Intake:	2021 onwards	Specialization:	Transport Management & Logistics Engineering
	Details of the Curriculum	Stream:	

Module Code	Module Name	Category C/E/O	Time allocation [Hours/Week]		Credits offered		Norm		Evaluation %	
			Lecture	Lab / Tute	GPA	NGPA	GPA	NGPA	CA	WE
Semester 1		**Specialization requirement**					**17.0**			
MA1014	Mathematics	C	5/2	1	3.0		17.0	0.0	20	80
CS1033	Programming Fundamentals	C	2	2	3.0				20	80
CE1023	Fluid Mechanics	C	2	2/4	2.0				20	80
LT1010	Fundamentals of Transport and Logistics Systems	C	5/2	1	3.0				50	50
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]	C	0	2	1.0				100	0
		Total			**17.0**	**0.0**	**17.0**	**0.0**		
Semester 2		**Specialization requirement**					**21.0**			
MA1024	Methods of Mathematics	C	5/2	1	3.0		18.0	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				40	60
LT1040	Geo-Spatial Analysis	C	2	2	3.0				60	40
LT1050	Systems Engineering	C	2	2	3.0				40	60
LT1900	Essential Skills Development [S2,S3]	C		2		1.0			100	
EL1030	Language Skills Enhancement [S1,S2]	C		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		**Specialization requirement**					**21.0**			
LT2010	Data Science for Transport and Logistics Systems	C	3	2	4.0		20.0	1.0	40	60
LT2020	Engineering Economics	C	2	2	3.0				40	60
LT2030	Operations Engineering	C	3	2	4.0				40	60
LT2040	Quantitative Methods for Transport and Logistics Systems	C	3	2	4.0				40	60
LT2050	Principles of Supply Chain Engineering	C	2	2	3.0				40	60
LT2060	Global Logistics Systems	C	3/2	1	2.0				40	60
LT1900	Essential Skills Development [S2,S3]	C		2		1.0			100	
		Total			**20.0**	**1.0**	**20.0**	**1.0**		
Semester 4		**Specialization requirement**					**20.0**			
LT2070	Sustainable Design of Transport and Logistics Systems	C	1	2	2.0		17.0	0.0	100	0
LT2080	Land Transport Systems	C	5/2	1	3.0				40	60
LT2090	Maritime Transport Systems	C	5/2	1	3.0				40	60
LT2100	Air Transport Systems	C	5/2	1	3.0				40	60
LT2110	Transport Demand Modelling and Simulation	C	5/2	1	3.0				40	60
LT2120	Supply Chain Analytics	C	2	2	3.0				40	60
LT2210	System Dynamics	E	2	2	3.0		3.0		40	60
LT2220	Quality Management in Engineering	E	2	2	3.0				40	60
LT2230	Advanced Operations Research in Transport and Logistics Systems	E	5/2	1	3.0				40	60
		Total			**26.0**	**0.0**	**20.0**	**0.0**		
Semester 5		**Specialization requirement**					**17.0**			
LT3010	Principles of Management, Accounting and Finance	C	2	2	3.0		17.0	0.0	40	60
LT3020	Supply Chain Design	C	2	2	3.0				40	60
LT3030	Safety and Security in Mobility Systems	C	3/2	1	2.0				40	60
LT3040	Design of Mobility Systems	C	3	4	5.0				50	50
LT3050	Planning and Design of Transport and Logistics Facilities	C	2	2	3.0				100	
LT3880	Engineer and Society[S5,S6]	C	0	2	1.0				100	
		Total			**17.0**	**0.0**	**17.0**	**0.0**		
Industrial Training		**Specialization requirement**					**6.0**			
LT3990	Industrial Training	C			0.0	6.0		6.0	100	
		Total			**0.0**	**6.0**	**0.0**	**6.0**		
Semester 6		**Specialization requirement**					**12.0**			
LT4200	Research Project [S6,S7,S8]	C		4	2.0		8.0	2.0	100	
LT4860	Integrated Capstone Design Project [S6,S7,S8]	C		4	2.0				100	
LT3070	Entrepreneurship and Business Management	C	3/2	1	2.0				40	60
LT3900	Research Methodologies for Transport and Logistics	C	1	2		2.0			100	
LT3880	Engineer and Society[S5,S6]	C	1	2	2.0				100	
HM-2	Humanities Elective II	E	3/2	1	2.0		2.0		100	
		Total			**10.0**	**2.0**	**10.0**	**2.0**		

Intake:	2021 onwards	Specialization:	Transport Management & Logistics Engineering

Semester 7		Specialization requirement					13.0			
LT4200	Research Project [S6,S7,S8]	C		4	2.0				100	
LT4860	Integrated Capstone Design Project [S6,S7,S8]	C		6	3.0				100	
LT4010	Marketing and Managerial Skills for Engineers	C	2	2	3.0		13.0		40	60
LT4020	Project Management and Appraisal	C	2	2	3.0				40	60
LT4030	Contract Management and Human Resources	C	2		2.0				40	60
LT4210	Railway Operations Planning	E	2	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				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	E	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		Specialization requirement					8.0			
LT4200	Research Project[S6,S7,S8]	C		4	2.0				100	
LT4860	Integrated Capstone Design Project [S6,S7,S8]	C		6	3.0		8.0		100	
LT4040	Smart Technologies for Transport and Logistics Systems	C	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				40	60
LT4340	Design and Operation of Ports	E	5/2	1	3.0			0.0	40	60
LT4350	Aviation Logistics	E	2	2	3.0				40	60
LT4360	Disruptive Vehicular Technologies	E	5/2	1	3.0				40	60
LT4370	Disaster and Humanitarian Logistics	E	2	2	3.0				40	60
LT4380	Risk Management in Transport and Logistics	E	2	2	3.0				40	60
LT4390	Intelligent Mobility Systems	E	5/2	1	3.0				40	60
LT4410	Aviation Technology and Operations	E	2	2	3.0				40	60
		Total			38.0	0.0	8.0	0.0		
		Grand Total			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 %	
			Lecture	Lab / Tute	GPA	NGPA		CA	WE