## DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING TEZPUR UNIVERSITY

Napaam – 784028 :: Sonitpur - Assam

Date: 17/01/2022

The following are the courses being offered for M.Tech(CSE), M.Tech(IT), MCA and B.Tech. Programmes excluding 2<sup>nd</sup> semesters in the Department of Computer Science & Engineering for Spring Semester 2022. In addition, the students shall have to take CBCT/Open Elective courses as applicable. Elective courses can be selected from MOOCs courses with maximum limit of 20% of Total Credits.

## **Offered Courses (Spring 2022)**

	M Took (CSE) 4th						
	M.Tech.(CSE) 4 <sup>th</sup>	1				1 _ 1	
CS641	Term Project II	0	0	16	16	Core	
	M.Tech.(IT) 4th S	Semest	er				
IT605	Term Project II	0	0	0	16	Core	
	MCA 4th Sem	ester					
CS515	Major Project	0	0	16	16	Core	
	MCA 6 <sup>th</sup> Sem	ester					
CS515	Major Project	0	0	16	16	Core	
	B.Tech. 4th Sen	mester	•				
BT201	Biology	3	0	0	3	Core	
CO206	Design and Analysis of Algorithms	3	0	1	4	Core	AK
CO214	Computer Architecture and Organization	3	1	0	4	Core	DKS
CO215	Computer Organization Lab	0	0	1	1	Core	RCB
CO216	Formal Language & Automata	3	0	0	3	Core	SKS
CO217	Graph Theory	3	0	0	3	Core	AK
CO218	Data Communication	3	0	0	3	Core	SKD
		Total Credits			21		
CS201	Data Structure & Operating System (Non CSE)	2	0	1	3	Core	LBS
	B.Tech. 6 <sup>th</sup> Ser	nester	I.				
CO314	System Software and Compiler Design	3	0	1	4	Core	US
CO315	Computer Networks	3	0	0	3	Core	NM
CO316	Computer Networks Lab	0	0	1	1	Core	NM
CO317	Project-I (using SE perspective)	0	0	2	2	Core	SIS
IC361	Accounting and Financial Management	3	0	0	3	Core	
	Elective-II	3	0	1	4		
	Open Elective-II	3	0	0	3		
		Tot	al Cre	dits	20		
	Note: MOOCs courses cannot be taken for Elect than 4.	ive-II, a	s credi	ts for N	MOOCs	are less	

CO423	Web Technology	3	0	1	4	Elect	DB
CO525	Data Mining	3	0	1	4	Elect	RS
CO306	Embedded Systems	3	0	1	4	Elect	SN
B.Tech. 8 <sup>th</sup> Semester							
XXXXX	Elective-V	3	0	0	3		
XXXXX	Open Elective-IV	3	0	0	3		
CO403	Project-III	0	0	8	8		
		Total Credits 14					
Choose CS Elective V from the list below or from MOOCS							
CO503	Fuzzy Logic and Neural Networks (Classes will	3	0	0	3	Elect	BB
	be held at afternoon Open Elective slot)						
CO423	Web Technology	3	0	1	4	Elect	DB
CO525	Data Mining	3	0	1	4	Elect	RS
CS731	Data Mining in Security	4	0	0	4	Elect.	DKB
OPEN ELECTIVES/CBCT(For other departments)							
CS535	Introduction to Scientific Computing	2	0	1	3	OE	MD
CO503	Fuzzy Logic and Neural Networks	3	0	0	3	OE	ВВ

## **MOOCs Courses (Elective)**

(Maximum allowed is 20% of total credits)

Course code	Course Name & Instructor(s)	Offering Institute	UG/PG	Duration (in Week)	Total Credit
CS653	Introduction to Internet of Things, Prof. Sudip Misra	IITKGP	<u>UG</u>	12	3
CS654	Programming, Data Structures and Algorithms Using Python, Prof. Madhavan Mukund	CMI	UG	8	2
CS657	Cloud Computing, Prof. Soumya Kanti Ghosh	IITKGP	UG	8	2
CS658	Social Networks, Prof. Sudarshan Iyengar, IIT Ropar	IITR	UG	12	3
CS660	Programming in Java, Prof. Debasis Samanta	IITKGP	UG	12	3
CS661	Data Science for Engineers, Prof. Ragunathan Rengasamy and Prof. Shankar Narasimhan	IITM	UG/PG	8	2
CS665	Artificial Intelligence: Knowledge Representation and Reasoning, Prof. Deepak Khemani	IITM	UG/PG	12	3
CS667	Introduction to Soft Computing, Prof. Debasis Samanta	IITKGP	UG/PG	8	2
CS669	Introduction to Industry 4.0 and Industrial Internet of Things, Prof. Sudip Misra, IIT KGP	IITKGP	PG	12	3
CS670	Deep Learning, Prof. Prabir Kumar Biswas	IITKGP	UG/PG	12	3
CS671	Reinforcement Learning, Prof. Balaraman Ravindran, IIT Madras	IITM	UG/PG	12	3
CS672	Ethical Hacking,	IITKGP	UG/PG	12	3

	Prof. Indranil Sengupta				
CS677	Introduction to Machine Learning,	IITM	UG/PG	12	n
	Prof. Balaraman Ravindran			12	
CS681	GPU Architectures and Programming,	IITKGP	iP UG/PG	12	2
	Prof. Soumyajit Dey				<u> </u>
cccoa	Data Analytics with Python,	IITR	UG/PG	12	3
CS683	Prof. A. Ramesh	IIIK		12	3
CS684	Cloud Computing and Distributed Systems,	IITP	UG/PG	8	2
	Prof. Rajiv Misra	IIIP			2

Pt booch

(B. Borah) Head, CSE