Course offerings in 2024-25 Semester II (Spring) - Version-5(30 Dec)

UG Programmes

CD	AD	Course No	Ccourse Name	Credits L-T-P-C	Faculty Name(s)
B.Tech I year II Semester - CSE&CSD					
In	CS	CS6.201	Introduction to Software Systems **(H)**	1-0-3-2	Sai Anirudh Karre
In	CS	CS1.201	Data Structures and Algorithms	3-1-3-5	Lini Thomas + Kshitij Gajjar
In	CS	CS2.201	Computer Systems Organization	3-1-0-4	Praveen Paruchuri + Deepak Gangadharan
In	EC	CS3.303	Introduction to IoT	1-0-3-3	Kavitha Vemuri + Suresh Purini
In	MA	MA2.101	Linear Algebra	3-1-0-4	Siddhartha Das + Indranil Chakrabarty
In	HS	OC2.102	Arts-2 **(H1&H2)**	2-0-0-2	Saroja TK (Coordinator)
In	HS	OC1.102	Sports-2	0-2-0-1	Physical Education Centre
			Total 14-5-9-21		
B.Tech I year II Semester - ECE & ECD					
In	EC	EC2.103	Analog Electronic Circuits	3-1-3-5	Zia Abbas
In	CS	CS1.201	Data Structures and Algorithms	3-1-3-5	Lini Thomas + Kshitij Gajjar
In	MA	MA2.101	Linear Algebra	3-1-0-4	Siddhartha Das + Indranil Chakrabarty
In	EC	EC5.102	Information and Communication	3-1-0-4	Arti Yardi + Lalitha Vadlamani
In	HS	OC2.102	Arts-2 **(H1&H2)**	2-0-0-2	Saroja TK (Coordinator)
In	HS	OC1.102	Sports-2	0-2-0-1	Physical Education Centre
			Total 14-6-6-21		
B.Tech I year II Semester – CND					
In	CS	CS6.201	Introduction to Software Systems **(H)**	1-0-3-2	Sai Anirudh Karre
In	CS	CS1.201	Data Structures and Algorithms	3-1-3-5	Lini Thomas + Kshitij Gajjar
In	MA	MA2.101	Linear Algebra	3-1-0-4	Siddhartha Das + Indranil Chakrabarty
In	CNS	SC4.102	Computing in Sciences II **(H2)**	3-1-0-2	Prabhakar B
PR	CNS	SC1.102	Classical Mechanics **(H1)**	3-1-0-2	Diganta Das
PR	CNS	SC1.101	Electrodynamics **(H2)**	3-1-0-2	Diganta Das
In	CNS	SC2.101	General and Structural Chemistry	3-1-0-4	Tapan Kumar Sau
In	HS	OC2.102	Arts-2 **(H1&H2)**	2-0-0-2	Saroja TK (Coordinator)
In	HS	OC1.102	Sports-2	0-2-0-1	Physical Education Centre
			Total 18-8-6-24		
B.Tech I year II Semester – CLD					
In	MA	MA2.101	Linear Algebra	3-1-0-4	Siddhartha Das + Indranil Chakrabarty

In	CS	CS6.201	Introduction to Software Systems (H)	1-0-3-2	Sai Anirudh Karre
In	CS	CS1.201	Data Structures and Algorithms	3-1-3-5	Lini Thomas + Kshitij Gajjar
In	CS	CS2.201	Computer Systems Organization	3-1-0-4	Praveen Paruchuri + Deepak Gangadharan
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	Parameswari Krishnamurthy
In	HS	OC2.102	Arts-2 (H1&H2)	2-0-0-2	Saroja TK (Coordinator)
In	HS	OC1.102	Sports-2	0-2-0-1	Physical Education Centre
			Total 18-7-6-26		

B.Tech I year II Semester – CHD

In	MA	MA2.101	Linear Algebra	3-1-0-4	Siddhartha Das + Indranil Chakrabarty
In	CS	CS6.201	Introduction to Software Systems (H)	1-0-3-2	Sai Anirudh Karre
In	CS	CS1.201	Data Structures and Algorithms	3-1-3-5	Lini Thomas + Kshitij Gajjar
In	HS	HS8.101	Making of Contemporary World	3-1-0-4	Anirban Dasgupta + Isha Dubey
In	HS	HS0.201	Thinking and Knowing in the Human Sciences-I	3-1-0-4	Saurabh Todariya + Subha Chakraburtty
In	HS	OC2.102	Arts-2 (H1&H2)	2-0-0-2	Saroja TK (Coordinator)
In	HS	OC1.102	Sports-2	0-2-0-1	Physical Education Centre
			Total 15-6-6-22		

B.Tech I year II Semester – CGD

In	MA	MA2.101	Linear Algebra	3-1-0-4	Siddhartha Das + Indranil Chakrabarty
In	EC	CS3.303	Introduction to IoT	1-0-3-3	Kavitha Vemuri + Suresh Purini
In	CS	CS6.201	Introduction to Software Systems (H)	1-0-3-2	Sai Anirudh Karre
In	CS	CS1.201	Data Structures and Algorithms	3-1-3-5	Lini Thomas + Kshitij Gajjar
In	CS	CS2.201	Computer Systems Organization	3-1-0-4	Praveen Paruchuri + Deepak Gangadharan
In	CG	GS0.301	Introduction to Spatial Sciences (H2)	3-1-0-2	RC Prasad + KS Rajan
In	HS	OC2.102	Arts-2 (H1&H2)	2-0-0-2	Saroja TK (Coordinator)
In	HS	OC1.102	Sports-2	0-2-0-1	Physical Education Centre
			Total 16-6-9-23		

B.Tech II year II Semester – CSE&CSD

In	CS	CS6.301	Design and Analysis of Software Systems	3-1-0-4	Raghu Reddy
Pr	CS	CS7.301	Machine, Data and Learning	3-1-0-4	Praveen Paruchuri + Sujit Gujar
In	HS	HS8.102	Intro to Human Sciences	3-1-0-4	Aakansha Natani + Ashwin Jayanti (with 4 other HSRC faculty)
Pr	SC	SC1.111	Science II	3-1-0-4	Nita Parekh + Chittaranjan Hens
Pr	CS		Breadth Elective-1	3-1-0-2	**Required to do at least one course in each bucket (Theory/Foundation and Systems/Applications). List is below.**
In	CS		Breadth Elective-2	3-1-0-2	
In	CS		Breadth Elective-3	3-1-0-2	
In	HS	OC3.102	Value Education II (H)	0-2-0-2	Shatrunjay Rawat (Coordinator)
In	HS	OC1.104	Sports-4	0-2-0-1	Physical Education Centre
			Total 21-11-0-25		

LE-CSD-2K24 I year II Semester

In	CS	CS6.301	Design and Analysis of Software Systems	3-1-0-4	Raghu Reddy
Pr	CS	CS7.301	Machine, Data and Learning	3-1-0-4	Praveen Paruchuri + Sujit Gujar
In	HS	HS8.102	Intro to Human Sciences	3-1-0-4	Aakansha Natani + Ashwin Jayanti (with 4 other HSRC faculty)

Pr	CS		Breadth Elective-1	3-1-0-2	**Required to do at least one course in each bucket (Theory/Foundation and Systems/Applications). List is below.**
In	CS		Breadth Elective-2	3-1-0-2	
In	CS		Breadth Elective-3	3-1-0-2	
Pr	OT		Open Elective-1	3-1-0-4	
In	HS	OC3.102	Value Education II **(H)**	0-2-0-2	Shatrunjay Rawat (Coordinator)
In	HS	OC1.102	Sports-2	0-2-0-1	Physical Education Centre
			Total 21-11-0-25		

Theory/Foundations Courses - Limit is 90 per course

		CS8.301	Introduction to Information Security **(H1)**	3-1-0-2	Ankit Gangwal
		EC5.205	Introduction to Coding Theory **(H1)**	3-1-0-2	Lalitha Vadlamani
		CS1.305	Introduction to Algorithms Engineering**(H2)**	3-1-0-2	Kishore Kothapalli
		CS9.312	Introduction to Quantum Information and Computation **(H1)**	3-1-0-2	Uttam Singh
		CS1.306	Numerical Algorithms **(H2)**	3-1-0-2	Pawan Kumar

Systems/Applications Courses - Limit is 90 per course

		CS7.303	Digital Signal Analysis **(H1)**	3-1-0-2	Anil Kumar Vuppala
		CS4.302	Data Visualisation **(H1)** - **Max (39)**	2-0-1-2	Kamal Karlapalem
		CS9.311	Introduction to Brain and Cognition **(H2)**	3-1-0-2	Kavitha Vemuri
		CS7.302	Computer Graphics **(H2)**	3-1-0-2	P J Narayanan
		CS3.307	Performance Modeling of Computer Systems **(H1)**	3-1-0-2	Tejas Bodas
		CS3.302	Software Programming for Performance **(H2)**	3-1-0-2	Suresh Purini
		GS0.301	Introduction to Spatial Sciences **(H2)**	3-1-0-2	RC Prasad + KS Rajan

B.Tech II year II Semester ECE & ECD & LED-2K24 I year II Semester

Pr	EC	EC5.203	Communication Theory	3-1-0-4	Sachin Chaudhari
Pr	EC	EC2.202	Electronics Workshop II	0-1-3-4	Arti Yardi + Spandan Roy
Pr	EC	EC2.204	Intro to Processor Architecture **(H1)**	3-1-0-2	Deepak Gangadharan
In	HS	HS8.102	Intro to Human Sciences	3-1-0-4	Aakansha Natani + Ashwin Jayanti (with 4 other HSRC faculty)
Pr	EC		Stream Foundation-1	3-1-0-4	
In	HS	OC3.102	Value Education II **(H)**	0-2-0-2	Shatrunjay Rawat (Coordinator)
In	HS	OC1.104	Sports-4 (for LED Sports-2)	0-2-0-1	Physical Education Centre
			Total 12-9-3-21		

Electives for UG2 ECE/ECD/LED Students

		EC5.205	Introduction to Coding Theory **(H1)**	3-1-0-2	Lalitha Vadlamani
		EC5.206	Introduction to Statistical Signal Processing **(H2)**	3-1-0-2	Santosh Nannuru
		EC4.201	Mechatronics System Design-1 **(H1)**	3-1-0-2	Nagamanikandan + Harikumar K
		EC2.205	Radio Frequency Based Sensors design: Principles and Applications **(H2)**	3-1-0-2	Andleeb Zahra (Guest Faculty)

B.Tech II year II Semester CND

In	CS	CS2.201	Computer Systems Organization	3-1-0-4	Praveen Paruchuri + Deepak Gangadharan
Pr	CS	CS7.301	Machine, Data and Learning	3-1-0-4	Praveen Paruchuri + Sujit Gujar

In	CS	CS6.301	Design and Analysis of Software Systems	3-1-0-4	Raghu Reddy
Pr	SC	SC1.204	Thermodynamics **(H1)**	3-1-0-2	Harjinder Singh
Pr	SC	SC1.205	Statistical Mechanics **(H2)**	3-1-0-2	Harjinder Singh
Pr	SC	SC2.203	Biomolecular Structures **(H1)**	3-1-0-2	Deva Priyakumar
Pr	SC	SC2.202	Organic Chemistry **(H2)**	3-1-0-2	Prabhakar B
Pr	SC	SC4.111	Science Lab II **(H)**	0-0-3-2	Tapan Kumar Sau + Chittaranjan Hens
In	HS	OC3.102	Value Education II **(H)**	0-2-0-2	Shatrunjay Rawat (Coordinator)
In	HS	OC1.104	Sports-4	0-2-0-1	Physical Education Centre
			Total 15-9-3-25		

B.Tech II year II Semester CLD

In	CL	CL2.204	Language Typology and Universals	3-1-0-4	Radhika Mamidi
PR	CL	CS7.401	Introduction to NLP	3-1-0-4	Manish Shrivastava
Pr	CS	CS7.303	Digital Signal Analysis **(H1)**	3-1-0-2	Anil Kumar Vuppala
Pr	CS	CS6.301	Design and Analysis of Software Systems	3-1-0-4	Raghu Reddy
Pr	CS	CS7.301	Machine, Data and Learning	3-1-0-4	Praveen Paruchuri + Sujit Gujar
In	HS	HS8.102	Introduction to Human Sciences	3-1-0-4	Aakansha Natani + Ashwin Jayanti (with 4 other HSRC faculty)
In	HS	OC3.102	Value Education II **(H)**	0-2-0-2	Shatrunjay Rawat (Coordinator)
In	HS	OC1.104	Sports-4	0-2-0-1	Physical Education Centre
			Total 18-9-0-25		

B.Tech II year II Semester CHD

Pr	CS	CS2.201	Computer Systems Organization	3-1-0-4	Praveen Paruchuri + Deepak Gangadharan
Pr	CS	CS7.301	Machine, Data and Learning	3-1-0-4	Praveen Paruchuri + Sujit Gujar
Pr	CS	CS6.301	Design and Analysis of Software Systems	3-1-0-4	Raghu Reddy
Pr	HS	HS0.302	Research Methods in Human Sciences	3-1-0-4	Isha Dubey + Anirban Dasgupta
Pr	HS	HS7.301	Science, Technology and Society	3-1-0-4	Radhika Krishnan
Pr	HS	HS2.303	Ethnography in praxis: An investigation into Field, Scales and Theory **(H2)**	3-1-0-2	Rajorshi Ray
In	HS	OC3.102	Value Education II **(H)**	0-2-0-2	Shatrunjay Rawat (Coordinator)
In	HS	OC1.104	Sports-4	0-2-0-1	Physical Education Centre
			Total 18-10-0-25		

B.Tech III year II Semester – CSE

Pr	CS	CS9.301/CS9.303	BTP I / CSE-Honours Project 2	0-2-6-2	
Pr	CS		Bouquet Course – 2	3-1-0-4	
Pr	CS		Bouquet Course – 3	3-1-0-4	
Pr	HS		HSS Elective - 2	3-1-0-4	
Pr	OE		Open Elective - 2	3-1-0-4	
			Total 12-6-6-18		

B.Tech III year II Semester – CSD & LCD-2K23 II year II Semester

Pr	CS	CS9.303	CSE-Honours Project 2	0-2-6-2	
Pr	CS		Bouquet Course – 2	3-1-0-4	
Pr	CS		Bouquet Course – 3	3-1-0-4	
Pr	HS		HSS Elective - 2	3-1-0-4	
Pr	OE		Open Elective - 2 (3 for LCD)	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:

Pr	SC	SC1.111	Science II	3-1-0-4	Nita Parekh + Chittaranjan Hens
Pr	EC	EC9.301/EC9.303	BTP-I/ECE-Honours Project 2	0-2-6-2	
Pr	EC		Open Elective 2	3-1-0-4	
Pr	EC		Stream Elective - 2	3-1-0-4	
Pr	HS		HSS Elective - 2	3-1-0-4	
			Total 12-6-9-18		

B.Tech III year II Semester – ECD & LED-2K23 II year II Semester

Pr	SC	SC1.111	Science II	3-1-0-4	Nita Parekh + Chittaranjan Hens
Pr	EC	EC9.303	ECE-Honours Project 2	0-2-6-2	
Pr	EC		Open Elective 2	3-1-0-4	
Pr	EC		Stream Elective - 2	3-1-0-4	
Pr	EC		Stream Elective - 3	3-1-0-4	
Pr	HS		HSS Elective - 2	3-1-0-4	
			Total 15-7-9-22		

B.Tech III year II Semester – CND

Pr	SC	SC9.303	CNS-Honours Project II	0-2-6-2	
Pr	HS	HS8.102	Intro to Human Sciences	3-1-0-4	Aakansha Natani + Ashwin Jayanti (with 4 other HSRC faculty)
Pr	SC		CNS Elective-1	3-1-0-4	
Pr	SC		CNS Elective-2	3-1-0-4	
Pr	CS		CS Elective-2	3-1-0-4	
Pr	SC	SC9.600	CCNSB Seminar	0 Cr	Abhishek Deshpande
			Total 12-6-6-18		

B.Tech III year II Semester – CLD:

Pr	SC	SC1.111	Science II	3-1-0-4	Nita Parekh + Chittaranjan Hens
Pr	CL	CL9.303	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	
Pr	OE		Open Elective - 1	3-1-0-4	
Pr	HS		HSS Elective - 2	3-1-0-4	
			Total 15-7-6-22		

B.Tech III year II Semester – CHD

Pr	HS	HS9.303	HS-Honours Project 2	0-2-6-2	
Pr	SC	SC1.111	Science II	3-1-0-4	Nita Parekh + Chittaranjan Hens
Pr	CS		CS-Elective 2	3-1-0-4	
Pr	CS		CS-Elective 3	3-1-0-4	
Pr	OE		Open Elective 1	3-1-0-4	
Pr	HS		HSS Elective 3	3-1-0-4	
			Total 15-7-6-22		

B.Tech IV year II semester – CSE

Pr	CS		Bouquet Core 5	3-1-0-4	
Pr	HS		Ethics 2*	3-1-0-2	Courses list is given below.
Pr	OE		Open Elective 5	3-1-0-4	
Pr	HS		HSS Elective 3	3-1-0-4	
Pr	SC		Science Elective 2	3-1-0-4	
			Total 15-5-0-18 (2 Credits of HP4 extra for Honours Students)		

B.Tech IV year II semester - CSD and LCD-2K22 III year II semester

Pr	CS	CS9.403	CS-Honours Project 4	0-2-6-2	
Pr	CS		Bouquet Core 5	3-1-0-4	
Pr	HS		Ethics 2*	3-1-0-2	Courses list is given below.
Pr	OE		Open Elective 5	3-1-0-4	
Pr	HS		HSS Elective 3	3-1-0-4	
Pr	SC		Science Elective 2	3-1-0-4	

			Total 15-7-6-20		
B.Tech IV year II Semester – ECE					
Pr	HS		Ethics 2*	3-1-0-2	Courses list is given below.
Pr	OE		Open Elective 4	3-1-0-4	
Pr	OE		Open Elective 5	3-1-0-4	
Pr	SC		Science Elective 2	3-1-0-4	
Pr	HS		HSS Elective 3	3-1-0-4	
			Total 15-5-0-18 (2 Credits of HP4 extra for Honours Students)		
B.Tech IV year II Semester – ECD and LED-2K22 III year II Semester					
Pr	EC	EC9.403	ECE-Honours Project 4	0-2-6-2	
Pr	HS		Ethics 2*	3-1-0-2	Courses list is given below.
Pr	OE		Open Elective 4	3-1-0-4	
Pr	OE		Open Elective 5	3-1-0-4	
Pr	SC		Science Elective 2	3-1-0-4	
Pr	HS		HSS Elective 3	3-1-0-4	
Pr	EC		Stream Elective 6	3-1-0-4	
			Total 18-8-6-24		
B.Tech IV year II Semester – CND					
Pr	HS		Ethics 2*	3-1-0-2	Courses list is given below.
Pr	SC	SC9.403	CNS-Honours Project 4	0-2-6-2	
Pr	SC		CNS Elective 4	3-1-0-4	
Pr	SC		CNS Elective 5	3-1-0-4	
Pr	CS		CS Elective 5	3-1-0-4	
Pr	HS		HSS Elective 1	3-1-0-4	
Pr	SC	SC9.600	CCNSB Seminar 4	0 Cr	Abhishek Deshpande
			Total 15-7-6-20		
B.Tech IV year II Semester - CLD					
Pr	CL	CL9.403	CL-Honours Project 4	0-2-6-2	
Pr	HS		Ethics 2*	3-1-0-2	Courses list is given below
Pr	MA		Maths Elective	3-1-0-4	
Pr	CL		CL Elective 4	3-1-0-2	
Pr	CS		CS Elective 4	3-1-0-4	
Pr	OE		Open Elective 3	3-1-0-4	
			Total 15-7-6-18		
B.Tech IV year II Semester - CHD					
Pr	CL	HS9.403	HS-Honours Project 4	0-2-6-2	
Pr	HS	HS8.302	Classical Text Readings II	3-1-0-4	Radhika Krishnan (Coordinator)
Pr	HS		HSS Elective 6	3-1-0-4	
Pr	CL		Open Elective 4	3-1-0-4	
Pr	CS		CS Elective 5	3-1-0-4	
			Total 12-6-6-18		
Note to UG3 and UG4 students: Basics of Ethics will be offered in H1&H2. Students may choose either of them.					
Pr	HS	HS0.203a	Basics of Ethics **(H1)**	3-0-0-2	Yusuf Indorewala
* Ethics2 Sub Electives - Random selection based on preferences. Please note that you have to complete Basics of					
Pr	HS	HS0.220	Language and Power **(H2)**	3-0-0-2	Priya Prithiviraj
Pr	HS	HS0.217	Ethics and the Digital Society **(H1)**	3-0-0-2	Nimmi Rangaswamy
Pr	HS	HS0.219	Governance of AI: Ethics and Regulation **(H2)**	3-0-0-2	Amber Sinha
Pr	HS	HS0.218a	Ethics in Research **(H1)**	3-0-0-2	Bhaktee Dongaonkar + Vinoo Alluri + Priyanka Srivastava
Pr	HS	HS0.218b	Ethics in Research **(H2)**	3-0-0-2	Bhaktee Dongaonkar + Vinoo Alluri + Priyanka Srivastava
Pr	HS	HS0.207	Science and Technology: Critical Perspectives **(H1)**	3-0-0-2	Yusuf Indorewala

			B.Tech V year II Semester – CSD		
Pr	CS	CS9.605	Thesis	12 Cr	
In	OT	OC9.600	Institute Seminar	1 Cr	
			Total 13 credits		
			B.Tech V year II Semester – ECD		
Pr	EC	EC9.605	Thesis	12 Cr	
In	OT	OC9.600	Institute Seminar	1 Cr	
			Total 13 credits		
			B.Tech V year II Semester – CLD		
Pr	CL	CL9.605	Thesis	12 Cr	
In	OT	OC9.600	Institute Seminar	1 Cr	
			Total 13 credits		
			B.Tech V year II Semester – CND		
Pr	SC	SC9.605	Thesis	12 Cr	
Pr	OE		Open Elective 1	3-1-0-4	
Pr	SC	SC9.600	CCNSB seminar - 5	0 Cr	
			Total 3-1-0-16		
			B.Tech V year II Semester – CHD		
Pr	HS	HS9.605	Thesis	12 Cr	
In	OT	OC9.600	Institute Seminar	1 Cr	
			Total 13 credits		
			LE-CSD-2K20-IV year II Semester		
Pr	CS	CS9.605	Thesis	12 Cr	
In	OT	OC9.600	Institute Seminar	1 Cr	
			Total 13 credits		
			LE-ECD-2K20-IV year II Semester		
Pr	EC	EC9.605	Thesis	12 Cr	
In	OT	OC9.600	Institute Seminar	1 Cr	
			Total 13 credits		

PG Programmes

CD	AD	CNO	CName	Credits	Faculty Name(s)
M.Tech I year II Semester - CSE					
Pr	CS		Bouquet core	3-1-0-4	
Pr	CS		Bouquet core	3-1-0-4	
Pr	CS		Area electives	3-1-0-4	
Pr	CS		Breadth Elective/Project/Independent Study	3-1-0-4	
			Total 12-4-0-16		
M.Tech II year II Semester – CSE					
Pr	CS		Area Elective	3-1-0-4	
Pr	CS		Area Elective	3-1-0-4	
Pr	CS		Area Elective	3-1-0-4	
Pr	CS		Open Elective/Project/Independent Study	3-1-0-4	
			Total 12-4-0-16		
M.Tech I year II Semester – CSIS					
		CS8.403	System and Network Security	3-1-0-4	Ashok Kumar Das
		CS8.401	Principles of Information Security	3-1-0-4	Kannan Srinathan
			Bouquet Core	3-1-0-4	
			Bouquet/ Area/ CS/ IT Elective	3-1-0-4	
			Total 12-4-0-16		
M.Tech II year II Semester – CSIS					

		CS9.412	PG-Project	0-2-6-4	
		CS8.402	Information Security Audit and Assurance	3-1-0-4	Shatrunjay Rawat
			Bouquet Core	3-1-0-4	
			Area/ CS/ IT Elective	3-1-0-4	
			Total 9-5-6-16		

M.Tech I Year II Semester – CASE

		CS0.302	Computing Tools	3-1-3-4	Sriranjani K
			Electvie I	3-1-0-4	
			Electvie II	3-1-0-4	
			Elective III	3-1-0-4	
			Elective IV	3-1-0-4	
			Total 15-5-3-20		

M.Tech II Year II Semester – CASE

		CE9.403	CASE Project	0-2-6-12	
			Total 0-2-6-12		

M.Tech I Year II Semester – Product Design and Management - Full Time

Pr	PD	PD2.422	Business Finance	3-1-0-4	Sarath Babu
Pr	PD		Product Design Elective 1	3-1-0-2	
Pr	PD		Product Design Elective 2	3-1-0-2	
Pr	PD		Product Design Elective 3	3-1-0-2	
Pr	PD		Business Elective 1	3-1-0-4	
Pr	PD		Business Elective 2	3-1-0-2	
Pr	PD		Technology / Systems / Open Elective	3-1-0-4	
Pr	PD	PD9.602	PDM Seminar	0Cr	Guest Speakers
			Total 21-7-2-20		

M.Tech II Year II Semester – Product Design and Management - Full Time

Pr	CS	PD9.404	PDM Project-4	0-2-6-12	
Pr	PD		Business/Design/Open Elective	3-1-0-4	
			Total 3-3-6-16		

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 Karlapalem
		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	Ziaul Haque Choudhury
	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				
		GS2.503	Spatial Data Sciences	3-1-0-4	KS Rajan

Electives

	CNO	CName	Credits	Faculty Name(s)
Electives for CND Students				

		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
		SC3.326	Algebraic Methods in Reaction Networks **(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) Max.25**	3-1-0-2	Vasudeva Varma
		CL3.409	Evaluation Methods for NLP **(H1)**	3-1-0-2	Manish Shrivastava + 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

	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
		EC2.411	Advanced Devices	3-1-0-4	Anshu Sarje
	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	**TBD**
	PD2.502	Product Lifecycle Management	3-1-0-4	Ravi Warrier

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
	CS7.603	Topics in Reinforcement Learning	3-1-0-4	Tejas Bodas + Harikumar K
	CS5.401	User Interaction and Usability of Digital Products **(Open Elective)**	3-1-0-4	Raman Saxena
	GS2.503	Spatial Data Sciences	3-1-0-4	KS Rajan
	CG9.600	Cognitive Science Seminar (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) (Max:40)**	3-1-0-4	Suryajith Ch + Girish Verma
	GS1.401	Optical Remote Sensing	3-1-0-4	RC Prasad
	CL3.408	Applications of Language Models **(H) Max.25**	3-1-0-2	Vasudeva Varma
	CS1.501	Advanced Optimization: Theory and Applications	3-1-0-4	Pawan Kumar
	CL3.409	Evaluation Methods for NLP **(H1)**	3-1-0-2	Manish Shrivastava + Parameswari Krishnamurthy
	CS1.505	Quantum aspects of Cryptography	3-1-0-4	Atul Singh Arora

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

Science Electives (Random selection) Max. no of students for each course is given in the brackets

		SC4.411	Machine Learning for Natural Sciences **(20)**	3-1-0-4	Prabhakar B + Vinod PK
		SC2.301	Physics of Soft Condensed Matter **(40)**	3-1-0-4	Marimuthu Krishnan
		SC2.316	Molecular Modeling and Simulations **(50)**	3-1-0-4	Deva Priyakumar + Marimuthu Krishnan
		SC3.326	Algebraic Methods in Reaction Networks **(40)**	3-1-0-4	Abhishek Deshpande
		SC1.308	The Universe Across Scales **(150)**	3-1-0-4	Subhadip Mitra+Chittaranjan Hens+Diganta Das
		SC2.315	Molecular Symmetry and Quantum Mechanics	3-1-0-4	Harjinder Singh

Humanities Electives for UG3 and UG4 (Random selection) Max. no of students for each course is 45

		HS3.304	The Gutenberg Parenthesis	3-1-0-4	Aniket Alam
		HS0.204	Introduction to Philosophy of Technology	3-1-0-4	Ashwin Jayanti
		HS3.305	Migrants and Migrations in Modern South Asia	3-1-0-4	Isha Dubey
		HS7.301	Science, Technology and Society **(Max: 15)**	3-1-0-4	Radhika Krishnan
		HS1.209	Music Language Creativity	3-1-0-4	TK Saroja
		HS8.202	Gender, Culture and Representation	3-1-0-4	Subha Chakraburtty
		HS8.303	Environmental & Social Governance in Mineral Extraction	3-1-0-4	Radhika Krishnan
		HS4.303	Digital Democracy and Data Governance in the European Union **(Max: 80)**	3-1-0-4	Aakansha Natani
		HS0.304	Mind, Body and Cognition	3-1-0-4	Saurabh Todariya
		HS2.304	Sociology of Platform Economies	3-1-0-4	Rajorshi Ray

Sd/-
Dean (Academics)

Date: 20-Nov-2024