International Institute of Information Technology, Hyderabad
Course offerings in 2020-21 Semester I (Monsoon)

PG Programmes

CD	AD	CNO	CName	Credits	Faculty Name(s)
M.Tech I year I Semester - CSE					
			Advanced Data Structures & Algorithms	3-0-2-6	Vineet Gandhi + Avinash Sharma
			Maths for Computer Science 1- Probability and Statistics (H1)	3-1-0-2	Girish Varma
			Maths for Computer Science 2 - Linear Algebra (H2)	3-1-0-2	Indranil Chakrabarthy
			Software Systems Design & Development	3-0-2-4	Raghu Reddy
			Advanced Operating Systems	3-0-1-4	Manish Shrivastava
			Total 12-1-5-18		
M.Tech II year I Semester – CSE					
			Bouquet Core	3-1-0-4	
			Area Elective	3-1-0-4	
			Semester project/Bouquet core/Area elective	3-1-0-4	
			Bouquet core / Area elective	3-1-0-4	
			Total 12-4-0-16		
M.Tech I year I Semester – CSIS					
			Advanced Data Structures & Algorithms	3-0-2-6	Vineet Gandhi + Avinash Sharma
			Maths for Computer Science 1- Probability and Statistics (H1)	3-1-0-2	Girish Varma
			Maths for Computer Science 2 - Linear Algebra (H2)	3-1-0-2	Indranil Chakrabarthy
			Software Systems Design & Development	3-0-2-4	Raghu Reddy
			Advanced Operating Systems	3-0-1-4	Manish Shrivastava
			Total 12-1-5-18		
M.Tech II year I Semester – CSIS					
		CSE703	PG Project-4Cr	0-0-8-4	
		CSE540	Research in Information Security	3-1-0-4	Ashok Kumar Das
		CSE435	Advanced Computer Networks	3-1-0-4	Sujit Gujar + Shatrunjay Rawat
			Bouquet/Area/CS/ECE Elective	3-1-0-4	
			Total 12-1-8-16		
M.Tech I Year I Semester – CASE					
			Structural Dynamics	3-1-0-4	Sunitha P
			Computer Problem Solving	3-1-0-4	Anoop Namboodiri
			Finite Element Method	3-1-2-4	Venkateswarlu M
			Structural Engineering Design Studio I (H2)	3-1-0-2	Pradeep Kumar R

			Seminar (H1)	3-1-0-2	Pradeep Kumar R
			Total 12-4-2-16		
M.Tech II Year I Semester – CASE					
			GT/BS/SI/CS Elective	3-1-0-4	
			SE Elective	3-1-0-4	
			SE Elective	3-1-0-4	
			Open Elective or CASE Project	4/8 Cr	
			Total 9-3-8-16		
M.Tech II Year I Semester – Bioinformatics					
		CSE505	Scripting & Computer Environments	3-0-2-4	**TBD**
		SCI643	Biomolecular Structure Interaction & Dynamics. **Prerequisites: ABA or GSC or equivalent**	3-1-0-4	B.Gopalakrishna
		SCI400	CCNSB Seminar	0 Cr	Deva Priyakumar
		SCI860	Computational Biology Project / IT Elective	3-1-0-4	
			IT Elective	3-1-0-4	
			Total 12-3-2-16		
MS by Research II Year I Semester - Computational Linguistics					
			MS Thesis	12 Cr	
MPhil / PhD II Year I Semester - Computational Linguistics					
			MPhil Thesis	12 Cr	

Electives

		CNO	**CName**	**Credits**	**Faculty Name(s)**
Electives for CND Students					
		SCI347	Selected topics in Instrumental Analysis	3-1-0-4	Tapan Kumar Sau
			Molecular symmetry and quantum mechanics	3-1-0-4	Harjinder Singh
Electives for CLD Students					
		CSE474	Information Retrieval & Extraction	3-1-0-4	Vasudeva Varma
		ECE448	Speech Signal Processing	3-1-0-4	Anil Kumar V
		CSE485	Intro to Cognitive Science	3-1-0-4	Priyanka Srivastava
			Syntactic Structures in Indian Languages	3-1-0-4	Parameshwari Krishnamurthy (HCU)
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			
		CSE478	Digital Image Processing	3-1-0-4	Ravi Kiran S
		ECE448	Speech Signal Processing	3-1-0-4	Anil Kumar V
		Level 2			

		CSE471	Statistical Methods in AI	3-1-0-4	Jawahar CV
	Communications Stream				
		Level 1			
		ECE438	Wireless Communications	3-1-0-4	Ubaidulla
		Level 2			
		ECE535	Radar Systems	3-1-0-4	K R Sarma
	VLSI and Embedded Systems Stream				
		Level 1			
		ECE468	Analog IC Design	3-1-0-4	Abhishek Srivastava + Zia Abbas
		ECE462	Principles of Semiconductor Devices	3-1-0-4	Anshu Sarje
		Level 2			
		ECE469	Design for Testability	3-1-0-4	Ganesh V. Bhutekar, Renia Inc.
		ECE467	CMOS Radio Frequency Integrated Circuit Design	3-1-0-4	Syed Azeemuddin
	Robotics Stream				
		Level 1			
		CSE483	Mobile Robotics	3-1-0-4	Madhava Krishna
		CSE478	Digital Image Processing	3-1-0-4	Ravi Kiran S
			Robotics: Dynamics and Control	3-1-0-4	Spandan Roy + Abhishek Sarkar
		Level 2			
		CSE975	Topics in Machine Learning **Prerequisite: Statistical Methods in AI**	3-1-0-4	Naresh Manwani
		CSE471	Statistical Methods in AI	3-1-0-4	Jawahar CV
Electives for PG CASE students					
		CSE591	Spatial Informatics	3-1-0-4	Rajan KS
			Plastic Theory of Structures	3-1-0-4	Venkateshwarlu M
		CES623	Advanced Structural Design	3-1-0-4	Sunitha P
		CSE596	Environmental Science & Technology	3-1-0-4	RC Prasad
		CEB411	Illumination Engineering	3-1-0-4	Vishal Garg
		CES644	IS Codes on Design and Structural Safety Assessment	3-1-0-4	Pradeep Kumar R
		CES635	Structural Wind Engineering	3-1-0-4	Shaik Rehana
Bouquet Courses (For UG2K18 batch students only)					
Theory					
			Modern Complexity Theory	3-1-0-4	Girish Varma
		CSE415	Principles of Programming Languages	3-1-0-4	Venkatesh Ch
		CSE418	Principles of Information Security	3-1-0-4	Srinathan Kannan
Systems					
		CSE431	Distributed Systems	3-1-0-4	Kishore Kothapalli
			Data Systems	3-1-0-4	Kamal Karlapalem
Artificial Intelligance					
		CSE471	Statistical Methods in AI	3-1-0-4	Jawahar CV
		CSE474	Information Retrieval & Extraction	3-1-0-4	Vasudeva Varma
			Advanced NLP	3-1-0-4	Manish Shrivastava
		CSE447	Data Analytics I	3-1-0-4	Vikram Pudi

IT + X					
		CSE485	Intro to Cognitive Science	3-1-0-4	Priyanka Srivastava
		CSE591	Spatial Informatics	3-1-0-4	Rajan KS
CPS					
			Real-Time Systems	3-1-0-4	Deepak Gangadhran
Bouquet Courses (For other students)					
Foundation					
			Modern Complexity Theory	3-1-0-4	Girish Varma
		CSE415	Principles of Programming Languages	3-1-0-4	Venkatesh Ch
		CSE418	Principles of Information Security	3-1-0-4	Srinathan Kannan
		CSE471	Statistical Methods in AI	3-1-0-4	Jawahar CV
Systems					
		CSE435	Advanced Computer Networks	3-1-0-4	Sujit Gujar + Shatrunjay Rawat
		CSE431	Distributed Systems	3-1-0-4	Kishore Kothapalli
			Data Systems	3-1-0-4	Kamal Karlapalem
CSE/Open Electives					
		CSE474	Information Retrieval & Extraction	3-1-0-4	Vasudeva Varma
			Advanced NLP	3-1-0-4	Manish Shrivastava
		CSE447	Data Analytics I	3-1-0-4	Vikram Pudi
		CSE503	Concurrent Data Structures	3-1-0-4	Govindarajulu R
		CSE540	Research in Information Security	3-0-1-4	Ashok Kumar Das
		CSE485	Intro to Cognitive Science	3-1-0-4	Priyanka Srivastava
		CSE591	Spatial Informatics	3-1-0-4	Rajan KS
			Real-Time Systems	3-1-0-4	Deepak Gangadhran
			Advanced Data Systems	3-1-0-4	Krishna Reddy P
		CSE451	Social Science Perspective on HCI **(Open Elective)**	3-1-0-4	Nimmi Rangaswamy
		CSE512	Distributing Trust and Block Chains **(Max: 40 Students)**	3-1-0-4	Sujit Gujar
		CSE478	Digital Image Processing	3-1-0-4	Ravi Kiran S
		CSE975	Topics in Machine Learning **Prerequisite: Statistical Methods in AI**	3-1-0-4	Naresh Manwani
		CSE483	Mobile Robotics	3-1-0-4	Madhava Krishna
		CSE484	Topics in Applied Optimization	3-1-0-4	Pawan Kumar
		CSE596	Environmental Science & Technology	3-1-0-4	RC Prasad
		CSE486	Introduction to Neural and Cognitive Modeling	3-1-0-4	Bapi Raju S
			Advaced Graphics, AR & VR	3-1-0-4	Avinash Sharma + PJ Narayanan
			Behavioral Research & Experimental Design	3-1-0-4	Vinoo Alluri + Bapi Raju S
			Open Quantum Systems and Quantum Thermodynamics	3-1-0-4	Samyadeb Bhattacharya
Engineering Electives <u>(Random Selection) Max. no of students for each course is given in the brackets</u>					
		CSE464	Game Design and Engineering **(60)**	3-1-0-4	Kavita Vemuri

		CEG445	Technology Product Entrepreneurship **(50)**	3-1-0-4	Ramesh Logangathan + Prakash Yalla
		CEW613	Hydrological modelling and Software Development	3-1-0-4	Shaik Rehana
Math Electives <u>(Random selection) Maximum no. of students for the following courses is: 50 each)</u>					
		CEA621	Finite Element Methods	3-1-0-4	Venkateshwarlu M
		IMA301	Functional Analysis	3-1-0-4	Lakshmi Burra
		IMA411	Entropy and Information	3-1-0-4	Indranil Chakrabarthy
Science Electives <u>(Random selection) Max. no of students for each course is given in the brackets</u>					
		SCI347	Selected topics in Instrumental Analysis	3-1-0-4	Tapan Kumar Sau
			Molecular symmetry and quantum mechanics	3-1-0-4	Harjinder Singh
		SCI541	Advanced Biomolecular Architecture **(50)**	3-1-0-4	Deva Priyakumar
		SCI643	Biomolecular Structure Interaction & Dynamics **(20)** **Prerequisites: ABA, GSC or equivalent**	3-1-0-4	B. Gopalakrishna
Humanities Electives for UG3 and UG4 <u>(Random selection) Max. no of students for each course is 40</u>					
		HSS482	Digital Humanities Project **(UG4 only)**	3-1-0-4	CEH Faculty
		HSS338	Understanding Raga: Semi Classical Forms of Indian Music	3-1-0-4	Saroja TK
		HSS343a	Introduction to History	3-1-0-4	Ashwin Jayanti
		HSS345a	Introduction to Shakespeare	3-1-0-4	Aruna Chaluvadi
		HSS368	Introduction to Sociology	3-1-0-4	Radhika Krishnan
		HSS316	Introduction to Philosophy	3-1-0-4	Don Dcruz
		HSS351a	Intro to Psychology	3-1-0-4	Priyanka Srivastava
		HSS447	Gender and Society	3-1-0-4	Sushmita Banerjee
		HSS448	Critical Viewing and Reading	3-1-0-4	Sushmita Banerjee
		HSS444	Theories and Practices of Nationalism	3-1-0-4	Aniket Alam
		CSE451	Social Science Perspective on HCI	3-1-0-4	Nimmi Rangaswamy

Sd/-

Date:14.7.2020 **Dean (Academics)**