

**SM PG 2022 Batch 3 Year MTech Program Curriculum**

Semester	Course Code	Course Name (optional)	Course Credits (Optional)	Segment (Optional)	Remarks	Global Remarks
<b>Semester I</b>						
1	AI5000	Foundations of Machine Learning	3	1-6		
1	EE5817	Random Variables and Stochastic Processes	3	1 - 6		
1	SM5083	Basics of Programming	2	3 -6		
1	SM5030	Internet of Things (IoT)	1	1 -2		
1	SM5010	Autonomous Navigation	1	3-4		
1&2	SM5206	Industry Lectures	1			
		<b>Total credits</b>	<b>10</b>			
<b>Semester II</b>						
2	SMxxxx	Core Electives	6			
2	SM5043	Traffic Engineering & Intelligent Transportation Systems	3	1-6		
2	LA5180	English Communication Skills: Advanced	1	3-4	Soft Skills	
		<b>Total credits</b>	<b>9</b>			
<b>Semester III</b>						
3	CS5060	Advanced Computer Networks	3	1-6		
3	SMxxxx	Core Electives	2		Department Electives	
3	SM6125	Thesis Stage I	2			
		<b>Total credits</b>	<b>7</b>			
<b>Semester IV</b>						
4	SM6135	Thesis Stage II	6			
		<b>Total credits</b>	<b>6</b>			
<b>Semester V</b>						
5	SM6145	Thesis Stage III	8			
		<b>Total credits</b>	<b>8</b>			
<b>Semester VI</b>						

6	SM6155	Thesis Stage IV	8			
		<b>Total credits</b>	<b>8</b>			
		<b>Overall Credits</b>	<b>48 (24+24)</b>			

**List of Electives:**

SM5093	Sustainability Concerns for Automobile Design	1
SM5103	Design Process for Smart Mobility	2
SM5113	Form and Style Explorations for Smart Mobility	2
SM5123	Introduction to Drones	2
SM5133	Sensing and Planning for Autonomous Vehicles	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
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
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
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
	CS5370	Deep Learning for Vision	3
	CS5020	Pattern Recognition and Machine Learning	3