

**Course Structure for Batch admitted in 2020-21  
B. Tech. Integrated (Mechanical)**

<b>First Year (Common for All Branches)</b>			
<b>Semester - I</b>		<b>Semester - II</b>	
<b>Sr. No.</b>	<b>Name of the Subject</b>	<b>Sr. No.</b>	<b>Name of the Subject</b>
1	Mathematics-I	1	Mathematics-II
2	Fundamentals of Physics	2	Applied Physics
3	Chemistry	3	Engineering Drawing-II
4	Engineering Drawing-I	4	Elements of Electrical Engineering
5	Communication Skills	5	Programming for Problem Solving
6	Workshop-I	6	Workshop-II
<b>B. Tech. Integrated (Mechanical) - Second Year</b>			
<b>Semester - III</b>		<b>Semester - IV</b>	
<b>Sr. No.</b>	<b>Name of the Subject</b>	<b>Sr. No.</b>	<b>Name of the Subject</b>
1	Engineering Mathematics-I	1	Engineering Mathematics-II
2	Manufacturing Processes-I	2	Machine Drawing and Computer Graphics
3	Engineering Thermodynamics	3	Strength of Materials
4	Engineering Mechanics	4	Manufacturing Processes-II
5	Constitution of India (Humanities-I)	5	Environmental Studies (Humanities -II)
6	Machine Shop-I	6	Machine Shop-II
<b>B. Tech. Integrated (Mechanical) - Third Year</b>			
<b>Semester - V</b>		<b>Semester - VI</b>	
<b>Sr. No.</b>	<b>Name of the Subject</b>	<b>Sr. No.</b>	<b>Name of the Subject</b>
1	Engineering Mathematics-III	1	Statistics and Numerical Methods
2	Kinematics of Machinery	2	Dynamics of Machinery
3	Materials Engineering	3	Design of Machine Elements-I
4	Fluid Mechanics	4	Mechanical Measurements and Metrology
5	Industrial Electronics	5	Fluid Machinery
6	Principles of Economics and Management	6	Thermal Engineering
		7	Professional Ethics and Legal Aspects (Humanities-III)
<b>Semester - VIII and XI</b>		<b>Semester - VII, IX, X and XII **</b>	
	<b>Inplant Training</b>	<ul style="list-style-type: none"> <li>• <b>Artificial Intelligence and Automation</b> :Machine Learning, Robotics &amp; Automation, Automation System Design, Nanotechnology in Automation, IOT-Internet of Things, Industry 4.0, Sensors &amp; Transducers, Microprocessors &amp; Microcontroller</li> </ul>	
		<ul style="list-style-type: none"> <li>• <b>Design &amp; Manufacturing</b> : Product Design &amp; Development, Additive Manufacturing (3D-Printing), Mechanical Systems Design, Micro &amp; Nano Manufacturing, Electrical &amp; Hybrid Automotive Technologies, Industry 4.0, Design HVAC (Heating, Ventilettling, Air Conditioning) Systems</li> </ul>	

\*\* Subject to Revision

**Course Structure for Batch admitted in 2020-21**  
**B. Tech. Integrated (Computer)**

<b>First Year (Common for All Branches)</b>			
<b>Semester - I</b>		<b>Semester - II</b>	
<b>Sr. No.</b>	<b>Name of the Subject</b>	<b>Sr. No.</b>	<b>Name of the Subject</b>
1	Mathematics-I	1	Mathematics-II
2	Fundamentals of Physics	2	Applied Physics
3	Chemistry	3	Engineering Drawing-II
4	Engineering Drawing-I	4	Elements of Electrical Engineering
5	Communication Skills	5	Programming for Problem Solving
6	Workshop-I	6	Workshop-II
<b>B. Tech. Integrated (Computer) - Second Year</b>			
<b>Semester - III</b>		<b>Semester - IV</b>	
<b>Sr. No.</b>	<b>Name of the Subject</b>	<b>Sr. No.</b>	<b>Name of the Subject</b>
1	Engineering Mathematics - I	1	Engineering Mathematics - II
2	Basic Electronics	2	Digital Logic Design
3	Basic Data Structures	3	Advanced Data Structures
4	Object Oriented Programming	4	Computer Organization and Architecture
5	Fundamentals of Website Designing	5	Programming Laboratory - I
6	Environmental Studies	6	Professional Ethics
7	Constitution of India		
<b>B. Tech. Integrated (Computer) - Third Year</b>			
<b>Semester - V</b>		<b>Semester - VI</b>	
<b>Sr. No.</b>	<b>Name of the Subject</b>	<b>Sr. No.</b>	<b>Name of the Subject</b>
1	Engineering Mathematics - III	1	Engineering Mathematics - IV
2	Discrete Mathematics	2	Design and Analysis of Algorithms
3	Principles of Operating System	3	Database Management Systems
4	Fundamentals of Computer Networks	4	Microprocessor
5	Computer Organization and Architecture	5	Digital Logic Design
6	Fundamentals of Website Designing	6	Web Technologies
7	Implementation of Technology	7	Professional Ethics
8	Programming Laboratory	8	Organizational Behaviour
<b>Semester - VIII and XI</b>		<b>Semester - VII, IX, X and XII **</b>	
	<b>Inplant Training</b>	<ul style="list-style-type: none"> <li>• <b>Artificial Intelligence :</b> Introduction to AI, Machine Learning, Types of machine learning, Python basics, Python advanced, Linear regression, Hypothesis Testing, Supervised Algorithm, Unsupervised learning, Principal component Analysis, Reinforcement Learning, Neural Networking, Deep Learning</li> <li>• <b>System Security :</b> Computer Network, Network Ethics, Information Security, Cyber Security, Network Security &amp; database vulnerabilities</li> </ul>	

\*\* **Subject to Revision**

**Course Structure for Batch admitted in 2020-21**  
**B. Tech. Integrated (Electronics & Telecommunication)**

First Year (Common for All Branches)			
Semester - I		Semester - II	
Sr. No.	Name of the Subject	Sr. No.	Name of the Subject
1	Mathematics-I	1	Mathematics-II
2	Fundamentals of Physics	2	Applied Physics
3	Chemistry	3	Engineering Drawing-II
4	Engineering Drawing-I	4	Elements of Electrical Engineering
5	Communication Skills	5	Programming for Problem Solving
6	Workshop-I	6	Workshop-II
B. Tech. Integrated (Electronics & Telecommunication) - Second Year			
Semester - III		Semester - IV	
Sr. No.	Name of the Subject	Sr. No.	Name of the Subject
1	Computer Programming-II	1	Object Oriented Programming
2	Electrical Technology	2	Electronic Circuit Analysis and Design
3	Electronic Materials and Components	3	Environmental Studies
4	Basic Electronics	4	Engineering Mathematics-II
5	Engineering Mathematics-I	5	Engineering Physics
6	Constitution of India	6	Numerical Techniques
B. Tech. Integrated (Electronics & Telecommunication) - Third Year			
Semester - V		Semester - VI	
Sr. No.	Name of the Subject	Sr. No.	Name of the Subject
1	Electronic Circuit Analysis and Design	1	Discrete Mathematics
2	Analog Integrated Circuits and Applications	2	Microprocessor and Microcontroller
3	Digital System Design	3	Database Management Systems
4	Signals and Systems	4	Control System Engineering
5	Circuit and Network Theory	5	Analog and Digital Communication
6	Electromagnetic Field Theory	6	Object Oriented Programming
Semester - VIII and XI		Semester - VII, IX, X and XII **	
	<b>Inplant Training</b>	<ul style="list-style-type: none"> <li>• <b>Internet of Things</b> : IOT System Architecture, IOT and Cloud Computing, Mobile App Development for IOT, IOT and Augmented Reality Emerging Technologies, Embedded systems, Robotics and IOT, etc</li> <li>• <b>Network Security</b> : Operating System and Security, Computer Network and Internet Architecture, Mobile Computing Security, Advanced Data Science for Security Analytics, etc.</li> </ul>	

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