR SECOND SEMESTER						
Code no.	Subject	Pds/week		Credit	Marks	
		L	S		Exam	Sessional
IEBT/Prod/T/321	Industrial Management	4		3	100	
IEBT/T/322	Telemetry & Remote Control	3		3	100	
IEBT/T/323	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	
IEBT/T/324	General Viva Voce			3	100	
IEBT/S/321	Power Electronics Lab.		3	3		100
IEBT/S/322	Telemetry & Remote Control Lab.		3	3		100
IEBT/S/323	Process Control Laboratory II		3	3		100
IEBT/S/324	Project		4	3		100
	Sub - Total	10	13	24	400	400

	Total	23		800
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