

SM PG 2020 Batch 2 Year MTech Program Curriculum

Semester	Course Code	Course Name	Credits	Segments	Pre-Requisite(s)	Remarks
1	SM5000/CS5590/AI5000	Foundations of Machine Learning	3	1-6		
1	SM5013	Autonomous Navigation	1	3-4		
1	SM5023	Stochastic Processes	1	5-6		
1	SM5033	Internet of Things (IoT)	1	1-2		
1	SM5043	Traffic Engineering & Intelligent Transportation Systems	3	1-6		
1	SM5051	Introduction to Programming	1	3-4		
1	SM5061	Data Acquisition and Control Lab	1	4-6		
2	LA5180	English Communication Skills: Advanced	1	3-4		
2	SMxxx	Core Electives (at least one should be 3 Credit Course)	12			Department
2	SM5071	Additive Manufacturing Lab	1			Lab
1&2	SM5206	SM Industry Lectures	1			Soft Skills
Summer	SM6025	Thesis Stage I	2			Summer Semester
3	SM6035	Thesis Stage II	10			
4	SM6045	Thesis Stage III	12			
List of Electives:						
	SM5150/CE3820	Highway Design and materials	2			
	CE8993	Topics in Transportation Planning	3			
	CC5520	Mobilities, Cities and Environment	2			
	CE 6680	Mathematical Methods in Civil Engineering	2			
	CE6511	Soft Computing Lab Civil Engineering	2			
	CE6610	Remote Sensing & GIS Applications to Civil Engineering	3			
	SM5130/CE4510	Environmental Impact Assessment	2			
	CS6550	Scaling to Big Data	3			
	CS5553	Wireless Networks & Security	3			

	CS6260	Topics in Wireless Networks	3			
	CS5200	Approximation Algorithms	3			
	CS6360	Advanced topics in Machine learning	3			
	CS6140	Video Content Analysis	3			
	CS6170	Computer Vision for Autonomous Vehicle Technology	3			
	CS5060	Advanced Computer Networks	3			
	DS5050	Mobility Design				
	DS5040	Design for Developments				
	SM5146/CA1046	Urban Design (Urban 101)	1			
	MA6040	Fuzzy Logic Connectives: Theory And Applications	3			
	ME5710	Design of EV	2			
	ME5670	vehicle dynamics and modelling	3			
	ME5120	Dynamics and Vibrations	3			
	ME5520	Measurement science and techniques	1.5			
	EE6650	Sensors for Autonomous Navigation	2			
	SM5123	Introduction to Drones	2			
	EE5440	Classical Control Techniques for MIMO system	1			
	EE5327	Optimization	1			
	EE5450	State feedback control	2			
	EE6327	Statistical Learning Theory	3			
	EE6640	Queuing Theory	2			
	EE5720	Game Theory	1			
	EE6320	Wireless Sensor Networks	3			
	AI5002	Probability and Random Variables	2			
	SM5090/AE3010	Introduction to Aerospace Vehicles	1.5			
	SM5100/AE3030	Flight Mechanics	1.5			
	SM5110/AE3020	Aerodynamics	3			
	SM5083/DS4013	Automobile Design Explorations	2			