

Overview

MSc Transport, Infrastructure and Logistics 2020 (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
SEN1741	Innovations in Transport and Logistics
AR0093	Infrastructure and Environment Method Module
AR0191	Urban Sustainability
AR0551	People, Movement and Public Space

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

CIE5802-18	Advanced Transportation Modelling
CIE5826	Railway Operations and Control
CIE4811-18	Planning and Operations of Public Transport Systems
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
SEN9710	Decision Making in Multimodal Transport Systems
SEN9720	Logistics and Supply Chain Innovations
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)

SEN1131	Institutional Economics for Design in Socio-technical Systems
SEN1151	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
SEN9710	Decision Making in Multimodal Transport Systems
SEN9720	Logistics and Supply Chain Innovations
SEN9725	Supply Chain Gaming
TPM004a	Transport Safety

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

ME44101	Dynamics and Interaction of Material and Equipment
ME44105	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
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

AR0093	Infrastructure and Environment Method Module
AR0191	Urban Sustainability
AR0551	People, Movement and Public Space
AR3CS010	Workshop Cross Domain City of the Future
AR3CS020	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
ME41105	Intelligent Vehicles
MT44070	Shipping Management
RO47016	Automotive Human Factors
WI4062TU	Transport, Routing and Scheduling
WM1301TU	Ethics of Transportation

3.5 Free electives (optional)

TIL6010	TIL Programming / Matlab
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
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