

UNIVERSITY OF MUMBAI



Bachelor of Engineering

in

- Computer Science and Engineering (Data Science)
- Computer Science and Engineering (Artificial Intelligence and Machine Learning)
- Artificial Intelligence and Data Science
- Artificial Intelligence and Machine Learning
- Data Engineering

Third Year with Effect from AY 2022-23

(REV- 2019 'C' Scheme) from Academic Year 2020 – 21

Under

FACULTY OF SCIENCE & TECHNOLOGY

(As per AICTE guidelines with effect from the academic year 2019–2020)

PROGRAM STRUCTURE FOR THIRD YEAR
UNIVERSITY OF MUMBAI (With Effect from 2022-2023)

Semester V

Course Code	Course Name	Teaching Scheme (Contact Hours)		Credits Assigned					
		Theory	Pract.	Theory	Pract.	Total			
CSC501	Theoretical Computer Science	3	--	3	--	3			
CSC502	Web Computing	3	--	3	--	3			
CSC503	Computer Network	3	--	3	--	3			
CSC504	Data Warehousing & Mining	3	--	3	--	3			
CSDO501	Department Level Optional Course- 1	3	--	3	--	3			
CSL501	Web Computing Lab	--	2	--	1	1			
CSL502	Computer Network Lab	--	2	--	1	1			
CSL503	Data Warehousing & Mining Lab	--	2	--	1	1			
CSL504	Business Communication and Ethics-II	--	2*+2	--	2	2			
CSM501	Mini Project: 2 A	--	4 ^{\$}	--	2	2			
Total		15	14	15	07	22			
Course Code	Course Name	Examination Scheme							
		Theory					Term Work	Pract & oral	Total
		Internal Assessment			End Sem Exam	Exam. Duration (in Hrs)			
		Test 1	Test 2	Avg					
CSC501	Theoretical Computer Science	20	20	20	80	3	-	--	100
CSC502	Web Computing	20	20	20	80	3	--	--	100
CSC503	Computer Network	20	20	20	80	3	--	--	100
CSC504	Data Warehousing & Mining	20	20	20	80	3	--	--	100
CSDO501	Department Level Optional Course -1	20	20	20	80	3	--	--	100
CSL501	Web Computing Lab	--	--	--	--	--	25	25	50
CSL502	Computer Network Lab	--	--	--	--	--	25	25	50
CSL503	Data Warehousing & Mining Lab	--	--	--	--	--	25	25	50
CSL504	Business Communication and Ethics-II	--	--	--	--	--	50	--	50
CSM501	Mini Project : 2A	--	--	--	--	--	25	25	50
Total		--	--	100	400	--	175	100	750

* Theory class to be conducted for full class and \$ indicates workload of Learner (Not Faculty), students can form groups with minimum 2(Two) and not more than 4(Four). Faculty Load: 1hour per week per four groups.

PROGRAM STRUCTURE FOR THIRD YEAR
UNIVERSITY OF MUMBAI (With Effect from 2022-2023)

Semester VI

Course Code	Course Name	Teaching Scheme (Contact Hours)			Credits Assigned				
		Theory	Pract. Tut.		Theory	Pract.	Total		
CSC601	Data Analytics	3	--		3	--	3		
CSC602	System Security	3	--		3	--	3		
CSC603	Software Engineering	3	--		3	--	3		
CSC604	Artificial Intelligence	3	--		3	--	3		
CSDO601	Department Level Optional Course -2	3	--		3	--	3		
CSL601	Data Analytics Lab	--	2		--	1	1		
CSL602	Cryptography & System Security Lab	--	2		--	1	1		
CSL603	Software Engineering Lab	--	2		--	1	1		
CSL604	Artificial Intelligence Lab	--	2		--	1	1		
CSL605	Skill base Lab Course: Cloud Computing	--	4		--	2	2		
CSM601	Mini Project Lab: 2B	--	4 ^s		--	2	2		
Total		15	16		15	08	23		
Course Code	Course Name	Examination Scheme							
		Theory					Term Work	Pract. & oral	Total
		Internal Assessment			End Sem Exam	Exam. Duration (in Hrs)			
		Test 1	Test 2	Avg					
CSC601	Data Analytics	20	20	20	80	3	--	--	100
CSC602	System Security	20	20	20	80	3	--	--	100
CSC603	Software Engineering	20	20	20	80	3	--	--	100
CSC604	Artificial Intelligence	20	20	20	80	3	--	--	100
CSDO601	Department Level Optional Course -2	20	20	20	80	3	--	--	100
CSL601	Data Analytics Lab	--	--	--	--	--	25	25	50
CSL602	System Security Lab	--	--	--	--	--	25	--	25
CSL603	Software Engineering Lab	--	--	--	--	--	25	-	25
CSL604	Artificial Intelligence Lab						25	25	50
CSL605	Skill base Lab Course: Cloud Computing	--	--	--	--	--	50	25	75
CSM601	Mini Project :2B	--	--	--	--	--	25	25	50
Total		--	--	100	400	--	175	100	775

PROGRAM STRUCTURE FOR THIRD YEAR
UNIVERSITY OF MUMBAI (With Effect from 2022-2023)

DEPARTMENT OPTIONAL COURSES

Department Optional Courses	Semester	Subject
Department Optional Course -1	V	Operation Research Entrepreneur and e-Business Quantitative Analysis
Department Optional Course -2	VI	Mobile Computing Distributed Computing Internet of Things