

Course offerings in 2020-21 Semester II (Spring)

Version-1 (1.12.2020)

UG Programmes

CD	AD	CNO	CName	Credits	Faculty Name(s)
B.Tech II year II Semester – CSE&CSD & LCD2K19					
In	CS	CS6.301	Design and Analysis of Software Systems	3-1-0-4	Ramesh Loganathan
Pr	CS	CS7.301	Machine, Data and Learning	3-1-0-4	Praveen P
In	HS	HS8.102	Intro to Human Sciences	3-1-0-4	Nimmi Rangaswamy
Pr	SC	SC1.111	Science II	3-1-0-4	Nita Parekh + Marimuthu Krishnan
In	CS	CS1.302	Automata Theory (H2)	3-1-0-2	Srinathan K
Pr	CS		Theory/Foundation Breadth Elective-1	3-1-0-2	
In	CS		Theory/Foundation Breadth Elective-2	3-1-0-2	
In	CS		Theory/Foundation Breadth Elective-3	3-1-0-2	
In	HS	OC3.102	Value Education II	0-2-0-2	Radhika M (Coordinator)
			Total 21-11-0-25		
Theory/Foundations Courses					
		CS9.302	Introduction to Quantum Information and Computation (H2)	3-1-0-2	Indranil Chakrabarty
			Introduction to Coding Theory (H1)	3-1-0-2	Lalitha V
Systems/Applications Courses					
		CS3.302	Software Programming for Performance (H2)	3-1-0-2	Deepak Gangadharan
		CS7.303	Digital Signal Analysis (H2)	3-1-0-2	Anil Kumar V
		CS9.301	Introduction to Brain and Cognition (H1)	3-1-0-2	Bapi Raju S + Kavita Vemuri
			Computer Graphics (H2)	3-1-0-2	Avinash Sharma
B.Tech II year II Semester ECE & ECD & LED2K19:					
Pr	EC	EC5.203	Communication Theory	3-1-0-4	Sachin Chaudhari
In	OT		Maths elective	3-1-0-4	
Pr	EC	EC6.202	Intro to Processor Architecture (H1)	3-1-0-2	Deepak Gangadharan
In	HS	HS8.102	Intro to Human Sciences	3-1-0-4	Nimmi Rangaswamy
Pr	EC		Stream Foundation-1	3-1-0-2	
Pr	EC	EC2.201	VLSI Design	3-1-0-4	Syed Azeemuddin + Abhishek Srivastava
In	HS	OC3.102	Value Education II	0-2-0-2	Radhika M (Coordinator)
			Total 12-9-3-21		
Electives for UG2 ECE/ECD/LED Students					
		EC2.203	Intro to Bio Electronics (H2)	3-1-0-2	Syed Azeemuddin + Prabhakar
		EC5.205	Introduction to Coding Theory(H1)	3-1-0-2	Lalitha V
B.Tech II year II Semester CND					
In	CS	CS2.201	Computer System Organization	3-1-0-4	Deepak Gangadharan
Pr	CS	CS7.301	Machine, Data and Learning	3-1-0-4	Praveen P
In	CS	CS6.301	Design and Analysis of Software Systems	3-1-0-4	Ramesh Loganathan
Pr	CNS	SC1.204	Thermodynamics (H1)	3-1-0-2	Harjinder Singh
Pr	CNS	SC1.205	Statistical Mechanics (H2)	3-1-0-2	Harjinder Singh
Pr	CNS	SC2.203	Biomolecular Structures (H1)	3-1-0-2	Marimuthu Krishnan
Pr	CNS	SC2.202	Organic Chemistry (H2)	3-1-0-2	Bhaswar Ghosh
In	CS	CS1.302	Automata Theory (H2)	3-1-0-2	Srinathan K
In	HS	OC3.102	Value Education II	0-2-0-2	Radhika M (Coordinator)
			Total 15-9-3-25		
B.Tech II year II Semester CLD					

Pr	CL	CL1.204	Language Typology and Universals	3-1-0-4	Dipti M Sharma
PR	CL	CS7.302	Introduction to NLP	3-1-0-4	Manish Shrivastava
Pr	CS	CS7.303	Digital Signal Analysis (H2)	3-1-0-2	Anil Kumar V
Pr	CS	CS6.301	Design and Analysis of Software Systems	3-1-0-4	Ramesh Loganathan
Pr	CS	CS7.301	Machine, Data and Learning	3-1-0-4	Praveen P
In	HS	HS8.102	Introduction to Human Sciences	3-1-0-4	Nimmi Rangaswamy
In	CS	CS1.302	Automata Theory (H2)	3-1-0-2	Srinathan K
In	HS	OC3.102	Value Education II	0-2-0-2	Radhika M (Coordinator)
			Total	18-9-0-25	
B.Tech II year II Semester CHD					
In	CS	CS2.201	Computer System Organization	3-1-0-4	Deepak Gangadharan
Pr	CS	CS7.301	Machine, Data and Learning	3-1-0-4	Praveen P
In	CS	CS6.301	Design and Analysis of Software Systems	3-1-0-4	Ramesh Loganathan
Pr	HS		Research Methods in Human Sciences	3-1-0-4	Aniket Alam
Pr	HS		Science, Technology and Society	3-1-0-4	Radhika Krishnan
In	CS	CS1.302	Automata Theory (H2)	3-1-0-2	Srinathan K
Pr	HS		HSS Elective-1	3-1-0-4	
In	HS	OC3.102	Value Education II	0-2-0-2	Radhika M (Coordinator)
			Total	18-9-0-25	
B.Tech III year II Semester – CSE:					
In	CS		BTP I / CSE-Honours 2	0-2-6-2	
Pr	CS		Bouquet Course – 2	3-1-0-4	
OT	[+]		Bouquet Course – 3	3-1-0-4	
OT	[+]		HSS Elective - 2	3-1-0-4	
OT	[+]		Open Elective - 2	3-1-0-4	
			Total	12-6-6-18	
B.Tech III year II Semester – CSD & LCD2K18					
Pr	CS		BTP I / CSE-Honours 2	0-2-6-2	
Pr	CS		Bouquet Course – 2	3-1-0-4	
Pr	CS		Bouquet Course – 3	3-1-0-4	
In	HS		HSS Elective - 2	3-1-0-4	
In	OT		Open Elective - 2	3-1-0-4	
Pr	CS		Stream Elective - 2	3-1-0-4	
			Total	15-7-6-22	
B.Tech III year II Semester – ECE:					
OT	[+]	ISC202	Science II	3-1-0-4	Nita Parekh + Marimuthu Krishnan
Pr	EC		ECE Elective 2	3-1-0-4	
Pr	EC		Stream Elective - 2	3-1-0-4	
In	HS		HSS Elective - 2	3-1-0-4	
In	EC		BTP-I/ECE-Honours Project 2	0-2-6-2	
			Total	12-6-6-18	
B.Tech III year II Semester – ECD & LED2K18					
OT	[+]	ISC202	Science II	3-1-0-4	Nita Parekh + Marimuthu Krishnan
Pr	EC		ECE Elective 2	3-1-0-4	
Pr	EC		Stream Elective - 2	3-1-0-4	
Pr	EC		Stream Elective - 3	3-1-0-4	
In	HS		HSS Elective - 2	3-1-0-4	
Pr	EC		ECE-Honours Project 2	0-2-6-2	
			Total	15-7-6-22	
B.Tech III year II Semester – CND					

Pr	CNS		CNS-Honours Project II	0-2-6-2	
In	HS	HS8.102	Intro to Human Sciences	3-1-0-4	Nimmi Rangaswamy
Pr	CNS		CNS Elective-1	3-1-0-4	
Pr	CNS		CNS Elective-2	3-1-0-4	
Pr	CS		CS Elective-2	3-1-0-4	
Pr	OT		CCNSB Seminar	0 Cr.	
			Total	12-6-6-18	
B.Tech III year II Semester – CLD:					
In	SC	SC1.111	Science II	3-1-0-4	Nita Parekh + Marimuthu Krishnan
Pr	CL		CL-Honours Project 2	0-2-6-2	
Pr	CL		CL-Stream Elective 1	3-1-0-4	
Pr	CS		CS Elective 1	3-1-0-4	
In	OT		Open Elective - 1	3-1-0-4	
In	HS		HSS Elective - 2	0-0-8-4	
			Total	18-5-0-24	
Lateral Entry III year II semester - LCD:					
Pr	CL		Bouquet Core (*)	3-1-0-4	
Pr	CS		Bouquet Core (*)	3-1-0-4	
OT	[+]		Science/Maths/Humanities/Engg	3-1-0-4	
			Elective (CS / Free)	3-1-0-4	
Pr	CS		Research Stream/CS Course	3-1-0-4	
		CSE494	CSE-Honours Project IV	0-0-8-4	
			Total	15-5-8-24	
B.Tech IV year II semester – CSE:					
Pr	CS		Bouquet Core (*)	3-1-0-4	
			Elective (CS / Free)	3-1-0-4	
			Elective (CS / Free)	3-1-0-4	
OT	[+]		Science/Maths/Humanities/Engg	3-1-0-4	
OT	[+]		Science/Maths/Humanities/Engg	3-1-0-4	
			Total	15-5-0-20	
B.Tech IV year II semester - CSD:					
Pr	CS		Bouquet Core (*)	3-1-0-4	
OT	[+]		Science/Maths/Humanities/Engg	3-1-0-4	
OT	[+]		Science/Maths/Humanities/Engg	3-1-0-4	
			Elective (CS / Free)	3-1-0-4	
Pr	CS		Research Stream/CS Course	3-1-0-4	
		CSE494	CSE-Honours Project IV	0-0-8-4	
			Total	15-5-8-24	
B.Tech IV year II Semester – ECE:					
O	[+]		Science/Maths/Humanities	3-1-0-4	
OT	[+]		Science/Maths/Humanities	3-1-0-4	
Pr	EC		EC Elective	3-1-0-4	
Pr	EC		EC Elective	3-1-0-4	
			Free Elective	3-1-0-4	
			Total	15-5-0-20	
B.Tech IV year II Semester – ECD: (Lateral Entry-III year II Semester-LED)					
OT	[+]		Science/Maths/Humanities	3-1-0-4	
OT	[+]		Science/Maths/Humanities	3-1-0-4	
Pr	EC		EC Elective	3-1-0-4	
Pr	EC		EC Elective	3-1-0-4	
			Free Elective	3-1-0-4	
		ECE494	ECE-Honours Project IV	0-0-8-4	
			Total	15-5-8-24	
B.Tech IV year II Semester – CND					

Pr	CS		Bouquet Core	3-1-0-4	
Pr	CNS	SCI473	CNS-Honours Project IV	0-0-8-4	
Pr	CNS		CNS Elective	3-1-0-4	
OT	[+]		CNS Elective	3-1-0-4	
	EG		Engg Elective	3-1-0-4	
			Free Elective	3-1-0-4	
		SCI400	CCNSB Seminar	0 Cr	
			Total 15-5-8-24		
B.Tech IV year II Semester - CLD					
OT	[+]		Humanities Elective	3-1-0-4	
Pr	CS		Bouquet Core	3-1-0-4	
Pr	??		CL-Elective	3-1-0-4	
Pr	CS		CS Elective	3-1-0-4	
In	CS	CSE494	Honours Project IV	0-0-8-4	
			Total 12-4-8-20		
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	
			Breadth Elective/Project/Independent 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 /CS/Open elective	3-1-0-4	
			Area /CS/Open elective	3-1-0-4	
			Total 12-4-0-16		
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	Ankit Gangawal
			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					
			Computing Tools	3-1-3-4	Vikrampudi
			Electvie I	3-1-0-4	
			Electvie II	3-1-0-4	
			Elective III	3-1-0-4	
			Elective IV (Half Course)	3-1-0-2	
			Total 15-5-3-18		
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 II Year II Semester – Bioinformatics				
		SCI400	CCNSB Seminar	0 Cr
			Advanced Bioinformatics	3-1-0-4
		SCI860	Computational Biology Project / Elective	0-0-8-4
			Domain/IT elective	3-1-0-4
			Total 6-2-8-12	
Electives				
		CNO	CName	Credits
Faculty Name(s)				
Electives for CND Students				
		SCI761	Topics in Nanosciences	3-1-0-4
			Nonlinear Dynamics	3-1-0-4
			Advanced Bioinformatics	3-1-0-4
Electives for CLD Students				
		CLG452	Linguistic Data 2: Collection & Modeling	3-1-0-4
				Parameswari Krishnamurthy, HCU
		CS4.501	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
		ECE431	Signal Detection and Estimation Theory	3-1-0-4
		Level 2		
			Medical Image Analysis	3-1-0-4
		CSE578	Computer Vision	3-1-0-4
		CSE471	Statistical Methods in AI	3-1-0-4
				Vineet Gandhi
Communications Stream				
		Level 1		
		ECE431	Signal Detection and Estimation Theory	3-1-0-4
		EC5.205	Introduction to Coding Theory	3-1-0-2
		Level 2		
			Applied Electromagnetics	3-1-0-4
		ECE537	Topics in Coding Theory	3-1-0-4
				Prasad Krishnan
VLSI and Embedded Systems Stream				
		Level 1		
			Design Verification and System Verilog	3-1-0-4
		ECE463	Digital VLSI Design	3-1-0-4
		Level 2		
			Applied Electromagnetics	3-1-0-4
		ECE562	Flexible Electronics	3-1-0-4
				Aftab Hussain
Robotics Stream				
		Level 1		
			Robotics: Planning and Navigation	3-1-0-4
			Intro to UAV Design	3-1-0-4
		Level 2		
		CSE578	Computer Vision	3-1-0-4
		CSE471	Statistical Methods in AI	3-1-0-4
		ECE551	Advances in Robotics & Control	3-1-0-4
				Spandan Roy
Electives for PG CASE Students				
		CES442	Disaster Management	3-1-0-4
				Sunitha P

			Advanced Structural Analysis	3-1-0-4	Pravin Kumar Venkat Rao
		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 Kumar 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					
			Nonlinear Dynamics	3-1-0-4	Vinod PK
		SCI761	Topics in Nanosciences	3-1-0-4	Tapan Kumar Sau
Bouquet Courses					
Foundation Courses - Registration Limit: 200					

		CSE481	Optimization Methods	3-1-0-4	Jawahar CV
			Adv. Algorithms	3-1-0-4	Kishore Kothapalli
Systems Courses - Registration Limit: 200					
		CSE441	Database Systems	3-1-0-4	Krishna Reddy
		CSE461	Software Engineering	3-1-0-4	Raghu Reddy
		CSE431	Distributed Systems (Max:100) Prerequisite: Operating Systems. Networks desirable	3-1-0-4	Lini Thomas
AI Courses					
		CSE471	Statistical Methods in AI	3-1-0-4	Vineet Gandhi
			Computer Vision	3-1-0-4	Anoop Namboodiri
CSE/Open Electives					
		CSE538	System and Network Security	3-1-0-4	Ashok Kumar Das
		CSE595	ICTs for Development (Free Elective)	3-1-0-4	Nimmi Rangaswamy
		CSE581	Information Security Audit and Assurance	3-1-0-4	Shatrunjay Rawat
		CS4.501	Social Computing	3-1-0-4	Vasudeva Varma
		CSE578	Computer Vision	3-1-0-4	Anoop Namboodiri
		CSE498	Introduction to Game Theory	3-1-0-4	Sujit Gujar
		CSE563	Internals of Application Servers	3-1-0-4	Ramesh Loganathan
		CSE586	Cognitive Neuroscience	3-1-0-4	Kavita Vemuri
		CSE588	Music, Mind, and Technology (30)	3-1-0-4	Vinoo Alluri
		CSE567	Usability Engineering	3-1-0-4	Priyanka Srivastava
		CS7.601	Deep Learning: Theory and Practices (Max:80)	3-1-0-4	Naresh Manwani
			Distributed Data Systems	3-1-1-4	Kamal Karlapalem
			Advanced Optimization: Theory and Applications	3-1-0-4	Pawan Kumar
			Behavioral Research: Statistical Methods	3-1-0-4	Bapi Raju S + Vinoo Alluri
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
			Green Buildings (40)	3-1-0-4	Vishal Garg
Math Electives (Random selection) Maximum no. of students for the following courses is: 50 each					
		IMA303	Differential Equations	3-1-0-4	Lakshmi Burra
		IMA409	Multivariate Analysis	3-1-0-4	Venkateshwarlu M
			Linear partial differential equations and variational calculus	3-1-0-4	Samyadeb Bhattacharya
Science Electives (Random selection) Max. no of students for each course is given in the brackets					

			Molecular Modeling and Simulations (20)	3-1-0-4	Deva Priyakumar
			Nonlinear Dynamics	3-1-0-4	Vinod PK
			Introduction to Particle Physics	3-1-0-4	Subhadip Mitra
		SCI761	Topics in Nanosciences (25)	3-1-0-4	Tapan Kumar Sau
			Advanced Bioinformatics	3-1-0-4	Nita Parekh
		SCI477	Machine Learning for Natural Sciences (10)	3-1-0-4	Nita Parekh + Girish Varma + Prabhakar B
		SC2.301	Physics of Soft Condensed Matter (40)	3-1-0-4	Marimuthu Krishnan
Humanities Electives for UG3 and UG4 (Random selection) Max. no of students for each course is 40					
		HSS482	Digital Humanities Project	0-0-8-4	CEH Faculty (Register with faculty consent only)
		HSS317	Ethics	3-1-0-4	Don Dcruz
		CSE595	ICTs for Development	3-1-0-4	Nimmi Rangaswamy
			Readings in Indian Literatures	3-1-0-4	Sushmita Banerjee
		HSS337	Comprehension of Indian Music	3-1-0-4	TK Saroja
		HS3.301	Alternate Religious Traditions in Indian History	3-1-0-4	Nilam Kakati + Aniket Alam
			Introduction to Philosophy of Technology	3-1-0-4	Ashwin Jayanthi
			Literature, History and Belonging in Hyderabad	3-1-0-4	Nazia Akhter
		HSS445	Literature –American Classics	3-1-0-4	Aruna Chaluvadi
			Science, Technology and Society (15)	3-1-0-4	Radhika Krishnan

Date: 4.12.2020

**Sd/-
Dean (Academics)**

**Sd/-
Director**