GHENT UNIVERSITY

Study Programme

Academic year 2025-2026

Faculty of Engineering and Architecture

Master of Science in Industrial Engineering and Operations Research -- Sustainable Mobility Analytics

Language of instruction: English

Programme version 1

1 General Courses 36 credits

The track Sustainable Mobility Analytics in the Master of Science in Industrial Engineering and Operations Research is part of the EIT Urban Mobility Master School. It may only be taken by students as part of a double degree with one the interuniversity partners, in accordance with the mobility scheme and subject to the requirements of the entry and exit university.

Nr	Course		CRDT	Ref	MT1	Session	Study
1	E004255	Operations Research Models and Methods El-Houssaine Aghezzaf -- Department of Industrial Systems Engineering and Product Design	6		1	A:1	180
2	E005741	Simulation of Stochastic Systems Stijn De Vuyst -- Department of Industrial Systems Engineering and Product Design	6		1	A:1	180
3	E018321	Algorithmic Programming Pieter Leyman -- Department of Industrial Systems Engineering and Product Design	6		1	A:1	180
4	E076951	Engineering Economy Sofie Verbrugge -- Department of Information Technology	6		1	A:1	180
5	E076341	Information Technology for Industrial Engineering Michiel Vlaminck -- Department of Telecommunications and Information Processing	3		1	A:2	90
6	E004153	Heuristics and Search Methods Sidharta Gautama -- Department of Industrial Systems Engineering and Product Design	3		2	A:2	90
7	E004241	Industrial Systems Modelling and Optimization El-Houssaine Aghezzaf -- Department of Industrial Systems Engineering and Product Design	6		2	A:2	180

2 Courses Related to the Main Subject 65 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	E084390	Traffic Flow Modelling Dieter Fiems -- Department of Telecommunications and Information Processing	6		1	A:1	180
2	E084460	Design of Urban Services Sidharta Gautama -- Department of Industrial Systems Engineering and Product Design	6		1	A:2	180
3	E084480	Advanced Topics in Traffic and Logistics Ivana Semanjski -- Department of Industrial Systems Engineering and Product Design	4		1	A:2	120
4	E076460	Dare to Venture	4		1	A:2	120
5	E084440	Summer School on Transportation	3		2	A:1	90
6	C004177	Spatiotemporal Analysis and Modelling Nico Van de Weghe -- Department of Geography	5		2		150
7	E018240	Big Data Technology Dieter De Witte -- Department of Electronics and Information Systems	4		2	A:1	120
8	E076471	Dare to Start Wouter Haerick -- Department of Information Technology	3		2	A:2	90
9	E099300	Industry Internship Engineering and Architecture [en, nl] Patrick Segers -- Department of Electronics and Information Systems	6		2	A:J	180

2.1 Master's Dissertation 24 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	E091103	Master's Dissertation	24		2	B:J	720

3 Elective Courses 19 credits

The student takes 19 credits of elective courses from the study programme of the Master of Science in Industrial Engineering and Operations Research, in accordance with the mobility schedule and the conditions of the entry and exit university, under the double degree agreement.

Teaching

When a course is not taught (solely) in the programme's language of instruction, the effectively used languages are indicated in square brackets following the cours name, using the following ISO codes:

bg: Bulgarian	de: German	es: Spanish	ja: Japanese	pl: Polish	sh: Kroatian/Serbian	zh: Chinese
cs: Czech	el: Greek	fr: French	nl: Dutch	pt: Portuguese	sl: Slovene	
da: Danish	en: English	it: Italian	no: Norwegian	ru: Russian	sv: Swedish	

Semester

Semesters are indicated by their number (1 or 2); semester 3 represents the summer period and J indicates a course spanning semesters 1 and 2.
When a capital letter precedes a semester number, the course has multiple offerings. The letter indicates the offering concerned.
When a semester is shown in brackets, the course in not offered this year in the specific offering.
The offering frequency and first year of offering are indicated by the following codes:

a: bi-annually	c: annually, from 2026-2027	f: annually, from 2027-2028	i: annually, from 2028-2029
b: tri-annually	d: bi-annually, from 2026-2027	g: bi-annually, from 2027-2028	j: bi-annually, from 2028-2029
	e: tri-annually, from 2026-2027	h: tri-annually, from 2027-2028	k: tri-annually, from 2028-2029