

## Course offerings in 2019-20 Semester II (Spring)

Version-3 (10.12.2019)

### UG Programmes

CD	AD	CNO	CName	Credits	Faculty Name(s)
<b>B.Tech I year II Semester - CSE&amp;CSD</b>					
In	CS	CS6.201	Introduction to Software Systems (H1)	1-0-3-2	Raghu Reddy
In	CS	CS1.201	Data Structures and Algorithms	3-1-3-5	Anoop + Ravikiran S
In	CS	CS2.201	Computer Systems Organization	3-1-0-4	Avinash Sharma
In	EC		Introduction to IoT	1-0-3-3	Deepak Gangadharan
In	MA	MA2.101	Linear Algebra	3-1-0-4	Prasad Krishnan & Indranil
In	OT	OC2.102	Arts-2	2-0-0-2	CEH Lecturers
In	OT	OC1.102	Sports-2	0-2-0-1	Physical Education Centre
			<b>Total 14-5-9-21</b>		
<b>B.Tech I year II Semester - ECE &amp; ECD</b>					
In	EC	EC2.103	Analog Electronic Circuits	3-1-3-5	Zia Abbas + Spandan Roy (Lab)
In	CS	CS1.201	Data Structures and Algorithms	3-1-3-5	Anoop + Ravikiran S
In	MA	MA2.101	Linear Algebra	3-1-0-4	Prasad Krishnan & Indranil
In	EC	EC5.102	Information and Communication	3-1-0-4	Lalitha V
In	OT	OC2.102	Arts-2	2-0-0-2	CEH Lecturers
In	OT	OC1.102	Sports-2	0-2-0-1	Physical Education Centre
			<b>Total 14-6-6-21</b>		
<b>B.Tech I year II Semester – CND</b>					
In	CS	CS6.201	Introduction to Software Systems (H1)	1-0-3-2	Raghu Reddy
In	CS	CS1.201	Data Structures and Algorithms	3-1-3-5	Anoop + Ravikiran S
In	MA	MA2.101	Linear Algebra	3-1-0-4	Prasad Krishnan & Indranil
In	CNS	SC4.111	Computing in Sciences II (H2)	3-1-0-2	Prabhakar B
PR	CNS	SC1.102	Classical Mechanics (H1)	3-1-0-2	Subhadip Mitra
PR	CNS	SC1.101	Electrodynamics (H2)	3-1-0-2	Subhadip Mitra
In	CNS	SC2.101	General and Structural Chemistry	3-1-0-4	Tapan Kumar Sau
In	OT	OC2.102	Arts-2	2-0-0-2	CEH Lecturers
In	OT	OC1.102	Sports-2	0-2-0-1	Physical Education Centre
			<b>Total 18-8-6-24</b>		
<b>B.Tech I year II Semester – CLD</b>					
In	MA	MA2.101	Linear Algebra	3-1-0-4	Prasad Krishnan & Indranil
In	CS	CS6.201	Introduction to Software Systems (H1)	1-0-3-2	Raghu Reddy
In	CS	CS1.201	Data Structures and Algorithms	3-1-3-5	Anoop + Ravikiran S
In	CS	CS2.201	Computer Systems Organization	3-1-0-4	Avinash Sharma
In	CL	CL1.102	Introduction to Linguistics II	3-1-0-4	Aditi Mukherjee
In	CL	CL3.101	Computational Linguistics 1	3-1-0-4	Radhika M
In	OT	OC2.102	Arts-2	2-0-0-2	CEH Lecturers
In	OT	OC1.102	Sports-2	0-2-0-1	Physical Education Centre
			<b>Total 18-7-6-26</b>		
<b>B.Tech I year II Semester – CHD</b>					
In	MA	MA3.101	Linear Algebra	3-1-0-4	Prasad Krishnan & Indranil
In	CS	CS6.201	Introduction to Software Systems (H1)	1-0-3-2	Raghu Reddy
In	CS	CS1.201	Data Structures and Algorithms	3-1-3-5	Anoop + Ravikiran S
In	HS	CL1.102	Making of the Contemporary India	3-1-0-4	Aniket Alam + Radhika Krishnan
In	HS	CL3.101	Thinking and Knowing in the Human Sciences-I	3-1-0-4	Sushmita Banerji + <b>TBD</b>
In	OT	OC2.102	Arts-2	2-0-0-2	CEH Lecturers
In	OT	OC1.102	Sports-2	0-2-0-1	Physical Education Centre
			<b>Total 15-6-6-22</b>		

**B.Tech II year II Semester – CSE&CSD & LCD2K19**

In	EG	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		Intro to Human Sciences	3-1-0-4	Nimmi Rangaswamy (Coordinator)
Pr	CS		Science II	3-1-0-4	Subhadip Mitra + Nita Parekh
Pr	CS		Theory/Foundation Breadth Elective-1	3-1-0-2	<b>Choose the courses from the list given below</b>
In	EC		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	Dipti M Sharma (Coordinator)
In	CS	OC1.104	Sports-4	0-2-0-1	Physical Education Centre
			<b>Total 21-11-0-25</b>		

**Theory/Foundations Courses**

			Program Verification (H2)	3-1-0-2	Venkatesh Choppella
			Introduction to Information Security (H1)	3-1-0-2	Ashok Kumar Das + Kannan Srinathan
			Introduction to Quantum Information and Computation (H2)	1-1-0-2	Indranil Chakrabarthy

**Systems/Applications Courses**

			Software Programming for Performance (H1)	3-1-0-2	Rahul Jain, CIE
			Digital Signal Analysis (H1)	3-1-0-2	Anil Kumar V
			Data Visualisation (H2)	2-0-1-2	Kamal Karlapalem
			Introduction to Brain and Cognition (H2)	3-1-0-2	Bapi Raju S + Kavita Vemuri

**B.Tech II year II Semester ECE & ECD & LED2K19:**

Pr	EC		Communication Theory	3-1-0-4	Sachin Chaudhari
Pr	EC	EC2.201	Electronics Workshop II	0-1-3-4	Zia Abbas + Madhava Krishna
Pr	EC	EC6.202	Intro to Processor Architecture (H1)	3-1-0-2	Suresh Purini
In	HS		Intro to Human Sciences	3-1-0-4	Nimmi Rangaswamy (Coordinator)
Pr	EC		Stream Foundation-1	3-1-0-4	<b>Choose course(s) from the list given below.</b>
In	HS	OC3.102	Value Education II	0-2-0-2	Dipti M Sharma (Coordinator)
In	CS	OC1.104	Sports-4	0-2-0-1	Physical Education Centre
			<b>Total 12-9-3-21</b>		

**Electives for UG2 ECE/ECD/LED Students**

			Intro to Bio Electronics (H2)	3-1-0-2	Syed + Prabhakar
			Communicaton and Controls in IoT (H1)	3-1-0-2	Sachin Chaudhari + Aftab
			Introduction to Coding Theory	3-1-0-4	Prasad Krishnan

**B.Tech II year II Semester CND**

In	CS	CS2.201	Computer Systems Organization	3-1-0-4	Avinash Sharma
Pr	CS	CS7.301	Machine, Data and Learning	3-1-0-4	Praveen P
In	EG	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 (H2)	3-1-0-2	Deva Priyakumar
Pr	CNS	SC2.202	Organic Chemistry (H1)	3-1-0-2	Prabhakar B
Pr	CNS	SC4.111	Science Lab II	0-0-3-2	Prabhakar B+Tapan Kumar Sau
In	HS	OC3.102	Value Education II	0-2-0-2	Dipti M Sharma (Coordinator)
In	CS	OC1.104	Sports-4	0-2-0-1	Physical Education Centre
			<b>Total 15-9-3-25</b>		

**B.Tech II year II Semester CLD**

Pr	CL	CL1.204	Language Typology and Universals	3-1-0-4	Radhika M + Manish Shrivastava
PR	CL		Introduction to NLP	3-1-0-4	Manish Shrivastava
Pr	CS		Digital Signal Analysis (H1)	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		Introduction to Human Sciences	3-1-0-4	Nimmi Rangaswamy (Coordinator)
In	HS	OC3.102	Value Education II	0-2-0-2	Dipti M Sharma (Coordinator)
In	CS	OC1.104	Sports-4	0-2-0-1	Physical Education Centre
			<b>Total 18-9-0-25</b>		

#### Lateral Entry II year II Semester – LCD

		CSE492	Honours Project II	0-0-8-4	
Pr	CS		Bouquet Core	3-1-0-4	
Pr	CS		Bouquet Core	3-1-0-4	
OT	[+]		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	
			<b>Total 15-5-8-24</b>		

#### Lateral Entry II year II Semester – LED

OT	[+]		Science/Maths/Humanities/Engg	3-1-0-4	
Pr	EC	ECE337	Communication Networks*	3-1-0-4	Ubaidulla
Pr	EC	ISC202	Science II	3-1-0-4	Marimuthu Krishnan
OT	EC		ECE Elective	3-1-0-4	
In	EC	ECE492	ECE-Honours Project II	0-0-8-4	
OT	EC		ECE Stream Elective	3-1-0-4	
			<b>Total 15-5-8-24</b>		

#### B.Tech III year II Semester – CSE:

In	CS	CSE496/ CSE492	BTP I / CSE-Honours Project 2	0-0-8-4	
Pr	CS		Bouquet Core	3-1-0-4	
OT	[+]	ISC202	Science II	3-1-0-4	Marimuthu Krishnan
OT	[+]		Science/Maths/Humanities/Engg	3-1-0-4	
OT	[+]		Elective (CS / Free)	3-1-0-4	
			<b>Total 12-4-0-20/24</b>		

#### B.Tech III year II Semester – CSD:

Pr	CS		Bouquet Core	3-1-0-4	
OT	[+]	ISC202	Science II	3-1-0-4	Marimuthu Krishnan
OT	[+]		Science/Maths/Humanities/Engg	3-1-0-4	
OT	[+]		Elective (CS / Free)	3-1-0-4	
			Research Stream Course	3-1-0-4	
		CSE492	Honours Project II	0-0-8-4	
			<b>Total 15-5-8-24</b>		

#### B.Tech III year II Semester – ECE:

OT	[+]		Science/Maths/Humanities	3-1-0-4	
Pr	EC	ECE337	Communication Networks*	3-1-0-4	Ubaidulla
Pr	EC	ISC202	Science II	3-1-0-4	Marimuthu Krishnan
OT	CS		ECE Elective	3-1-0-4	
In	EC	ECE496	BTP-I/ECE-Honours Project I	0-0-8-4	
			<b>Total 15-5-0-20</b>		

#### B.Tech III year II Semester – ECD:

OT	[+]		Science/Maths/Humanities/Engg	3-1-0-4	
Pr	EC	ECE337	Communication Networks*	3-1-0-4	Ubaidulla
Pr	EC	ISC202	Science II	3-1-0-4	Marimuthu Krishnan

OT	EC		ECE Elective	3-1-0-4	
In	EC	ECE492	ECE-Honours Project II	0-0-8-4	
OT	EC		ECE Stream Elective	3-1-0-4	
			<b>Total 15-5-8-24</b>		
<b>B.Tech III year II Semester – CND</b>					
Pr	CS	CSE481	Optimization Methods	3-1-0-4	CV Jawahar
Pr	CS		Bouquet Core	3-1-0-4	
Pr	CNS	SC2.202	Organic Chemistry ( <b>Attend with UG2 for H1</b> )	3-1-0-4	Prabhakar B
Pr	CNS	CSE492	CSE-Honours Project II	0-0-8-4	
Pr	CNS		CNS Elective	3-1-0-4	
Pr	CS		CS Elective	3-1-0-4	
			CCNSB Seminar	0 Cr.	Vinod Palakkad (Coordinator)
			<b>Total 15-5-8-24</b>		
<b>B.Tech III year II Semester – CLD:</b>					
			Humanities Elective	3-0-0-4	
Pr	CS		Bouquet Core	3-1-0-4	
Pr			CL-Elective	3-1-0-4	
Pr	CS	CSE573	NLP Applications	3-1-0-4	Manish Shrivastava
Pr	CS		CS Elective	3-1-0-4	
In	CS	CSE492	CSE-Honours Project II	0-0-8-4	
			<b>Total 18-5-0-24</b>		
<b>Lateral Entry III year II semester - LCD:</b>					
Pr	CS		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	
			<b>Total 15-5-8-24</b>		
<b>B.Tech IV year II semester – CSE:</b>					
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	
			<b>Total 15-5-0-20</b>		
<b>B.Tech IV year II semester - CSD:</b>					
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	
			<b>Total 15-5-8-24</b>		
<b>B.Tech IV year II Semester – ECE:</b>					
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	
			<b>Total 15-5-0-20</b>		
<b>B.Tech IV year II Semester – ECD: (Lateral Entry-III year II Semester-LED)</b>					

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	
			<b>Total 15-5-8-24</b>		

#### 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	Vinod Palakkad (Coordinator)
			<b>Total 15-5-8-24</b>		

#### 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	CSE391	Semester Project (4Cr)	0-0-8-4	
			<b>Total 12-4-8-20</b>		

#### 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	
			<b>Total 15-5-8-24</b>		

### PG Programmes

CD	AD	CNO	CName	Credits	Faculty Name(s)
<b>M.Tech I year II Semester - CSE</b>					
			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	
			<b>Total 12-4-0-16</b>		
<b>M.Tech II year II Semester – CSE</b>					
			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	
			<b>Total 12-4-0-16 / 6-2-16-16</b>		
<b>M.Tech I year II Semester – CSIS</b>					
		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	
			<b>Total 12-4-0-16</b>		
<b>M.Tech II year II Semester – CSIS</b>					

		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	
			<b>Total 6-2-16-16</b>		
<b>M.Tech I Year II Semester – CASE</b>					
		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	
			<b>Total 12-4-3-16</b>		
<b>M.Tech II Year II Semester – CASE</b>					
			Elective	3-1-0-4	
			Elective	3-1-0-4	
			Elective	3-1-0-4	
			Elective	3-1-0-4	
			<b>Total 12-4-0-16</b>		
<b>M.Tech I Year II Semester - Bioinformatics</b>					
		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	
			<b>Total 12-4-0-16</b>		
<b>M.Tech II Year II Semester – Bioinformatics</b>					
		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	
			<b>Total 6-2-8-12</b>		
<b>Electives</b>					
		<b>CNO</b>	<b>CName</b>	<b>Credits</b>	<b>Faculty Name(s)</b>
<b>Electives for BSD Students</b>					
		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
<b>Electives for CND Students</b>					
		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
<b>Electives for CLD Students</b>					
		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
<b>ECE Electives (Also applicable as CSE/Open Electives)</b>					
<b>Note for UG ECE/ECD Students: Please read carefully the guidelines for choosing of ECE Electives before registering.</b>					

	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><b>Note for UG3/UG4 CSE/CSD students:</b> 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 <b>3</b> courses each from <b>5</b> in Foundations and <b>5</b> in Systems Bouquet Courses during their entire B.Tech Programme.</p> <p><b>Note for M.Tech CSE Students:</b> 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
	<b>Systems Courses - Registration Limit: 200</b>				
		CSE441	Database Systems	3-1-0-4	Krishna Reddy P
		CSE461	Software Engineering	3-1-0-4	Vasudeva Varma + Prakash Yalla
		CSE431	Distributed Systems ( <b>Max:100</b> ) <b>Prerequisite: Operating Systems. Networks desirable</b>	3-1-0-4	Lini Thomas
	<b>CSE/Open Electives</b>				
		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 ( <b>Free Elective</b> )	3-1-0-4	Nimmi Rangaswamy
			Probabilistic Graphical Models ( <b>Free Elective</b> )	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
			Social Computing	3-1-0-4	Vasudeva Varma
			Deep Learning: Theory and Practices ( <b>Max:80</b> )	3-1-0-4	Naresh Manwani
	<b>Engineering Electives (Random Selection) Max. no of students for each course is given in the brackets</b>				
		CES442	Disaster Management ( <b>40</b> )	3-1-0-4	Sunitha P
		CEG461	Remote Sensing ( <b>40</b> )	3-1-0-4	RC Prasad
		CEG462	Hydro Informatics ( <b>40</b> )	3-1-0-4	Shaik Rehana
	<b>Math Electives (Random selection) Maximum no. of students for the following courses is: 50 each)</b>				
		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
	<b>Science Electives (Random selection) Max. no of students for each course is given in the brackets</b>				
		SCI341	General & Structural Chemistry ( <b>35</b> )	3-1-0-4	Tapan Kumar Sau
		SCI433/ SCI633	Modeling and Simulations ( <b>20</b> )	3-1-0-4	Prabhakar B + Deva Priyakumar
		SCI761	Topics in Nanosciences ( <b>25</b> )	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
	<b>Humanities Electives for UG3 and UG4 (Random selection) Max. no of students for each course is 40</b>				
		HSS482	Digital Humanities Project <b>Note: Register with faculty consent only</b>	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

**Date: 22.11.2019**

**Sd/-  
Dean (Academics)**