

## List of Honours, Minor Specialization, DE, OC as Approved by BoS for 2021 Admitted Batch

Session	Semester	Courses for Honours	Courses for Minor Specialization	DE-Courses	OC-Courses	Seminar/Self Study Courses
July-Dec 2023	V	Track-(Information Security) 1) Cyber Security and Privacy 2) Ethical Hacking Track(IOT) 1) Introduction to Internet of Things 2) Sensor Technology Physics Fabrication and Circuit Track (High Performance Computing Track) 1) Multicore Computer Architecture 2) Distributed System	1 ) Computer Architecture 2) Operating system Fundamentals 3) Programming, Data Structures and Algorithms using python			1) Introduction to Computer and Network Performance Analysis using Queuing System 2) Software Conceptual Design 3)Software Testing 4) Innovation by Design
Jan-June 2024	VI	Track-(Information Security) 1) Information Security-5 Secure system engineering 2) Foundation of cryptography Track(IOT) 1) Introduction to Internet of Industry 4.0 and industrial Internet of things 2) Sensor and actuators Track (High Performance Computing Track) 1) Parallel computer	1) Programming in Modern 2) Introduction to the Internet of Things 3) Introduction to Automata, Language and competition	1) user-centric computing for human-computer interaction 2) Digital Design with Verilog 3)Getting started with competitive programming	1) Data Structure 2) Python Programming	

		Architecture 2) Basic of computational complexity				
July-Dec 2024	VII	Track-(Information Security) 1) Secure Computation: Part II 2) Practical Cyber Security for Cyber Security Practitioners 3) Responsible & Safe AI  Track(IOT) 1) Robotics 2) Smart Grid: Basics to Advanced Technologies  Track (High Performance 1) Parameterized Algorithms 2) Statistical Learning for Reliability Analysis	1) Software Engineering 2) Programming in Java 3) Computer Graphics	DE-2(Through Traditional Mode)  1) Adhoc Networks 2) Data Mining & Warehousing 3) Distributed Systems  DE-3*  1) Reinforcement Learning 2) Big Data Computing 3) Design & Implementation of HumanComputer Interfaces  DE-4*  1) Deep Learning - IIT Ropar 2) Approximation Algorithm 3) Deep Learning for Computer Vision	OC-2  1) Computer Networks 2) Web Technologies	