

B.Tech IV year II Semester – BSD:				
Pr	CE		CE Elective	3-1-0-4
Pr	CE		Stream Elective	3-1-0-4
Pr	CE		CE-Honours Project-4	3-1-0-4
In	MA		Mathematics Elective	3-1-0-4
In	HS		Humanities Elective	3-1-0-4
			Total 15-5-8-24	

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/ /PG-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 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	Sanchari Sircar, PhD Scholar
			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	Sanchari Sircar, PhD Scholar
		SCI433 /SCI 633	Modeling and Simulations	3-1-0-4	Deva Priyakumar
		SCI765	Introduction to Systems Biology	3-1-0-4	Vinod Palakkad
			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 Palakkad
		SCI765	Introduction to Systems Biology	3-1-0-4	Vinod Palakkad
		SCI764	Computational Biology Project / Elective	0-0-8-4	
			Domain/IT elective	3-1-0-4	
			Total 12-3-2-16		
MS by Research II Year II Semester - Computational Linguistics					
			MS Thesis	12 Cr	
MPhil / PhD I Year II Semester - Computational Linguistics					
		CLG612	Basic Mathematics-2	3-1-0-4	TBD
		CLG662	Computers & Scripting-2	3-1-0-4	TBD
		CLG422	Computational Linguistics 2	3-1-0-4	Soma Paul
			Total 9-3-0-12		
MPhil / PhD II Year II Semester - Computational Linguistics					
			MPhil Thesis	12 Cr	

Electives

		CNO	CName	Credits	Faculty Name(s)
Electives for BSD Students					
		CES442	Disaster Management	3-1-0-4	Sunitha P
		CEA621	Finite Element Methods	3-1-0-4	Venkateswarlu M
		CEF631	Foundation Engineering & Design	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
		CSE471	Statistical Methods in AI	3-1-0-4	Naresh Manwani
Electives for CND Students					
		SCI653	NGS Data Analysis	3-1-0-4	Nita Parekh
		SCI640	Intro to Nanobiotechnology	3-1-0-4	Tapan Kumar Sau
		SCI765	Introduction to Systems Biology	3-1-0-4	Vinod Palakkad
			Material Science & Engineering	3-1-0-4	N V Suresh Kumar
Electives for CLD Students					
		CSE974	Topics in Information Retrieval	3-1-0-4	Manish Shrivastava
		CLG423	Topics in Discourse Analysis	3-1-0-4	Radhika M
		ECE446	Speech Systems	3-1-0-4	Suryakanth VG
Electives for CHD Students					
		HSS423	CTR-II: Greek Thought	3-1-0-4	Navjyoti Singh
		HSS424	CTR-IV: Research Specific	3-1-0-4	CEH Faculty
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	Sachin Chaudhari
Page 7 of 10		ECE446	Speech Systems	3-1-0-4	Suryakanth VG

		Level 2			
		CSE578	Computer Vision	3-1-0-4	Anoop Namboodiri
		CSE471	Statistical Methods in AI	3-1-0-4	Naresh Manwani
		Communications Stream			
		Level 1			
		ECE431	Signal Detection and Estimation Theory	3-1-0-4	Sachin Chaudhari
		ECE439	Error Correcting Codes	3-1-0-4	Prasad Krishnan
		Level 2			
		ECE535	Radar Systems	3-1-0-4	KR Sarma
		VLSI and Embedded Systems Stream			
		Level 1			
		ECE465	VLSI Architectures	3-1-0-4	Govind Krishnan
		Level 2			
		ECE566	Photonics	3-1-0-4	Syed Azeemuddin + KR Sarma
		Robotics Stream			
		Level 1			
		ECE452	Intro to Robotics: Mechanics & Control	3-1-0-4	Abhishek Sarkar
		Level 2			
		CSE578	Computer Vision	3-1-0-4	Anoop Namboodiri
		CSE471	Statistical Methods in AI	3-1-0-4	Naresh Manwani
		ECE551	Advances in Robotics & Control	3-1-0-4	Madhava Krishna + Abhishek Sarkar
		Electives for PG CASE Students			
		CEA621	Finite Element Methods	3-1-0-4	Venkateswarlu M
		CEF631	Foundation Engineering & Design	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
		CES771	CASE Project	4 credits	
		Electives for PG Bioinformatics Students			
		SCI653	NGS Data Analysis	3-1-0-4	Nita Parekh
		SCI640	Intro to Nanobiotechnology	3-1-0-4	Tapan Kumar Sau
		Bouquet Courses			
<p>Note for UG 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 two must be from the foundations and at least two 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			
		CSE471	Statistical Methods in AI	3-1-0-4	Naresh Manwani
		CSE418	Principles of Information Security	3-1-0-4	Srinathan Kannan
		CSE481	Optimization Methods	3-1-0-4	Sujit Gujar
		Systems Courses			
		CSE441	Database Systems	3-1-0-4	Vikram Pudi
		CSE461	Software Engineering	3-1-0-4	Vasudeva Varma
		CSE431	Distributed Systems Prerequisite: Operating Systems. Networks desirable	3-1-0-4	K Kishore + Suresh Purini

CSE/Open Electives					
		CSE974	Topics in Information Retrieval	3-1-0-4	Manish Shrivastava
		CLG423	Topics in Discourse Analysis	3-1-0-4	Radhika M
		ECE446	Speech Systems	3-1-0-4	Suryakanth VG
		CSE593	Advanced Topics in Game Theory	3-1-0-4	Ganesh Iyer
		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
		CLG422	Computational Linguistics 2	3-1-0-4	Soma Paul
		CSE541	Advances in Database Systems	3-1-0-4	P K Reddy
		CSE503	Concurrent Data Structures	3-1-0-4	R.Govindarajulu
		CSE563	Internals of Application Servers	3-1-0-4	Ramesh Loganathan
		CSE586	Cognitive Neuroscience	3-1-0-4	Kavita Vemuri
		TS17005	Intro to Parallel Scientific Computing	3-1-0-4	Pawan Kumar
			ICTs for Development	3-1-0-4	Nimmi Rangaswamy
			Distributing Trust & Blockchains	3-1-0-4	Sujit P Gujar
			Music, Mind, and Technology	3-1-0-4	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
			New Elective	3-1-0-4	To be Announced
Math Electives (Random selection) Maximum no. of students for the following courses is: 50 each)					
		IMA304	Linear Algebra	3-1-0-4	Indranil Chakrabarthy
		IMA301	Functional Analysis	3-1-0-4	Lakshmi Burra
		IMA307	Mathematical Methods	3-1-0-4	Subhadip Mitra
Science Electives (Random selection) Max. no of students for each course is given in the brackets					
		SCI341	General & Structural Chemistry (100) (a) First-come-first serve registration (b) 4th year students get preference (c) interview, in case of over-subscription.	3-1-0-4	Abhijit Mitra
		SCI372	Science Lab II (5-10) Selection through interview by the faculty	0-1-4-4	Tapan Kumar Sau + Prabhakar B
		SCI347	Select topics in Physical Chemistry (20)	3-1-0-4	Harjinder Singh
		SCI433/ SCI633	Modeling and Simulations (20)	3-1-0-4	Deva Priyakumar
		SCI640	Intro to Nanobiotechnology (30)	3-1-0-4	Tapan Kumar Sau
		SCI765	Introduction to Systems Biology (30)	3-1-0-4	Vinod Palakkad
		SCI346	Organic Chemistry (50)	3-1-0-4	Abhijit Mitra
			Material Science & Engineering (30)	3-1-0-4	N V Suresh Kumar
			Gravity & Gravitational Waves (30)	3-1-0-4	C Mukku

Humanities Electives for UG3 and UG4 (Random selection) Max. no of students for each course is 40

		HSS481 /HSS482	Digital Humanities Project Note: Students can register with faculty consent only	2/4 Cr	CEH Faculty
		LAN318	Readings from Hindi Literature	3-1-0-4	Harjinder Singh
		HSS361	Human Rights	3-1-0-4	Nanda Kishore Acharya
		TS17001	Critical Thinking	3-1-0-4	Jolly Thomas
		TS17004	The State in Colonial India	3-1-0-4	Aniket Alam
		TS17003	Literature –American Classics	3-1-0-4	Aruna Chaluvadi
		HSS337	Comprehension of Indian Music	3-1-0-4	TK Saroja
			ICTs for Development	3-1-0-4	Nimmi Rangaswamy
			Environment & Politics in India	3-1-0-4	Radhika Krishnan
			Woman & Politics in India	3-1-0-4	Sinjini Bhattacharya

Sd/-**Sd/-**

Date: 30.11.2017	Dean (Academics)		Director
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