CALENDAR 2024-2025

Q1

28 aug	Master kick-off
2 sep	Start academic year
2 sep-12 oct	Create a PSP and discuss it with your mentor
27 sep	MomenTUm
13 oct	Registration closing date for exams Q1 and courses Q2
28 oct-9 nov	Exams

Q2

23 dec-3 jan	Christmas Holidays
5 jan	Registration closing date for exams Q2 and courses Q3
20 jan-1 feb	Exams

Q3

1 mar	International exp. deadline A
3-7 mar	Carnival Holidays
t.b.a.	Bouwkunde Bedrijvendagen
23 mar	Registration closing date for exams Q3 and courses Q4
7-19 apr	Exams
18-21 apr	Good Friday and Easter

Q4

26 apr	King's Day
5 may	Liberation Day
29-30 may	Ascension Day + bridge day
8 jun	Registration closing date for exams Q4
9 jun	Whit Monday
23 jun-5 jul	Exams

11-16 aug	Interim exams
24 aug	Reg. deadline courses Q1
1 sep	International exp. deadline B

*Time/location may vary depending on the situation at the time

COACHING AND ADVICE

As a TU/e student, you are responsible for your own study progress and we expect a pro-active attitude. Of course, we will help you when needed.

During the master you can discuss your personal study plan, career possibilities and elective choices with your **mentor**. For SMDSA students, your mentor is the coordinator of the program, prof. Soora Rasouli (s.rasouli@tue.nl). Prof. Soora Rasouli is also your main point of contact for questions regarding the curriculum. An appointment with the **academic advisor**, for instance to discuss any personal circumstances, can be made online (educationguide.tue.nl/guidance-and-development/who-to-contact/academic-advisor). Should you have questions regarding your study progress, please contact the **Education & Student Affairs Office**.
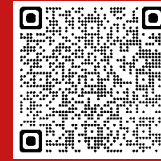
TO-DO LIST

Start off well and check this list!

☐ Gather the required documents and apply to the EIT Urban Mobility master school before the Application deadlines (eiturbanmobility.eu/detailed-master-school-programme-information/).

☐ Make your **personal study plan** (PSP) for the part of your study that you will complete at the TU/e. This plan is the basis for your master and consists of all your courses and projects, as well as your planning. Once checked and signed by your mentor, deliver your PSP via Osiris Case, which is accessible via Osiris Student (tue.osiris-student.nl/login).

MORE INFORMATION

Education & Student
Affairs Office
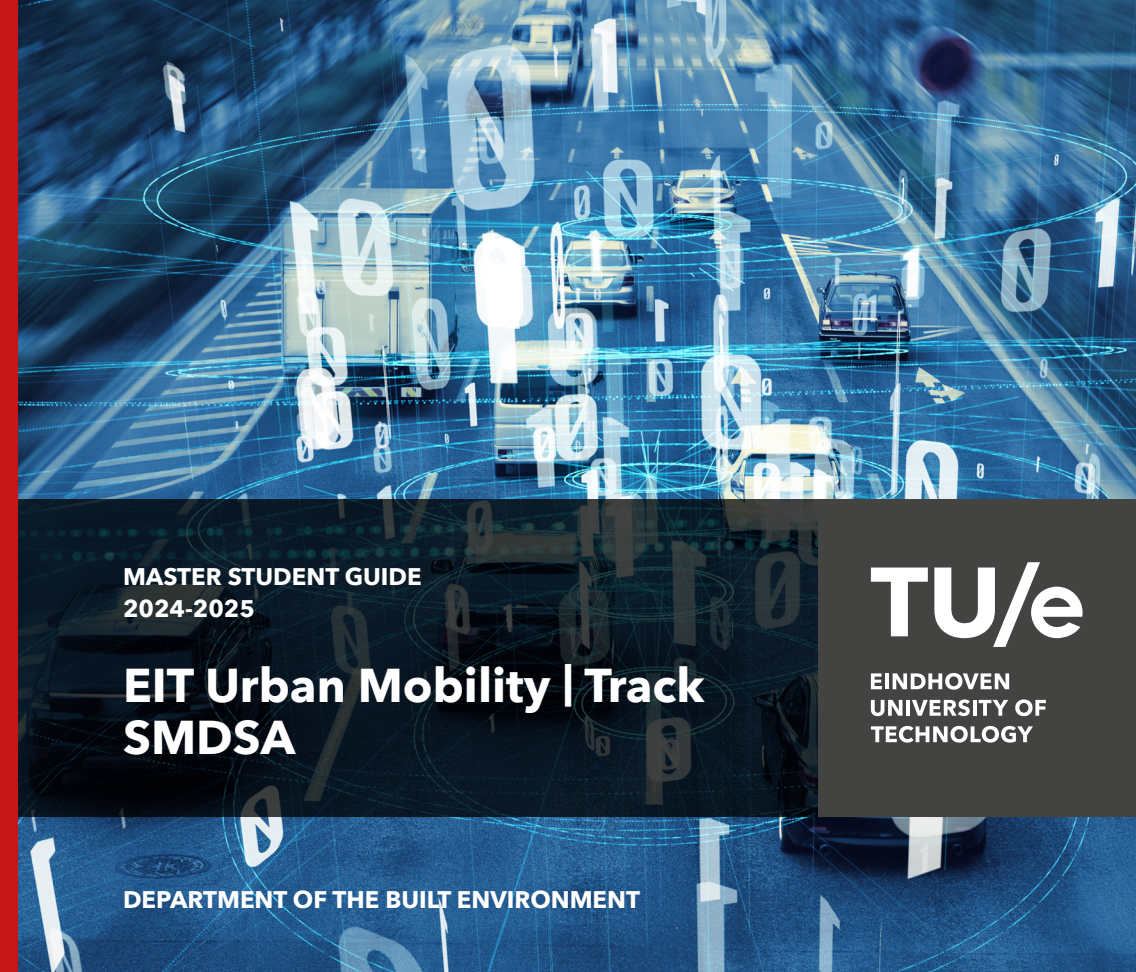(Built Environment)
Vertigo 2.12
esa.be@tue.nl

And check out these webpages:

- Education Guide ABP
  for department-specific information on curriculum, regulations (PER), and more (educationguide.tue.nl/gs/abp)
- Education Guide (general)
  for more general topics (educationguide.tue.nl)
- OSIRIS
  for a complete course catalogue, your exam results and your study progress (osiris.tue.nl)
- CANVAS
  here you can find the study guide with the planning and assignments for your courses (canvas.tue.nl)
- Intranet
  for information about the department and facilities such as the student workshop (intranet.tue.nl/BE)

We need your help to improve our education!
Please fill in our course evaluations and send suggestions for improvements and complaints to the Education Coordinator (education.coordinator.BE@tue.nl). Complaints on examinations can be sent to the Examination Committee (examination.committee.be@tue.nl)

**MASTER STUDENT GUIDE
2024-2025**

EIT Urban Mobility | Track SMDSA

TU/e

**EINDHOVEN
UNIVERSITY OF
TECHNOLOGY**

DEPARTMENT OF THE BUILT ENVIRONMENT

TRACK SMDSA

Smart Mobility Data Science and Analytics (SMDSA) is a master track where students learn how to manage large mobility datasets, critically understand their quality, and utilize them to address our cities most pressing challenges.

You will gain analytical skills to extract hidden patterns of big mobility data and learn advanced statistical methods to build forecasting models which will be used as planning tools. You will apply the knowledge you gain in projects during which you will work on real mobility challenges.

Year 1 - Entry University

- Introduction to I&E*
- Challenge based project
- Core Skills in Urban Mobility

Pan-European Kick-Off

Summer School

EIT Label Certificate Double degree

Year 2 - Exit University

- Challenge based project continued
- Electives in Urban Mobility
- Electives in I&E
- Master Thesis

Visiting 2 European cities

* Innovation and Entrepreneurship

STUDY STRUCTURE

The SMDSA track is a double degree and EIT Label Certificate program. You will spend one year each at two different universities, the "entry" university and the "exit" university (see the diagram above). All choices are located at a leading university in Europe in the field of urban mobility. Graduating students will be awarded two master's degrees, one from each university where they carried out their studies.

The track has integrated technical content and business content (Innovation & Entrepreneurship – shared between all programs). An integral part of the second year is a Master's thesis (30 ECTS).

On the next page, you will find the course overview of the SMDSA program at the TU/e. TU/e offers only a program as 'exit' university. For more information, and for the uncompressed versions of the course overviews, visit the education guide (master ABP, track SMDSA).

PARTNER UNIVERSITIES

Listed below are the SMDSA partner universities and their web addresses.

- **Eindhoven University of Technology**, Eindhoven, the Netherlands (educationguide.tue.nl/programs/graduate-school/masters-programs/architecture-building-and-planning/curriculum/tracks) only exit program
- **University of Tartu**, Tartu, Estonia (cs.ut.ee/en/smart-mobility-data-science-and-analytics)
- **UPC**, Barcelona, Spain (camins.upc.edu/en/Studies/master/urban_mobility)
- **Politecnico di Milano**, Milan, Italy (www.eitum.polimi.it/smdsa/) only exit program
- **Ghent University**, Ghent, Belgium (studiekiezer.ugent.be/master-of-science-in-industrial-engineering-and-operations-research-sustainable-mobility-analytics-en/2023) only exit program
- **University of Lisbon-Técnico. IST**, Lisbon, Portugal (https://www.ulisboa.pt/en/info/eit-urban-mobility-masters-programs-ulisboa)

PROGRAM

Exit point program TU/e		Q	ECTS
Innovation and Entrepreneurship courses			
1ZM160	Innovation and entrepreneurship study	1	5
1ZM16	Managing innovation processes: Agile, SCRUM, and other innovation tools	1	5
0EM120	Governing innovations	1	5
0EM130	Modern society in transition	1	5
1ZM120	Entrepreneurial marketing	2	5
0EM160	Innovation and intellectual property rights	2	5
Core courses			
7ZW5M0	Smart healthy urban environment	2	5
7SM30M0	Graduation project SMDSA	3-4	30
Specialization electives			
2AMI10	Foundations of process mining	1	5
0HM310	Automotive human factors	1	5
2DME20	Non linear optimization	1	5
7ZW3M0	Urban planning 2	1	5
0LM190	Philosophy and ethics of AI	2	5
2AMU10	Foundations of artificial intelligence	2	5
1CM110	Decision making in transport and logistics	2	5
1CM240	Artificial intelligence for logistics and its interfaces	3	5

* **Please note:** Students are required to spend at least 12 weeks in a non-academic organization, 8 of which is required to be related to their master thesis. The remaining 4 weeks can be spent either in relation to the Master thesis or as elective Internship course.

total: 65

ELIGIBILITY

In order to qualify for admission to the SMDSA track, you must be fluent in English and have completed a Bachelor's degree encompassing a minimum of 180 ECTS. For more detailed and up-to-date information on admissions criteria, application deadlines, and required documents, visit the EIT Urban Mobility website (eiturbanmobility.eu/detailed-master-school-programme-information/).

BUILD YOUR OWN FUTURE

Invest in your future and explore the great offer of extra-curricular activities alongside your study program:

CHEOPS
Study association of the Built Environment

- The study associations of the Built Environment organize workshops, excursions, lectures and leisure activities. Join a committee to meet new people, learn new skills, and have fun! (cheops.cc)

sg

- Broaden your horizon at Studium Generale: lectures, debates, concerts, theatre, movies and more! (studiumgenerale-eindhoven.nl)

Good to know
- EIT Urban Mobility offers a number of merit-based scholarships, for which there is no need to apply. To check the criteria on which students are ranked, visit the EIT Urban Mobility Website. (eiturbanmobility.eu/detailed-master-school-programme-information/).

- The Smart Mobility Data Science and Analytics programme is aimed to educate, inspire, and unite future leaders in the Urban Mobility Sector. For more information on career opportunities , visit the SMDSA page on the EIT Urban Mobility Website (eiturbanmobility.eu/smart-mobility-data-science-and-analytics/).

Handy! Cut this folded page and use the calendar on the back side as a bookmark for your agenda.