

Course Curriculum Framework of Program MTECH Data Science and Artificial Intelligence (OJT Starting 1st Semester)

Type of Course Sem	Major Core			Skill Enhancement	Ability Enhancement	Value Added Course	Multi-disciplinary	OJT	Audit Course
	Discipline Core 1	Discipline Core 2	Discipline Elective						
Semester I	Mathematical foundation for Data Science (2)	Data Science: Fundamentals (2)	A. Advanced Data Structures and algorithms B. Pattern Recognition (2)	Project (2)	Lab Practice: Module I: Advance Data Structures / Pattern recognition Lab, Module II: Programming for Data Science (2)	--	Programming for Data Analysis (2)	OJT (8)	Life Skills (soft skills related audit course) (0)
Exit Certificate in Data Science									
Semester II	Artificial Intelligence (2)	Deep Learning (2)	A. Data Analysis using R B. Scale and Advance Excel (2)	Project (2)	Lab Practice: Module I: R Programming Lab / Advance Excel / Scala Lab, Module II: Machine Learning Lab (2)	--	Machine Learning (2)	OJT (8)	Life Skills (soft skills related audit course) (0)
Certificate Course in Machine Learning; Exit I & II: Diploma in Data Science									
Semester III	Natural Language Processing (2)	Evolutionary Learning (2)	A. Big Data Analysis B. Data Warehousing (2)	Project (2)	Lab Practice: Module I: Big Data / Data Warehousing Lab, Module II: Natural Language Processing Lab (2)	--	Time Series Analysis (2)	OJT (8)	Life Skills (soft skills related audit course) (0)
Certificate in Advanced Data Management Exit I, II, III: Advanced Diploma in Data Science and Artificial Intelligence									
Semester IV	--	--	A. Research methodology B. Project management (3)	--	--	Climate Change / Carbon Credits (1)	--	MAJOR PROJECT/OJT (16)	Professional Ethics (0)
MTech in Data Science and Artificial Intelligence									