

List of Honours, Minor Specialization, DE, OC as Approved by BoS for 2018 Admitted Batch

Name of the Department: Computer Science and Engineering

| Session | Semester | Courses for Honours | Courses for Minor Specialization | DE-Courses | OC-Courses |
|---------------|----------|---|--|---|--|
| Jul-Dec 2020 | V | 1) Introduction to internet of things 2) Data Science for Engineers 3) The Joy of Computing using Python | 1) Introduction to Operating Systems 2) Database Management System 3) Object oriented analysis and design | | |
| Jan-June 2021 | VI | 1) GPU Architecture and Programming 2) Privacy and Security in online social media 3) Computational Complexity Theory | 1) Design and analysis of algorithms 2) Programming data structures and algorithms using python 3) Programming in java | <p style="text-align: center;">DE-1</p> 1) Network and Web Security 2) Image Processing 3) Mobile Computing <p style="text-align: center;">DE-2(SWAYAM)</p> 1) Data Analytics with Python 2) Introduction to Machine Learning 3) An Introduction to Artificial Intelligence 4) Artificial Intelligence: Knowledge Representation and Reasoning 5) Machine Learning, ML | <p style="text-align: center;">OC-1</p> 1) Data Structures 2) Python Programming |
| July-Dec 2021 | VII | 1) Deep Learning for Computer Vision 2) Parameterized Algorithms 3) Big Data Computing | 1) Computer Graphics 2) Theory of Computation 3) Software Testing | <p style="text-align: center;">DE-3</p> 1) Networking with TCP/IP 2) Data Mining & Warehousing 3) Distributed Systems <p style="text-align: center;">DE-4(SWAYAM)</p> 1) Cloud Computing 2) Deep learning - IITRopar 3) Software Testing | <p style="text-align: center;">OC-2</p> 1) Soft Computing 2) Network Security 3) Data Mining & Warehousing <p style="text-align: center;">OC-3</p> 1) R Programming 2) Artificial Intelligence 3) Computer Networks |

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| Jan-June 2022 | VIII | 1) Advanced Computer Architecture 1) Information Security - 5 - Secure Systems Engineering 2) Foundations of Cryptography | 1) Cloud Computing and Distributed Systems 2) Introduction to Machine Learning 3) Data Science for Engineers | DE-5(SWAYAM) 1) Social Network 2) Ethical Hacking 3) Hardware Security DE-6(SWAYAM) 1) Blockchain and its Applications 2) Online Privacy 3) Reinforcement Learning | OC-4 1) Ethical Hacking 2) Introduction to Internet of Things 3) Online Privacy |
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