Overview

MSc Transport, Infrastructure and Logistics 2021 *(120 EC)*

Courses *(75 EC)*

1 Fundamentals *(23 EC)*

TIL4030-20	TIL Research and Design Methods
CIE4801-18	Transport Modelling
SEN1221	Statistical Analysis of Choice Behaviour
ME44206	Quantitative Methods for Logistics

2 Specialisations *(27 EC) (1 specialisation)*

2.1 Specialisation P - Policy: Infrastructure, Planning and Environment *(27 EC)*

CIE5816	Urban Regions, Transport and Economics
CIE5817	Assessment of Transport Infrastructure and Systems
SEN171a	Advanced Evaluation Methods for Transport Policy Decision-making
TPM004a	Transport Safety
AR0168	People, Movement and Public Space
AR0228	Infrastructure and Environment Method Module

2.2 Specialisation D - Design: Transport Systems and Networks *(27 EC)*

CIE4811-18	Planning and Operations of Public Transport Systems
CIE5803-18	Railway Traffic Management
CIE5826	Railway Operations and Control
SEN1721	Travel Behaviour Research
AE4423-20	Airline Planning and Optimization
AE4426	Airport Operations

2.3 Specialisation O - Operations: Traffic, Technology and Control *(27 EC)*

CIE4825	Traffic Flow Modelling and Control Part 1
CIE5821	Traffic Flow Modelling and Control Part 2
CIE5805-18	Intelligent Vehicles for Safe and Efficient Traffic: Design and Assessment
SEN9110	Simulation Master Class
ME44200	Operations and Maintenance
ME44305	System Analysis and Simulation

2.4 Specialisation E - Engineering: Transport, Logistics and Supply Chains *(27 EC)*

CIE5830	Freight Transport Systems: Analysis and Modelling
SEN9720	Logistics and Supply Chain Innovations
TPM028a	Decision Making in Multimodal Transport Systems
ME44101	Dynamics and Interaction of Material and Equipment
ME44300	Multi-Machine Coordination for Logistics
ME44311	Advanced Operations Management

3 Electives *(25 EC)*

3.1 Electives T&P - Transport and Planning *(at least 1 course)*

CIE4811-18	Planning and Operations of Public Transport Systems
CIE4825	Traffic Flow Modelling and Control Part 1
CIE4831-18	Empirical Analysis for Transport and Planning
CIE4845	Emerging Topics for Transport & Planning
CIE5802-18	Advanced Transportation Modelling
CIE5803-18	Railway Traffic Management
CIE5805-18	Intelligent Vehicles for Safe and Efficient Traffic: Design and Assessment
CIE5810-19	Traffic Safety
CIE5815	Resilient Transport Systems: Analysis and Interventions
CIE5816	Urban Regions, Transport and Economics
CIE5817	Assessment of Transport Infrastructure and Systems
CIE5821	Traffic Flow Modelling and Control Part 2
CIE5822	Active modes: Traffic and Transport
CIE5825	Advanced Public Transport Modelling and Operations
CIE5826	Railway Operations and Control
CIE5830	Freight Transportation Systems: Analysis and Modelling

3.2 Electives T&L - Transport and Logistics *(at least 1 course)*

SEN115a	Law and Institutions
SEN171a	Advanced Evaluation Methods for Transport Policy Decision-making
SEN1721	Travel Behaviour Research
SEN1741	Innovations in Transport and Logistics
SEN9110	Simulation Master Class
SEN9720	Logistics and Supply Chain Innovations
SEN9725	Supply Chain Gaming
TPM004a	Transport Safety
TPM023a	Cost-Benefit Analysis: Theory and Application
TPM028a	Decision Making in Multimodal Transport Systems
TPM032a	Multi-criteria Decision Analysis

3.3 Electives MME - Multi-Machine Engineering *(at least 1 course)*

ME44101	Dynamics and Interaction of Material and Equipment
ME44106	Structural Design with FEM
ME44110	Integration Project Multi-Machine Systems
ME44115	Discrete Element Method (DEM) Simulation
ME44125	Reliability and Maintenance of Transport Equipment
ME44200	Operations and Maintenance
ME44210	Drive & Energy Systems
ME44300	Multi-Machine Coordination for Logistics
ME44305	System Analysis and Simulation
ME44311	Advanced Operations and Production Management
ME44312	Machine Learning for Transport and Multi-Machine Systems

3.4 External electives *(at least 1 course)*

3.4.1 Electives C&O - Control and Operations

AE4321-15	Air Traffic Management
AE4423-20	Airline Planning and Optimization
AE4446	Airport Operations

3.4.2 Electives U - Urbanism

AR0168	People, Movement and Public Space
AR0228	Infrastructure and Environment Method Module
AR3CS021	Seminar Cross Domain City of the Future
AR8003TU	Legal and Governance

3.4.3 Electives TIL - Other TIL fields

CIE4330	Ports and Waterways 1
CIE4874	Elements of Railway Engineering
CIE5306	Ports and Waterways 2
CME2300	Financial Engineering
ME41106	Intelligent Vehicles 3mE
MT44070	Shipping Management
RO47016	Automotive Human Factors
WI4062TU	Transport, Routing and Scheduling
WM1301TU	Ethics of Transportation

3.5 Free electives *(optional)*

TIL6000	TIL Capita Selecta
TIL6010	TIL Programming
TIL6020	TIL Scientific Assignment
	Free electives

Projects and Thesis *(45 EC)*

4 Projects *(15 EC)*

TIL4020-20	TIL Research Project
TIL5050-20	TIL Design Project

5 Thesis *(30 EC)*

TIL5060	TIL Thesis