

Course offerings in 2024-25 Semester II (Spring) - Version-2(20 Nov)

CD - Course Discription -Programme Requirement; Institute Requirement

AD - Area Code - MA-Maths; CS-Comp Sci; EC-Electronics, CG-Cognitive Science;

HS-Human Sciences; SC-Science; OE-Open Elective; CL-Compu. Linguistics; OT-Others

L-T-P-C: (Lecture hours - Tutorial hours - Practical Hours) per week - Credits

H1-1st Half of the Semester; H2-2nd Half of the Semester; H-1 Class per week with full Semester

CD	AD	Course No	Ccourse Name	Credits L-T-P-C	Faculty Name(s)
Bouquet Courses - Registration Limit: 150					
		Theory Courses			
		CS1.404	Optimization Methods	3-1-0-4	Naresh Manwani
		CS1.406	Advanced Algorithms	3-1-0-4	Suryajith Ch
		CS8.401	Principles of Information Security	3-1-0-4	Kannan Srinathan
		Systems Courses			
		CS4.401	Data Systems	3-1-0-4	Kamal Karlaalem
		CS6.401	Software Engineering	3-1-0-4	Karthik Vaidhyanathan
		CS3.401	Distributed Systems Prerequisite: Operating Systems. Networks desirable	3-1-0-4	Lini Thomas
		CS1.403	Compilers	3-1-0-4	Venkatesh Choppella
		AI Courses			
		CS7.403	Statistical Methods in AI	3-1-0-4	Vineet Gandhi + CV Jawahar
		CS7.505	Computer Vision	3-1-0-4	Makarand Tapaswi + Ravi Kiran
		CPS			
		EC4.404	Mechatronics System Design	3-1-0-4	Nagamanikandan + Harikumar K
		IT+X			
		CS4.410	Spatial Data Sciences	3-1-0-4	KS Rajan
Electives					
		CNO	CName	Credits	Faculty Name(s)
Electives for CND Students					
		SC1.420	Introduction to Particle Physics	3-1-0-4	Subhadip Mitra
		SC4.411	Machine Learning for Natural Sciences	3-1-0-4	Prabhakar B + Vinod PK
		SC2.301	Physics of Soft Condensed Matter	3-1-0-4	Marimuthu Krishnan
		SC2.316	Molecular Modeling and Simulations	3-1-0-4	Deva Priyakumar + Marimuthu Krishnan
		SC2.315	Molecular Symmetry and Quantum Mechanics	3-1-0-4	Harjinder Singh
		SC3.303	Advanced Bioinformatics	3-1-0-4	Nita Parekh
		SC3.316	Mathematical Models in Biology (40)	3-1-0-4	Abhishek Deshpande
Electives for CLD Students					
		CL2.404	Computational Psycholinguistics	3-1-0-4	Rajakrishnan P Rajkumar
		CL5.401	Topics in SSMT	3-1-0-4	Chiranjeevi Yerra + Parameswari Krishnamurthy

		EC5.408	Speech Signal Processing	3-1-0-4	Anil Kumar Vuppala
		CL3.408	Applications of Language Models (H)	3-1-0-2	Vasudeva Varma
		CL3.409	Evaluation Methods for NLP (H1)	3-1-0-2	Parameswari Krishnamurthy
ECE Electives (Also applicable as CSE/Open Electives)					
Note for UG ECE/ECD Students: Please read carefully the guidelines for choosing of ECE Electives before registering.					
Signal Processing & Communication Stream					
		CS7.505	Computer Vision	3-1-0-4	Makarand Tapaswi + Ravi Kiran
		CS7.403	Statistical Methods in AI	3-1-0-4	Vineet Gandhi + CV Jawahar
		EC5.402	Time Frequency Analysis	3-1-0-4	Anil Kumar Vuppala + Chiranjeevi Yerra
		CS8.502	Topics in Information-Theoretic Privacy	3-1-0-4	Gowtham Kurri + Prasad Krishnan
		EC5.408	Speech Signal Processing	3-1-0-4	Anil Kumar Vuppala
VLSI and Embedded Systems Stream					
		EC2.401	Analog IC Design	3-1-0-4	Abhishek Srivastava
		EC2.502	Flexible Electronics	3-1-0-4	Aftab Hussain
Robotics Stream					
		EC4.402	Intro to UAV Design	3-1-0-4	Harikumar K
		CS7.505	Computer Vision	3-1-0-4	Makarand Tapaswi + Ravi Kiran
		CS7.403	Statistical Methods in AI	3-1-0-4	Vineet Gandhi + CV Jawahar
		EC4.501	Advances in Robotics & Control	3-1-0-4	Spandan Roy
		EC4.403	Robotics: Planning and Navigation	3-1-0-4	Madhava Krishna K
		EC4.404	Mechatronics System Design	3-1-0-4	Nagamanikandan + Harikumar K
Electives for PG CASE Students					
		CE1.603	Advanced Structural Analysis	3-1-0-4	Pravin Kumar Venkat Rao
		CE1.608	Analysis & Design of Precast and Prestressed Structures	3-1-0-4	Shubham Singhal
		CE1.609	Analysis and Design of Bridge Structures	3-1-0-4	Jofin George
		CE5.501	Design of Hydraulic Structures	3-1-0-4	Shaik Rehana
		CE1.601	Earthquake Engineering	3-1-0-4	Sunitha P
Electives for M.Tech PDM students - Offering to other students as Open elective- Max 20 students allowed					
Design Elective		PD1.411	Product Design Workshop	3-1-0-4	Prakash Yalla+Raghu Reddy
		CS5.401	User Interaction and Usability of Digital Products	3-1-0-4	Raman Saxena
Business/Entrepren Elect		CS9.424	Technology Product Entrepreneurship	3-1-0-4	Ramesh Loganathan + Prakash Yalla
		PD2.423	Organizational Operations (H2)	3-1-0-2	Santanu Mandal
		PD2.502	Product Lifecycle Management	3-1-0-4	Ravi Warriar
CSE/Open Electives					
		CS7.401	Introduction to NLP	3-1-0-4	Manish Shrivastava
		CS8.403	System and Network Security	3-1-0-4	Ashok Kumar Das
		CS8.402	Information Security Audit and Assurance	3-1-0-4	Shatrunjay Rawat
		CS7.505	Computer Vision	3-1-0-4	Makarand Tapaswi + Ravi Kiran
		CS1.408	Introduction to Game Theory	3-1-0-4	Sujit Gujar

		CS3.404	Internals of Application Servers	3-1-0-4	Ramesh Loganathan + Arjun Rajashekar
		CG3.501	Cognitive Science and AI	3-1-0-4	Bapi Raju S
		CG3.403	Behavioral Research: Statistical Methods	3-0-1-4	Vishnu Sreekumar + Bapi Raju S
		CG4.401	Music, Mind, and Technology (Open Elective)	3-1-0-4	Vinoo Alluri
		CE8.401	Disaster Management (40)	3-1-0-4	Jofin George + Shubham Singhal
		CG2.401	Cognitive Neuroscience (Max:80)	3-1-0-4	Bhaktee Dongaonkar
		CL3.407	Neural Natural Language Generation (H1)	3-1-0-2	Manish Shrivastava
		CS7.603	Topics in Reinforcement Learning	3-1-0-4	Tejas Bodas + Harikumar K
		CS5.401	User Interaction and Usability of Digital Products (Max:30) (Open Elective)	3-1-0-4	Raman Saxena
		CS4.410	Spatial Data Sciences	3-1-0-4	KS Rajan
		CG9.600	Cognitive Science Seminar - 0 Credits (For Cognitive Sci Students)	0-2-0-0	Bapi Raju S + Priyanka Srivastava
		CS1.409	Quantum Algorithms	3-1-0-4	Shantanav Chakraborty
		CL2.404	Computational Psycholinguistics	3-1-0-4	Rajakrishnan P Rajkumar
		CS7.405	Responsible & Safe AI Systems	3-1-0-4	Ponnurangam Kumaraguru
		CS8.502	Topics in Information-Theoretic Privacy	3-1-0-4	Prasad Krishnan + Gowtham Kurri
		MA7.501	Continuous Variable Quantum Information Theory and Computation	3-1-0-4	UttamSingh
		CS9.433	Hydro Informatics (Max:40) Open Elective	3-1-0-4	Shaik Rehana
		CS9.441	Applied Attention Theory (Max:40) Open Elective	3-1-0-4	Priyanka Srivastava
		CS1.503	Mathematical Foundations of Data Science (Open for MS&PhD Students)	3-1-0-4	Suryajith Ch + Girish Verma
		CS9.436	Optical Remote Sensing	3-1-0-4	RC Prasad
			Applications of Language Models (H)	3-1-0-2	Vasudeva Varma
		CS1.501	Advanced Optimization: Theory and Applications	3-1-0-4	Pawan Kumar
Math Electives (Random selection) Maximum no. of students for the following courses is: 50 each					
		MA4.303	Linear Partial Differential Equations and Variational Calculus	3-1-0-4	Samyadeb Bhattacharya
		CS1.501	Advanced Optimization: Theory and Applications	3-1-0-4	Pawan Kumar
		MA7.501	Continuous Variable Quantum Information Theory and Computation	3-1-0-4	UttamSingh

Sd/-

Dean (Academics)

Date: 20-Nov-2024