

VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELAGAVI



Scheme of Teaching and Examinations

M.Tech., in CSE

Data Science

Choice Based Credit System (CBCS) and Outcome Based Education (OBE)

Specialization in – Data Science

II SEMESTER

Sl. No	Course Type	Course Code	Course Title	Teaching Hours per Week			Examination			Credits	
				Theory	Practical/Seminar	Tutorial/SDA	Duration in hours	CIE Marks	SEE Marks		Total Marks
				L	P	T/SDA					
1	PCC/PEC/ MDC/PCC(PB) /IPCC	MSCS201	Advances in Operating Systems	3	0	0	03	50	50	100	3
2		MSDS202	Deep Learning	3	2	0	03	50	50	100	4
3		MSDS203	Advanced Database Management and NoSQL	3	0	1	03	50	50	100	3
4		MSDS214X	Professional Elective course 1	3	0	0	03	50	50	100	3
5		MSDS215X	Professional Elective course 2	3	0	0	03	50	50	100	3
6		MSDS206	Mini Project with Seminar	3	0	0	03	50	50	100	3
7	PCCL	MSDSL207	Database Management and NoSQL Laboratory	0	2	0	03	50	50	100	2
8	AEC/SEC	MSCS258	Skill Enhancement For Research Excellence-1	0	2	0	03	50	50	100	1
								400	400	800	22

Note: **PCC**: Professional core. **IPCC**-Integrated Professional Core Courses, **PCC(PB)**: Professional Core Courses (Project Based), **PCCL**-Professional Core Course lab, **PEC**- Professional Elective Courses, **MDC**- Multi-Disciplinary Courses
L-Lecture, P-Practical, T/SDA-Tutorial / Skill Development Activities (Hours are for Interaction between faculty and students)
L-Lecture, P-Practical, T/SDA-Tutorial / Skill Development Activities (Hours are for Interaction between faculty and students) **PBLC**: Project Based Learning Course,
 Note: **xxx** means specialization code for example **MDE**- Design Engineering, **LDN**- Digital Communication and Networking, **SCE**- Computer Engineering, **CCT**- Construction Technology, **AUD**- Urban Design, **MBA**- Master of Business Administration, **MCA**-Master of Computer Application, etc

Ability Enhancement Courses (AEC): These courses are designed to help students enhance their skills in communication, language, and personality development. They also promote a deeper understanding of subjects like social sciences and ethics, culture and human behaviour, human rights, and the law.

Skill Enhancement Course (SEC): Skill Enhancement Course means a course designed to provide value-based or skill-based knowledge and should contain both theory and lab/hands-on/training/fieldwork. The main purpose of these courses is to provide students with life skills in the hands-on mode to increase their employability.

If AEC/SEC courses are ONLINE (MOOCs) courses, suggested by the concerned board of studies. These courses will be made available on www.online.vtu.ac.in,

For Professional Elective Course

Professional Elective Course-I (PEC)		Professional Elective Course-II (PEC)	
Code	Title of the Course	Code	Title of the Course
MSDS214A	Data Visualization	MSDS215A	Semantic Web and Social Network
MSDS214B	Time series Analysis and Forecasting	MSDS215B	Data Security and Privacy
MSDS214C	Pattern Recognition	MSDS215C	Block Chain Technology
MSDS214D	Image and video analysis	MSDS215D	Applied Social Network Analysis