Intake:	2021 onwards	Specia	lization:	Transpo	rt Manag	ement &	Logistics	ogistics Engineering			
	Details of the Curriculum	Sti	ream:								
Module	Module Name	0 0	Time all [Hours		Credits	Credits offered		Norm		ntion %	
Code		Category C/E/O	Lecture	Lab / Tute	GPA	NGPA	GPA	NGPA	CA	WE	
	Semester 1		Specializ	ation rec	luiremen	ıt	1'	7.0			
MA1014	Mathematics	С	5/2	1	3.0				20	80	
CS1033	Programming Fundamentals	C	2	2	3.0				20	80	
CE1023 LT1010	Fluid Mechanics Fundamentals of Transport and Logistics Systems	C C	5/2	2/4	2.0		17.0 0.0	0.0	20 50	80 50	
LT1010 LT1020	Mechanics in Transport	C	5/2	1	3.0				40	60	
EE1040	Electrical Fundamentals	c	2	2/4	2.0			20	80		
EL1030	Language Skills Enhancement[S1,S2]	С	0	2	1.0		1		100	0	
			Total		17.0	0.0	17.0	0.0			
			6 ' . !'		•			1.0			
MA1024	Semester 2 Methods of Mathematics	С	Specializ 5/2	ation rec	3.0		2.	1.0	30	70	
EN1803	Basic Electronics for Engineering Applications	C	2	2	3.0				40	60	
CS2813	Visual Programming	C	1	2	2.0				60	40	
LT1030	Operations Research for Transport and Logistics Systems	C	5/2	1	3.0		10.0		40	60	
LT1040	Geo-Spatial Analysis	С	2	2	3.0		18.0	1.0	60	40	
LT1050	Systems Engineering	С	2	2	3.0		1		40	60	
LT1900	Essential Skills Development [S2,S3]	С		2		1.0			100		
EL1030	Language Skills Enhancement [S1,S2]	С		2	1.0				100		
HM-1	Humanities Elective I	E	2		2.0		2.0		100		
			Total		20.0	1.0	20.0	1.0			
	Semester 3		Specializ	ation rec	uiremen	ıt	2	1.0			
LT2010	Data Science for Transport and Logistics Systems	С	3	2	4.0		_		40	60	
LT2020	Engineering Economics	С	2	2	3.0				40	60	
LT2030	Operations Engineering	С	3	2	4.0		1		40	60	
LT2040	Quantitative Methods for Transport and Logistics Systems	С	3	2	4.0		20.0	1.0	40	60	
LT2050	Principles of Supply Chain Engineering	С	2	2	3.0				40	60	
LT2060	Global Logistics Systems	С	3/2	1	2.0		-		40	60	
LT1900	Essential Skills Development [S2,S3]	С		2		1.0		<u> </u>	100		
			Total		20.0	1.0	20.0	1.0			
	Semester 4		Specializ	ation rec	uiremen	ıt	2	0.0			
LT2070	Sustainable Design of Transport and Logistics Systems	С	1	2	2.0				100	0	
LT2080	Land Transport Systems	С	5/2	1	3.0]		40	60	
LT2090	Maritime Transport Systems	С	5/2	1	3.0		17.0		40	60	
LT2100	Air Transport Systems	С	5/2	1	3.0		1/10		40	60	
LT2110	Transport Demand Modelling and Simulation	С	5/2	1	3.0			0.0	40	60	
LT2120	Supply Chain Analytics		-	-			<u> </u>				
		C	2	2	3.0			-	40	60	
LT2210	System Dynamics Ouality Management in Engineering	Е	2	2	3.0			-	40	60	
LT2220	Quality Management in Engineering	E	2 2	2 2	3.0 3.0		3.0	-	40 40	-	
-		Е	2	2	3.0		3.0		40	60	
LT2220	Quality Management in Engineering Advanced Operations Research in Transport and Logistics	E	2 2	2 2	3.0 3.0	0.0	3.0 20.0	0.0	40 40	60 60	
LT2220	Quality Management in Engineering Advanced Operations Research in Transport and Logistics Systems	E	2 2 5/2 Total	2 2 1	3.0 3.0 3.0 26.0	•	20.0	0.0	40 40	60 60	
LT2220 LT2230	Quality Management in Engineering Advanced Operations Research in Transport and Logistics Systems Semester 5	E E	2 2 5/2	2 2 1	3.0 3.0 3.0 26.0	•	20.0		40 40 40	60 60 60	
LT2220	Quality Management in Engineering Advanced Operations Research in Transport and Logistics Systems	E	2 2 5/2 Total	2 2 1 ation rec	3.0 3.0 3.0 26.0	•	20.0	0.0	40 40	60 60	
LT2220 LT2230 LT3010	Quality Management in Engineering Advanced Operations Research in Transport and Logistics Systems Semester 5 Principles of Management, Accounting and Finance	E E E C	2 2 5/2 Total Specializ 2	2 2 1 ation rec 2	3.0 3.0 3.0 26.0 uiremen 3.0	•	20.0	- 0.0 7.0	40 40 40 40	60 60 60 60	
LT2220 LT2230 LT3010 LT3020	Quality Management in Engineering Advanced Operations Research in Transport and Logistics Systems Semester 5 Principles of Management, Accounting and Finance Supply Chain Design	E E E C C	2 2 5/2 Total Specializ 2 2	2 2 1 ation rec 2 2	3.0 3.0 3.0 26.0 uiremen 3.0 3.0 3.0	•	20.0	0.0	40 40 40 40 40 40	60 60 60 60 60	
LT2220 LT2230 LT3010 LT3020 LT3030	Quality Management in Engineering Advanced Operations Research in Transport and Logistics Systems Semester 5 Principles of Management, Accounting and Finance Supply Chain Design Safety and Security in Mobility Systems	E E E C C C	2 2 5/2 Total Specializ 2 2 3/2	2 2 1 ation rec 2 2 1	3.0 3.0 3.0 26.0 uiremen 3.0 3.0 2.0	•	20.0	- 0.0 7.0	40 40 40 40 40 40 40	60 60 60 60 60 60	
LT2220 LT2230 LT3010 LT3020 LT3030 LT3030 LT3040	Quality Management in Engineering Advanced Operations Research in Transport and Logistics Systems Semester 5 Principles of Management, Accounting and Finance Supply Chain Design Safety and Security in Mobility Systems Design of Mobility Systems	E E E C C C C C	2 2 5/2 Total Specializ 2 3/2 3 2 0	2 2 1 ation rec 2 2 1 4	3.0 3.0 3.0 3.0 26.0 3.0 2.0 5.0 3.0 1.0	t	20.0	0.0 0.0	40 40 40 40 40 40 40 50	60 60 60 60 60 60	
LT2220 LT2230 LT3010 LT3020 LT3030 LT3040 LT3050	Quality Management in Engineering Advanced Operations Research in Transport and Logistics Systems Semester 5 Principles of Management, Accounting and Finance Supply Chain Design Safety and Security in Mobility Systems Design of Mobility Systems Planning and Design of Transport and Logistics Facilities	E E E C C C C C C C C	2 2 5/2 Total Specializ 2 2 3/2 3 2	2 2 1 ation rec 2 2 1 4 2	3.0 3.0 3.0 26.0 uiremen 3.0 3.0 2.0 5.0 3.0	•	20.0	- 0.0 7.0	40 40 40 40 40 40 40 50 100	60 60 60 60 60 60	
LT2220 LT2230 LT3010 LT3020 LT3030 LT3040 LT3050	Quality Management in Engineering Advanced Operations Research in Transport and Logistics Systems Semester 5 Principles of Management, Accounting and Finance Supply Chain Design Safety and Security in Mobility Systems Design of Mobility Systems Planning and Design of Transport and Logistics Facilities Engineer and Society[S5,S6]	E E E C C C C C C C C	2 2 5/2 Total Specializ 2 3/2 3/2 3 2 0 Total	2 2 1 ation rec 2 2 1 4 2 2	3.0 3.0 3.0 26.0 3.0 3.0 2.0 5.0 3.0 1.0 17.0	0.0	20.0 17.0 17.0	0.0 0.0 0.0	40 40 40 40 40 40 40 50 100	60 60 60 60 60 60	
LT2220 LT2230 LT3010 LT3020 LT3030 LT3040 LT3050 LT3880	Quality Management in Engineering Advanced Operations Research in Transport and Logistics Systems Semester 5 Principles of Management, Accounting and Finance Supply Chain Design Safety and Security in Mobility Systems Design of Mobility Systems Planning and Design of Transport and Logistics Facilities Engineer and Society[S5,S6] Industrial Training	E E E C C C C C C C C	2 2 5/2 Total Specializ 2 3/2 3 2 0	2 2 1 ation rec 2 2 1 4 2 2	3.0 3.0 3.0 26.0 3.0 3.0 2.0 5.0 3.0 1.0 17.0	t 0.0	20.0 17.0 17.0	0.0 7.0 0.0 0.0	40 40 40 40 40 40 40 50 100	60 60 60 60 60 60	
LT2220 LT2230 LT3010 LT3020 LT3030 LT3040 LT3050	Quality Management in Engineering Advanced Operations Research in Transport and Logistics Systems Semester 5 Principles of Management, Accounting and Finance Supply Chain Design Safety and Security in Mobility Systems Design of Mobility Systems Planning and Design of Transport and Logistics Facilities Engineer and Society[S5,S6]	E E E C C C C C C C C	2 2 5/2 Total Specializ 2 3/2 3/2 3 2 0 Total	2 2 1 ation rec 2 2 1 4 2 2	3.0 3.0 3.0 26.0 26.0 3.0 3.0 5.0 3.0 1.0 17.0	0.0	20.0 17.0 17.0	0.0 0.0 0.0	40 40 40 40 40 40 40 40 50 100 100	60 60 60 60 60 60	
LT2220 LT2230 LT3010 LT3020 LT3030 LT3040 LT3050 LT3880	Quality Management in Engineering Advanced Operations Research in Transport and Logistics Systems Semester 5 Principles of Management, Accounting and Finance Supply Chain Design Safety and Security in Mobility Systems Design of Mobility Systems Planning and Design of Transport and Logistics Facilities Engineer and Society[S5,S6] Industrial Training	E E E C C C C C C C C	2 2 5/2 Total Specializ 2 3/2 3 2 0 Total Specializ	2 2 1 ation rec 2 2 1 4 2 2	3.0 3.0 3.0 3.0 26.0 3.0 2.0 5.0 3.0 1.0 1.0 17.0 uiremen 0.0	t 0.0	20.0 17 17.0 17.0 0.0	0.0 7.0 0.0 0.0 6.0 6.0	40 40 40 40 40 40 40 40 50 100 100	60 60 60 60 60 60	
LT2220 LT2230 LT3010 LT3020 LT3030 LT3040 LT3050 LT3880 LT3890	Quality Management in Engineering Advanced Operations Research in Transport and Logistics Systems Semester 5 Principles of Management, Accounting and Finance Supply Chain Design Safety and Security in Mobility Systems Design of Mobility Systems Planning and Design of Transport and Logistics Facilities Engineer and Society[S5,S6] Industrial Training Industrial Training	E E E C C C C C C C C C C C C C	2 2 5/2 Total Specializ 2 3/2 3 2 0 Total Specializ	2 2 1 4 2 2 1 4 2 2 3 4 2 2 3 4 2 2 3 1 1 4 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3.0 3.0 3.0 26.0 26.0 3.0 2.0 5.0 3.0 1.0 17.0 17.0 10 0.0 0.0	0.0 0.0 tt 6.0 6.0	20.0 17 17.0 17.0 0.0	0.0 7.0 0.0 0.0 6.0	40 40 40 40 40 40 50 100 100 100	60 60 60 60 60 60	
LT2220 LT2230 LT3010 LT3020 LT3020 LT3030 LT3040 LT3050 LT3880 LT3990 LT3990	Quality Management in Engineering Advanced Operations Research in Transport and Logistics Systems Semester 5 Principles of Management, Accounting and Finance Supply Chain Design Safety and Security in Mobility Systems Design of Mobility Systems Planning and Design of Transport and Logistics Facilities Engineer and Society[S5,S6] Industrial Training Industrial Training Semester 6 Research Project [S6,S7,S8]	E E E C C C C C C C C C C C C C C C C C	2 2 5/2 Total Specializ 2 3/2 3 2 0 Total Specializ Total	2 2 1 ation rec 2 2 2 1 4 2 2 ation rec 4	3.0 3.0 3.0 26.0 26.0 3.0 2.0 5.0 3.0 1.0 17.0 17.0 0.0 0.0 0.0 0.0	0.0 0.0 tt 6.0 6.0	20.0 17 17.0 17.0 0.0	0.0 7.0 0.0 0.0 6.0 6.0	40 40 40 40 40 40 40 50 100 100 100 100	60 60 60 60 60 60	
LT2220 LT2230 LT3010 LT3020 LT3030 LT3040 LT3050 LT350 LT3990 LT4200 LT4200 LT4860	Quality Management in Engineering Advanced Operations Research in Transport and Logistics Systems Semester 5 Principles of Management, Accounting and Finance Supply Chain Design Safety and Security in Mobility Systems Design of Mobility Systems Planning and Design of Transport and Logistics Facilities Engineer and Society[S5,S6] Industrial Training Industrial Training Semester 6 Research Project [S6,S7,S8] Integrated Capstone Design Project [S6,S7,S8]	E E E C C C C C C C C C C C C C C C C C	2 2 5/2 Total Specializ 2 3/2 3 2 0 Total Specializ Specializ	2 2 1 ation rec 2 2 1 4 2 2 ation rec 4 4	3.0 3.0 3.0 26.0 26.0 3.0 2.0 5.0 3.0 1.0 17.0 17.0 0.0 0.0 0.0 2.0 2.0	0.0 0.0 tt 6.0 6.0	20.0 17.0 17.0 17.0 0.0 13	0.0 7.0 0.0 0.0 6.0 6.0 2.0	40 40 40 40 40 40 40 40 50 100 100 100	60 60 60 60 60 50	
LT2220 LT2230 LT3010 LT3020 LT3030 LT3030 LT3050 LT3050 LT3990 LT4200 LT4200 LT4860 LT3070	Quality Management in Engineering Advanced Operations Research in Transport and Logistics Systems Systems Semester 5 Principles of Management, Accounting and Finance Supply Chain Design Safety and Security in Mobility Systems Design of Mobility Systems Planning and Design of Transport and Logistics Facilities Engineer and Society[S5,S6] Industrial Training Industrial Training Semester 6 Research Project [S6,S7,S8] Integrated Capstone Design Project [S6,S7,S8] Entrepreneurship and Business Management	E E E C C C C C C C C C C C C C C C C C	2 2 5/2 Total Specializ 2 3/2 3/2 0 Total Specializ Specializ 3/2 3/2 3/2	2 2 1 ation rec 2 2 1 4 2 2 2 ation rec 4 4 4 1	3.0 3.0 3.0 26.0 26.0 3.0 2.0 5.0 3.0 1.0 17.0 17.0 0.0 0.0 0.0 0.0	t 0.0 t 6.0 6.0	20.0 17 17.0 17.0 0.0	0.0 7.0 0.0 0.0 6.0 6.0	40 40 40 40 40 40 40 40 50 100 100 100 100 100 40	60 60 60 60 60 60	
LT2220 LT2230 LT3010 LT3020 LT3030 LT3040 LT3050 LT3050 LT3880 LT3990 LT4200 LT4200 LT4860 LT3070 LT3900	Quality Management in Engineering Advanced Operations Research in Transport and Logistics Systems Systems Semester 5 Principles of Management, Accounting and Finance Supply Chain Design Safety and Security in Mobility Systems Design of Mobility Systems Planning and Design of Transport and Logistics Facilities Engineer and Society[S5,S6] Industrial Training Industrial Training Semester 6 Research Project [S6,S7,S8] Integrated Capstone Design Project [S6,S7,S8] Entrepreneurship and Business Management Research Methodologies for Transport and Logistics	E E E C C C C C C C C C C C C C C C C C	2 2 5/2 Total 2 3/2 3 2 0 Total Specializ Specializ 3/2 1	2 2 1 ation rec 2 2 1 4 2 2 2 ation rec 4 4 4 1 2	3.0 3.0 3.0 26.0 uiremen 3.0 2.0 5.0 3.0 1.0 17.0 uiremen 0.0 0.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0	0.0 0.0 tt 6.0 6.0	20.0 17.0 17.0 17.0 0.0 13	0.0 7.0 0.0 0.0 6.0 6.0 2.0	40 40 40 40 40 40 50 100 100 100 100 100 100 100 100	60 60 60 60 60 50	
LT2220 LT2230 LT3010 LT3020 LT3030 LT3030 LT3050 LT3050 LT3990 LT4200 LT4200 LT4860 LT3070	Quality Management in Engineering Advanced Operations Research in Transport and Logistics Systems Systems Semester 5 Principles of Management, Accounting and Finance Supply Chain Design Safety and Security in Mobility Systems Design of Mobility Systems Planning and Design of Transport and Logistics Facilities Engineer and Society[S5,S6] Industrial Training Industrial Training Semester 6 Research Project [S6,S7,S8] Integrated Capstone Design Project [S6,S7,S8] Entrepreneurship and Business Management	E E E C C C C C C C C C C C C C C C C C	2 2 5/2 Total Specializ 2 3/2 3/2 0 Total Specializ Specializ 3/2 3/2 3/2	2 2 1 ation rec 2 2 1 4 2 2 2 ation rec 4 4 4 1	3.0 3.0 3.0 26.0 26.0 3.0 2.0 5.0 3.0 1.0 17.0 17.0 0.0 0.0 0.0 2.0 2.0	t 0.0 t 6.0 6.0	20.0 17.0 17.0 17.0 0.0 13	0.0 7.0 0.0 0.0 6.0 6.0 2.0	40 40 40 40 40 40 40 40 50 100 100 100 100 100 40	60 60 60 60 60 50	

Intake:	2021 onwards	ement &	Logistics	Engineer	ring					
	S		Smaal alla			4	12	3.0		
LT4200	Semester 7 Research Project [S6,S7,S8]	С	Specializ	4		it	13	0.0	100	r
LT4200 LT4860	Integrated Capstone Design Project [S6,S7,S8]	C C		6	2.0				100	<u> </u>
LT4860 LT4010		C C	2	2	3.0		13.0		40	(0)
	Marketing and Managerial Skills for Engineers	_					15.0		40	60
LT4020	Project Management and Appraisal	С	2	2	3.0					60
LT4030	Contract Management and Human Resources	С	2		2.0				40	60
LT4210	Railway Operations Planning	E	-	2	3.0				100	0
LT4220	Big Data Analytics for Mobility Decisions	E	5/2	1	3.0				40	60
LT4230	Inventory Operations and Warehouse Design	E	2	2	3.0		-	0.0	40	60
LT4240	Design of Urban Logistics	E	2	2	3.0			0.0	40	60
LT4250	Manufacturing and Service Operations Management	E	2	2	3.0				40	60
LT4260	Design of Public Transport Operations	E	5/2	1	3.0				40	60
LT4270	Artificial Intelligence for Supply Chains	E	2	2	3.0				40	60
LT4280	Project Formulation and Procurement	E	2	2	3.0				60	40
LT4290	Applications of Robotics and Automation in Transport and Logistics Systems	Е	2	2	3.0				40	60
LT4300	Shipping Logistics	E	5/2	1	3.0				40	60
LT4400	Aerodrome Planning and Operations	E	2	2	3.0				40	60
			Total		46.0	0.0	13.0	0.0		
	Semester 8		Specializ	ation rec	quiremen	t	8	.0		
LT4200	Research Project[S6,S7,S8]	С		4	2.0				100	
LT4860	Integrated Capstone Design Project [S6,S7,S8]	С		6	3.0		8.0		100	
LT4040	Smart Technologies for Transport and Logistics Systems	С	5/2	1	3.0				40	60
LT4310	Smart Cities and Mobility	E	5/2	1	3.0				40	60
LT4320	Analytics for Procurement	E	2	2	3.0				40	60
LT4330	Network Science for Mobility Systems	E	2	2	3.0		1		40	60
LT4340	Design and Operation of Ports	E	5/2	1	3.0		1	0.0	40	60
LT4350	Aviation Logistics	E	2	2	3.0		1		40	60
LT4360	Disruptive Vehicular Technologies	Е	5/2	1	3.0		1		40	60
LT4370	Disaster and Humanitarian Logistics	Е	2	2	3.0		1		40	60
LT4380	Risk Management in Transport and Logistics	Е	2	2	3.0		1		40	60
LT4390	Intelligent Mobility Systems	E	5/2	1	3.0		1		40	60
LT4410	Aviation Technology and Operations	E	2	2	3.0		1		40	60
			Total		38.0	0.0	8.0	0.0		
			Grand To	tal	194.0	10.0	125.0	10.0		

Total credit requirement for the Specialization	135.0
Faculty/Specialization Electives beyond the specialization requirements [refer faculty electives table]*	15.0
TOTAL CREDIT REQUIREMENT FOR GRADUATION	150.0

Service modules									
Code	Module Name	Semeter	Time allocation [Hours/Week]		Credits		Offered to	Evaluation %	
cout			Lecture	Lab / Tute	GPA	NGPA	oncreatio	CA	WE