DEPARTMENT OF COMPUTER SCIENCE
Faculty of Sciences, Jamia Millia Islamia (Central University), New Delhi

SEM	CODE	COURSE TITLE	L-T-P	CR	SUMMARY
MSc (AI & ML): Program Structure-2023					
I	MS11	Foundations of Data Science with Python	3-1-0	4	
	MS12	Digital Logic and Computer Architecture	3-1-0	4	
	MS13	Data Warehousing & Data Mining	3-1-0	4	Periods: 28
	MS14	Mathematical Foundations for AI	3-1-0	4	Credits: 24
	MS15	Database Management Systems	3-1-0	4	
	MS16	Lab-I (Python)	0-0-4	2	
	MS17	Lab-II (Oracle)	0-0-4	2	
II	MS21	Data Communication & Networks	3-1-0	4	Periods: 28
	MS22	Artificial Intelligence & ML	3-1-0	4	Credits: 24
	MS23	Data Structures	3-1-0	4	
	CS24	Elective-I	3-1-0	4	
	CS25	Elective-II	3-1-0	4	
	MS27	Lab-III (ML)	0-0-4	2	
	MS28	Lab-IV (Data Structures)	0-0-4	2	
III	MS31	Cloud Computing	3-1-0	4	Periods: 28
	MS32	Deep Learning	3-1-0	4	Credits: 24
	MS33	Minor Project	0-1-6	4	
	CS34	Elective-III	3-1-0	4	
	CS35	Elective-IV	3-1-0	4	
	MS36	Lab-V (Deep Learning)	0-0-4	2	
	MS37	Lab-VI (Hadoop)	0-0-4	2	
IV	MS41	Major Project	0-4-20	14	Credits: 14
M.Sc. (AI & ML) Program Summary: Courses [Th (15)+Labs(6)+MP (1)+MP (1)] =25				Total Credits=86	
Elective Courses					
II	CS24.1	Data Reduction & Visualization	3-1-0	4	
	CS24.2	Software Engineering	3-1-0	4	
	CS24.3	Compiler Design	3-1-0	4	
	CS24.4	Applied Statistics	3-1-0	4	
	CS24.5	Operating Systems and Shell programming	3-1-0	4	
	CS24.6	Advanced DBMS	3-1-0	4	
	CS25.1	Mobile Application Development	3-1-0	4	
	CS25.2	Modelling and Simulation	3-1-0	4	
	CS25.3	Digital Image Processing	3-1-0	4	
	CS25.4	Information/Data Security	3-1-0	4	
	CS25.5	Programming with Java	3-1-0	4	
	CS25.6	Data Analytics and Predictive Modelling	3-1-0	4	
III	CS34.1	Software Project Management	3-1-0	4	
	CS34.2	IOT and Big Data	3-1-0	4	
	CS34.3	IPR & Ethical Hacking	3-1-0	4	
	CS34.4	Soft Computing	3-1-0	4	
	CS34.5	Cyber Security	3-1-0	4	
	CS34.6	Analysis and Design of Algorithms	3-1-0	4	
	CS35.1	Web development with J2EE	3-1-0	4	
	CS35.2	Business Intelligence	3-1-0	4	
	CS35.3	Cryptography & Network Security	3-1-0	4	
	CS35.4	Systems Programming	3-1-0	4	
	CS35.5	AR & VR	3-1-0	4	
	CS35.6	NLP with Deep Learning	3-1-0	4	
	CS35.7	Software Architecture	3-1-0	4	
	CS35.8	Software Testing & Quality Assurance	3-1-0	4	

** Approved elective courses as per the Department/University guidelines.