

Course Structure of MCA

**Department of Computer Sciences &
Engineering**

School of Engineering

Tezpur University

Course Structure

Time Duration:

Minimum duration: 3 years (6 semesters)
Maximum duration: 5 years (10 semesters)

Credit Requirements:

Minimum Credit requirement : 110
Core Courses : 72
Electives : 29
Open Electives : 9

COURSE STRUCTURE

(Notional Semester-wise Distribution of Courses)

Course Code	Title	Credit Structure L-T-P			Total Credit
1st Semester					
CS 404	Programming & Problem Solving	3	1	1	5
CS 405	Discrete Mathematics	2	1	0	3
CS 406	Digital Logic	3	0	1	4
CS407	Information and Communication Technology	3	0	1	4
	<i>Elective</i>				
2nd Semester					
CS 403	File Structures	2	0	0	2
CS 408	Data Structures	3	1	1	5
CS 409	Comp. Organization & Architecture	3	1	1	5
	<i>Elective</i>				
	<i>Elective</i>				
	<i>Open Elective</i>				3
3rd Semester					
CS 502	System Software	2	0	1	3
CS 508	Database Management	3	1	1	5
CS 509	Data Communication	3	0	1	4
	<i>Elective</i>				
	<i>Elective</i>				
	<i>Open Elective</i>				3
4th Semester					
CS 504	Operating System	2	1	1	4
CS 505	Software Engineering	3	0	1	4
CS 507	Computer Networks	3	0	1	4
	<i>Elective</i>				
	<i>Elective</i>				
	<i>Elective / Open Elective</i>				3
5th Semester					

	<i>Elective</i>				
	<i>Elective</i>				
	<i>Elective</i>				3
	<i>Elective / Open Elective(If three Open Electives not yet taken)</i>				3
CS 514	Minor Project	0	0	8	8
	6th Semester				
CS 515	Major Project	0	0	0	16

Elective Courses

Course Code	Title	Credit Structure	Total Credit
CS 525	Artificial Intelligence	3-0-0	3
CS 424	Formal Language and Automata	3-0-0	3
CS 421	Graph Theory	3-0-0	3
CS 529	Embedded Systems	3-0-1	4
CS 621	Mobile Computing	4-0-0	4
CS 625	Web Technology	3-0-1	4
IT 509	Data Mining & Data Warehousing	3-0-1	4
IT 507	Computer Security & Cryptography	3-0-0	3
CS 606	Computer Architecture and Parallel Processing	3-0-0	3
CS 610	Bioinformatics	3-0-0	3
CS 533	Computational Geometry	3-0-0	3
CS 522	Computer Graphics	3-0-1	4
CS 523	Enterprise Resource Planning	3-0-0	3
CS 524	Theory of Computation	3-0-0	3
IT 504	E-Commerce	3-0-0	3
CS 532	Compiler Design	3-0-1	4
CS 602	Image Processing	3-0-0	3
CS 422	Numerical Methods	3-0-1	4
CS 601	Design & Analysis of Algorithms	3-0-0	3
CS 609	Geographic Information Systems	3-0-0	3
CS 531	Object Oriented Programming & Design	3-1-1	5
IT 611	Distributed Systems	3-0-0	3
BM 421	Accounting & Financial Management	2-1-0	3
MS 509	Probability & Statistics	2-1-0	4
BM 504	Managerial Economics	2-0-0	2
BM 501	Foundation of Management	3-0-0	3