GHENT UNIVERSITY

Study Programme

Academic year 2026-2027

Faculty of Engineering and Architecture

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

Language of instruction: English

Programme version 1

1 General Courses 36 credits

The main subject Sustainable Mobility Analytics in the Master of Science in Operations Research Engineering is part of the EIT Urban Mobility Master School. It can only be followed 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* Indicative price: € 60	6		1	A:1	180
2	E005741	Simulation of Stochastic Systems *Stijn De Vuyst -- Department of Industrial Systems Engineering and Product Design* Indicative price: € 0	6		1	A:1	180
3	E076951	Engineering Economy *Sofie Verbrugge -- Department of Industrial Systems Engineering and Product Design* Indicative price: € 60	6		1	A:1	180
4	E004153	Heuristics and Search Methods *Sidharta Gautama -- Department of Industrial Systems Engineering and Product Design* Indicative price: € 0	3		1	A:2	90
5	E076341	Information Technology for Industrial Engineering *Michiel Vlaminck -- Department of Telecommunications and Information Processing* Indicative price: € 0	3		1	A:2	90
6	E018321	Algorithmic Programming *Pieter Leyman -- Department of Industrial Systems Engineering and Product Design* Indicative price: € 0	6		2	A:1	180
7	E004241	Industrial Systems Modelling and Optimization *El-Houssaine Aghezzaf -- Department of Industrial Systems Engineering and Product Design* Indicative price: € 219	6		2	A:2	180

2 Courses Related to the Main Subject 61 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	C003534	Urban Mobility and Logistics *Giovanni Circella -- Department of Geography* Indicative price: € 0	5		1	A:1	150
2	E084460	Design of Urban Services *Sidharta Gautama -- Department of Industrial Systems Engineering and Product Design* Indicative price: unknown	6		1	A:2	180
3	F001022	Dare to Venture *Johan Verrue -- Department of Marketing, Innovation and Organisation* Indicative price: unknown	4		1	A:2	120
4	E084390	Traffic Flow Modelling *Dieter Fiems -- Department of Telecommunications and Information Processing* Indicative price: € 0	6		1	A:1	180
5	E084440	Summer School on Transportation Indicative price: unknown	3		2	A:1	90

6	E076471	Dare to Start *Wouter Haerick -- Department of Information Technology* Indicative price: unknown	3	2	A:2	90
7	E084480	Advanced Topics in Traffic and Logistics *Ivana Semanjski -- Department of Industrial Systems Engineering and Product Design* Indicative price: € 345	4	2	A:2	120
8	E099300	Industry Internship Engineering and Architecture [en, nl] *Patrick Segers -- Department of Electronics and Information Systems* Indicative price: unknown	6	2	A:J	180

2.1 Master's Dissertation 24 credits

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

3 Courses Related to the Main Subject

Students subscribe to the courses from one of the tracks below, in accordance with the mobility scheme and subject to the requirements of the entry and exit university.

3.1 Track Data Analytics 5 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	C004177	Spatiotemporal Analysis and Modelling *Nico Van de Weghe -- Department of Geography* Indicative price: € 0	5		2	A:1	150

3.2 Track Urban Mobility Transitions 7 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	E084710	Planning Theory: Contemporary Challenges *Tim Devos -- Department of Civil Engineering* Indicative price: € 0	4		1	A:2	120
2	E086621	Planning and Transition: Mobility *Koos Fransen -- Department of Civil Engineering* Indicative price: € 0	3		2	A:1	90

4 Elective Courses

The student subscribes to elective courses from the study programme of the Master of Science in Operations Research Engineering, in accordance with the mobility schedule and the conditions of the entry and exit university, under the double degree agreement:
•18 credit units in the Track Data Analytics
•16 credit units in the Track Urban Mobility Transitions

Programme related study costs

None

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 2027-2028	f: annually, from 2028-2029	i: annually, from 2029-2030
b: tri-annually	d: bi-annually, from 2027-2028	g: bi-annually, from 2028-2029	j: bi-annually, from 2029-2030
	e: tri-annually, from 2027-2028	h: tri-annually, from 2028-2029	k: tri-annually, from 2029-2030

Learning materials

The prices stated are indicative and subject to fluctuations.
The list of learning materials per course unit can be found in the course sheets.