DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
TEZPUR UNIVERSITY
Napaam – 784028 :: Sonitpur - Assam

No.: F.TU/CSE/03-02(V-I)/   Date: 11/03/2021

The following are the courses being offered for Ph.D., M.Tech(CSE), M.Tech(IT), MCA and B.Tech. Programmes in the department of Computer Science & Engineering for Spring Semester 2021. 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 2021)

Corse Code	Title	Credit Structure			Credit	Course Type	Course Instructor
		L	T	P			
M.Tech(CSE) 2nd Semester							
CS606	Computer Architecture and Parallel Processing	3	0	0	3	Core	NS
CS544	Advanced Programming Lab II	0	1	2	3	Core	SK/SIS
CS545	Seminar	0	2	0	2	Core	
XXXXX	**Elective I**				3/4		
XXXXX	**Elective II**				3/4		
XXXXX	**Open Elective I**	3	0	0	3		
		Total Credits			**17/19**		
	Choose Elective I from the following list or from MOOCs list given below						
IT610	Advanced Database System	3	0	1	4	Elect	SIS
CS731	Data Mining in Security	4	0	0	4	Elect.	DKB
CO503	Fuzzy Logic and Neural Networks	3	0	0	3	Elect	BB
CS529	Embedded Systems	3	0	1	4	Elect	SN
	Choose Elective II from the following list or from MOOCs list given below						
IT517	Pattern Recognition	3	0	1	4	Elect	SS
CS625	Web Technology	3	0	1	4	Elect	DB
IT509	Data Mining & Data Warehousing	3	0	1	4	Elect	BN
M.Tech(IT) 2nd Semester							
IT610	Advanced Database System	3	0	1	4	Core	SIS
CS545	Seminar	0	2	0	2	Core	
XXXXX	**Elective 2**	3	0	0	3/4		
XXXXX	**Elective 3**	3	0	0	3/4		
XXXXX	**Elective 4**	3	0	0	3/4		
XXXXX	**Open Elective 2**				3		
		Total Credits			18/21		
	Choose Elective 2 from following list or from MOOCs list given below						
CS731	Data Mining in Security	4	0	0	4	Elect.	DKB
CO503	Fuzzy Logic and Neural Networks	3	0	0	3	Elect	BB
CS529	Embedded Systems	3	0	1	4	Elect	SN
CS731	Data Mining in Security	4	0	0	4	Elect.	DKB
	Choose Elective 3 from the following list or from MOOCs list given below						
IT517	Pattern Recognition	3	0	1	4	Elect	SS
CS625	Web Technology	3	0	1	4	Elect	DB
	Choose Elective 4 from the following list or from MOOCs list given below						

IT509	Data Mining & Data Warehousing	3	0	1	4	Elect	BN
CS606	Computer Architecture and Parallel Processing	3	0	0	3	Elect	NS

M.Tech.(CSE) 4th Semester

CS641	Term Project II	0	0	16	16	Core	

M.Tech.(IT) 4th Semester

IT605	Term Project II	0	0	0	16	Core	

MCA 2nd Semester

IC361	Accounting and Financial Management	3	0	0	3	Core	
CS413	Database Management Systems	3	0	0	3	Core	SS
CS414	Database Management Systems Lab	0	0	2	2	Core	RCB
CS513	Software Engineering	3	0	0	3	Core	SSS
CS518	Software Engineering Lab	0	0	1	1	Core	SSS
XXXXX	**Elective 4**				3/4		
XXXXX	**Elective 5**				3/4		
		Total Credits			18/20		
	Choose Elective 4 from the following list or from MOOCs list given below						
IT509	Data Mining & Data Warehousing	3	0	1	4	Elect	BN
IT517	Pattern Recognition	3	0	1	4	Elect	SS
	Choose Elective 5 from the following list or from MOOCs list given below						
CS625	Web Technology	3	0	1	4	Elect	DB
CS529	Embedded Systems	3	0	1	4	Elect	SN

MCA 4th Semester

CS504	Operating System	2	1	1	4	Core	SKD
CS505	Software Engineering	3	0	1	4	Core	RS
CS507	Computer Networks	3	0	1	4	Core	NM
XXXXX	**Elective 6**				3/4		
XXXXX	**Elective 7**				3/4		
XXXXX	**Open elective/Elective (3 open electives are to be completed by 5-th semester)**				3		
		Total Credits			21/23		
	Choose the elective 6 from the following list or from MOOCS list given below						
CS625	Web Technology	3	0	1	4	Elect	DB
CS529	Embedded Systems	3	0	1	4	Elect	SN
CS532	Compiler Design	3	0	1	4	Elect	US
	Choose the elective 7 from the following list or from MOOCS list given below						
IT517	Pattern Recognition	3	0	1	4	Elect	SS
IT509	Data Mining & Data Warehousing	3	0	1	4	Elect	RS
	In case the 3rd elective required choose it from the following group						
CS601	Design and Analysis of Algorithms	3	0	0	3	Elect	AK
IC361	Accounting and Financial Management	3	0	0	3	Elect	

MCA 6th Semester

CS515	Major Project	0	0	0	16	Core	

B.Tech. 4th Semester

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	SK
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. 6th Semester

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		
		Total Credits			20		
	Choose Elective II from the following list or from MOOCs list given below)						
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. 8th Semester

CO482	Project II	0	0	0	12	Core	
XXXXX	**CS Elective IV**	3	0	0	3	Core	
XXXXX	**Open Elective III**	3	0	0	3		
		Total Credits			18		
	Choose CS Elective IV from the list below or from MOOCS						
CO503	Fuzzy Logic and Neural Networks	3	0	0	3	Elect	BB
CO505	Advanced Database System	3	0	0	3	Elect	SIS
IT517	Pattern Recognition	3	0	1	4	Elect	SS
IT507	Computer Security & Cryptography	3	0	0	3	Elect	DKB

B.Tech 2nd Semester

CO103	Introductory Computing	2	1	0	3	Core	US/NS/SP/ SSS/SK
CO104	Computing Laboratory	0	0	2	2	Core	BN/LBS/MD/ RCB/RCB
CO105	Discrete Mathematics	3	1	0	4	Core	SP

Ph.D

CS731	Data Mining in Security	4	0	0	4	Elect.	DKB
IT517	Pattern Recognition	3	0	1	4	Elect	SS
CO503	Fuzzy Logic and Neural Networks	3	0	0	3	Elect	BB
CS606	Computer Architecture and Parallel Processing	3	0	0	3	Elect	NS

OPEN ELECTIVES/CBCT(For other departments)

CS535	Introduction to Scientific Computing	2	0	1	3	OE	MD/RCB
CO503	Fuzzy Logic and Neural Networks	3	0	0	3	OE	BB

IT507	Computer Security & Cryptography	3	0	0	3	OE	DKB
MOOCs Course (Elective) **(Maximum allowed is 20% of total credits)**							
CS652	Privacy and Security in Online Social Media	2	0	0	2		
CS653	Introduction to Internet of Things	3	0	0	3		
CS654	Programming, data structures and algorithms using Python	2	0	0	2		
CS657	Cloud Computing	2	0	0	2		
CS658	Social Networks	3	0	0	3		
CS660	Programming in Java	3	0	0	3		
CS661	Data Science for Engineering	2	0	0	2		
CS665	AI: Knowledge Representation and Reasoning	3	0	0	3		
CS666	Embedded System Design with ARM	2	0	0	2		
CS667	Introduction to Soft Computing	2	0	0	2		
CS669	Introduction to Industry 4.0 and Industrial Internet of Things	3	0	0	3		
CS 670	Deep Learning	3	0	0	3		
CS 671	Reinforcement Learning	3	0	0	3		
CS 677	Introduction to Machine Learning	3	0	0	3		
CS681	Cloud Computing and Distributed Systems	3	0	0	2		
CS683	Data Analytics with Python	3	0	0	3		
CS684	Cloud Computing and Distributed Systems	2	0	0	2		

(B. Borah)
Head, CSE