

Course offerings in 2019-20 Semester II (Spring)

Version-3 (10.12.2019)

PG Programmes

CD	AD	CNO	CName	Credits	Faculty Name(s)
M.Tech I year II Semester - CSE					
			Bouquet core	3-1-0-4	
			Bouquet core	3-1-0-4	
			Area electives	3-1-0-4	
			Area/Open elec/PG-Project/Indep.study	3-1-0-4	
			Total 12-4-0-16		
M.Tech II year II Semester – CSE					
			Area elective / Bouquet core	3-1-0-4	
			Area elective / Bouquet core	3-1-0-4	
			Area project (or)	0-0-16-8	
			Area /CS/Open elective	3-1-0-4	
			Area /CS/Open elective	3-1-0-4	
			Total 12-4-0-16 / 6-2-16-16		
M.Tech I year II Semester – CSIS					
		CSE538	System and Network Security	3-1-0-4	Ashok Kumar Das
		CSE418	Principles of Information Security	3-1-0-4	Srinathan Kannan
			Bouquet core elective	3-1-0-4	
			Bouquet core elective	3-1-0-4	
			Total 12-4-0-16		
M.Tech II year II Semester – CSIS					
		CSE704	PG-Project (8 Cr)	0-0-16-8	
		CSE581	Information Security Audit and Assurance	3-1-0-4	Shatrunjay Rawat
			Bouquet/Area/C/IT Elective	3-1-0-4	
			Total 6-2-16-16		
M.Tech I Year II Semester – CASE					
		CSE604	Computing Tools	3-1-3-4	Vikrampudi
			SE Elective	3-1-0-4	
			SE Elective	3-1-0-4	
			SE Elective / CASE Project	3-1-0-4	
			Total 12-4-3-16		
M.Tech II Year II Semester – CASE					
			Elective	3-1-0-4	
			Elective	3-1-0-4	
			Elective	3-1-0-4	
			Elective	3-1-0-4	
			Total 12-4-0-16		
M.Tech I Year II Semester - Bioinformatics					
		CSE604	Computing Tools	3-1-0-4	Vikrampudi
		SCI433 /SCI633	Modeling and Simulations	3-1-0-4	Prabhakar B + Deva Priyakumar
		SCI765	Introduction to Systems Biology	3-1-0-4	Vinod PK
			Domain/IT elective	3-1-0-4	
			Total 12-4-0-16		
M.Tech II Year II Semester – Bioinformatics					
		SCI400	CCNSB Seminar	0 Cr	Vinod PK
		SCI765	Introduction to Systems Biology	3-1-0-4	Vinod PK
		SCI860	Computational Biology Project / Elective	0-0-8-4	CCNSB Faculty

			Domain/IT elective	3-1-0-4	
			Total 6-2-8-12		
Electives					
		CNO	CName	Credits	Faculty Name(s)
Electives for BSD Students					
		CES442	Disaster Management	3-1-0-4	Sunitha P
			Elasticity: Theory and Finite Elements	3-1-0-4	Venkateswarlu M
		CEW612	Design of Hydraulic Structures	3-1-0-4	Shaik Rehana
		CES617	Stability of Structures	3-1-0-4	Sunitha P
		CES641	Earthquake Engineering	3-1-0-4	Pradeep R
		CEG461	Remote Sensing	3-1-0-4	RC Prasad
		CEG422	Green Buildings	3-1-0-4	Vishal Garg
		CSE471	Statistical Methods in AI	3-1-0-4	Ravi Kiran S + Vineet
Electives for CND Students					
		SCI761	Topics in Nanosciences	3-1-0-4	Tapan Kumar Sau
		SCI765	Introduction to Systems Biology	3-1-0-4	Vinod PK
		SCI653	NGS Data Analysis	3-1-0-4	Nita Parekh
Electives for CLD Students					
		CLG452	Linguistic Data 2: Collection & Modeling	3-1-0-4	Radhika M + Aditi Mukherjee + Dipti M Sharma
			Social Computing	3-1-0-4	Vasudeva Varma
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 Stream					
		Level 1			
		ECE442	Time Frequency Analysis	3-1-0-4	Anil Kumar V
		ECE431	Signal Detection and Estimation Theory	3-1-0-4	Santosh Nannuru
		Level 2			
		CSE578	Computer Vision	3-1-0-4	Avinash Sharma
		CSE471	Statistical Methods in AI	3-1-0-4	Ravi Kiran S + Vineet
Communications Stream					
		Level 1			
		ECE431	Signal Detection and Estimation Theory	3-1-0-4	Santosh Nannuru
			Introduction to Coding Theory	3-1-0-4	Prasad Krishnan
		Level 2			
			Topics in Coding Theory	3-1-0-4	Lalitha V
		ECE538	Fiber Optic Communication Systems	3-1-0-4	Kavita Vemuri
VLSI and Embedded Systems Stream					
		Level 1			
		ECE463	Digital VLSI Design	3-1-0-4	Anshu Sarje
		Level 2			
		ECE566	Photonics	3-1-0-4	Syed Azeemuddin
		CSE422	Advanced Computer Architecture	3-1-0-4	Govindarajulu R
		ECE562	Flexible Electronics	3-1-0-4	Aftab Hussain
Robotics Stream					
		Level 1			
		ECE452	Intro to Robotics: Mechanics & Control	3-1-0-4	Abhishek Sarkar + Spandana Roy
		Level 2			
		CSE578	Computer Vision	3-1-0-4	Avinash Sharma
		CSE471	Statistical Methods in AI	3-1-0-4	Ravi Kiran S + Vineet

	ECE551	Advances in Robotics & Control	3-1-0-4	Madhava Krishna + Abhishek Sarkar
Electives for PG CASE Students				
	CES442	Disaster Management	3-1-0-4	Sunitha P
		Elasticity Theory and Finite Elements	3-1-0-4	Venkateswarlu M
	CEW612	Design of Hydraulic Structures	3-1-0-4	Shaik Rehana
	CES617	Stability of Structures	3-1-0-4	Sunitha P
	CES641	Earthquake Engineering	3-1-0-4	Pradeep R
	CEG461	Remote Sensing	3-1-0-4	RC Prasad
	CEG422	Green Buildings	3-1-0-4	Vishal Garg
	CES771	CASE Project	4 credits	
Electives for PG Bioinformatics Students				
	SCI653	NGS Data Analysis	3-1-0-4	Nita Parekh
	SCI761	Topics in Nanosciences	3-1-0-4	Tapan Kumar Sau
Bouquet Courses				
<p>Note for UG3/UG4 CSE/CSD students: Bouquet courses for Computer Science cater to developing breadth in computer science in Foundations and Systems Area. Some of these courses are also Research Stream Courses. A student must take at least 3 courses each from 5 in Foundations and 5 in Systems Bouquet Courses during their entire B.Tech Programme.</p> <p>Note for M.Tech CSE Students: Every student must register for 20 bouquet core credits. Of the 20 bouquet core credits, at least 2 must be from the foundations and at least 2 must be from the systems stream. Further, at least two of these bouquet core courses must be done in the second semester and at least one in the third semester.</p>				
Foundation Courses - Registration Limit: 200				
	CSE471	Statistical Methods in AI	3-1-0-4	Ravi Kiran S + Vineet
	CSE418	Principles of Information Security	3-1-0-4	Srinathan Kannan
	CSE481	Optimization Methods	3-1-0-4	CV Jawahar
Systems Courses - Registration Limit: 200				
	CSE441	Database Systems	3-1-0-4	Krishna Reddy P
	CSE461	Software Engineering	3-1-0-4	Vasudeva Varma + Prakash Yalla
	CSE431	Distributed Systems (Max:100) Prerequisite: Operating Systems. Networks desirable	3-1-0-4	Lini Thomas
CSE/Open Electives				
	CSE578	Computer Vision	3-1-0-4	Avinash Sharma
	CSE498	Introduction to Game Theory	3-1-0-4	Sujit Gujar
	CSE581	Information Security Audit and Assurance	3-1-0-4	Shatrunjay Rawat
	CSE538	System and Network Security	3-1-0-4	Ashok Kumar Das
	CSE573	NLP Applications	3-1-0-4	Manish Shrivastava
	CSE563	Internals of Application Servers	3-1-0-4	Ramesh Loganathan
	CSE586	Cognitive Neuroscience	3-1-0-4	Kavita Vemuri
	CSE504	Intro to Parallel Scientific Computing	3-1-0-4	Pawan Kumar
	CSE595	ICTs for Development (Free Elective)	3-1-0-4	Nimmi Rangaswamy
		Probabilistic Graphical Models (Free Elective)	3-1-0-4	Girish Varma
	CSE588	Music, Mind, and Technology	3-1-0-4	Vinoo Alluri
	CSE567	Usability Engineering	3-1-0-4	Priyanka Srivastava
	CSE569	Software Foundations	3-1-0-4	Venkatesh Choppella
	CSE486	Introduction to Neural and Cognitive Modeling	3-1-0-4	Bapi Raju S
	ECE566	Photonics	3-1-0-4	Syed Azeemuddin
		Social Computing	3-1-0-4	Vasudeva Varma

			Deep Learning: Theory and Practices (Max:80)	3-1-0-4	Naresh Manwani
Engineering Electives (Random Selection) Max. no of students for each course is given in the brackets					
		CES442	Disaster Management (40)	3-1-0-4	Sunitha P
		CEG461	Remote Sensing (40)	3-1-0-4	RC Prasad
		CEG462	Hydro Informatics (40)	3-1-0-4	Shaik Rehana
Math Electives (Random selection) Maximum no. of students for the following courses is: 50 each)					
		IMA303	Differential Equations	3-1-0-4	Lakshmi Burra
			Probabilistic Graphical Models	3-1-0-4	Girish Varma
		IMA409	Multivariate Analysis	3-1-0-4	Venkateswarlu M
Science Electives (Random selection) Max. no of students for each course is given in the brackets					
		SC2.101	General & Structural Chemistry (35)	3-1-0-4	Tapan Kumar Sau
		SCI433/ SCI633	Modeling and Simulations (20)	3-1-0-4	Prabhakar B + Deva Priyakumar
		SCI761	Topics in Nanosciences (25)	3-1-0-4	Tapan Kumar Sau
		SCI765	Introduction to Systems Biology	3-1-0-4	Vinod PK
		SCI653	NGS Data Analysis	3-1-0-4	Nita Parekh
		SCI477	Machine Learning for Natural Sciences(10)	3-1-0-4	Deva Priyakumar + Prabhakar B + Vinod PK + Girish Varma
Humanities Electives for UG3 and UG4 (Random selection) Max. no of students for each course is 40					
		HSS482	Digital Humanities Project Note: Register with faculty consent only	0-0-8-4	CEH Faculty
		HSS365	Science Technology and Society	3-1-0-4	Harjinder Singh
		HSS446	The State in Colonial India	3-1-0-4	Aniket Alam
		HSS337	Comprehension of Indian Music	3-1-0-4	T K Saroja
		CSE595	ICTs for Development	3-1-0-4	Nimmi Rangaswamy
		HSS466	Environment & Politics in India	3-1-0-4	Radhika Krishnan
		HSS447	Gender and Society	3-1-0-4	Sushmita Banerji
			An Introduction to William Blake	3-1-0-4	Aruna Chaluvadi
			Alternate Religious Traditions in Indian History	3-1-0-4	Nilam Kakati (HCU) + Aniket Alam
		TS17002	Language, Mind and Society	3-1-0-4	Aditi Mukherjee
			Ethics	3-1-0-4	Don Wallace Freeman Dcruz
			Thinking about Social Phenomena: Constructing Puzzles	3-1-0-4	Raheel Dhattiwala

Sd/-

Dean (Academics)

Date: 22.11.2019