Form number

Form name DSAI Program of Examinations Enrollment year 2022-2023 or later

Month and year of enrollment:

ID-Number:

Fill in moment At the end of the 3rd quarter of your studies

Name:

Intended graduation cluster*: -

Name representative research cluster*:

*This form needs approval (within SCOP/e - 2IMR10) from the representative of the research cluster where you intend to graduate.

Instructions

Please fill in the form digitally. In the case you want to change your program and you require permission from the Examination Committee in advance (e.g. when following courses at another university), note the changes on page 4. When you want to change the program for other reasons, please do this at the start of your preparation phase together with form 2. For more information on the DSAI program check <u>the online education guide</u>.

- 1. In the green column the mandatory study components (core) are already selected. Additionally, you need to select <u>one</u> of the three core electives in this column (2AMM20, 2AMI10 or 2AMV10).
- 2. In the white columns, you need to select two major trajectories (two courses/10 credits per major trajectory) and one or two minor trajectories (two courses/10 credits in total from trajectories that are not your major trajectories). Please indicate which trajectory is a major and which one is a minor.
- 3. On page 2 and 3 you need to fill in the seminar you chose to follow and your free electives (15 credits). Also, you can fill in your homologation courses and internship, if applicable. Are you following courses at another university? Please provide links to the course descriptions of these courses (e.g. a link to a course catalogue) on page 4.
- 4. If you need to make changes to a previously approved program please use textbox one page 4 as well.

		Core and core	Specialization electiv	es major/minor (30)
Code	Course title	electives (30)		
Mandatory stud	dy components			
0LM190	Ethics in Data Science & Al			
2AMC15	Data Intelligence Challenge			
Program Trajectories			2 x 10 credits majo	or + 2 x 5 credits minor
DS&AI in Context			major	minor
2IMP40	Empirical Methods in Software Engineering			
Statistics			major	minor
2AMS10	Longitudinal Data Analysis			
2DI70	Statistical Learning Theory			
2AMS20	Statistics for Big Data			
2DD23	Time-Series & Forecasting			
2AMS30	Network Statistics for Data Science			

Data Engineer	ing and Management		1	major	minor
2AMD15	Big Data Management				
2IMD10	Engineering Data Systems				
2IMS25	Principles of Data Protection				
2AMD20	Knowledge Engineerin				
Artificial Intelli	gence and Machine Learning		I	major	minor
2AMU10	Foundations of AI				
2AMU20	Generative AI Models				
2AMU30	Uncertainty representation and reasoning				
2AMM40	Advanced Topics in Al				
Data Mining 8	& Machine Learning major		I	major	minor
2AMM20	Research Topics in Data Mining				
2AMS40	Learning Optimal Decision Strategies				
2AMM15	Machine Learning Engineering				
2AMM10	Deep Learning				
2AMM30	Text Mining				
Process Mining	and Visual Analytics (formerly: Explainable Data Analytics)		r	major	minor
2AMI10	Foundations of Process Mining				
2AMI20	Advanced Process Mining				
2AMV10	Visual Analytics				
Algorithmic Da	ata Analysis		I	major	minor
2AMS50	Optimization for Data Science				
2IMA20	Algorithms for Geographic Data				
2IMA30	Topological Data Analysis				
	Subtotal credits/ no. of courses completed	30	20	10	

Seminar (select one)

Course code	Course title		credits
2IMA00	Seminar Algorithms		5
2IMD00	Seminar Datamanagement		5
2IMI00	Seminar Process Analytics		5
2IMM00	Seminar Data Mining		5
2IMS00	Seminar IST		5
2IMU00	Seminar Uncertainty in Al	Ι.	5
2IMV00	Seminar Visualization		5
2AMS00	Seminar SPOR		5

2IMN00	Seminar IRIS	5
2IMP00	Seminar SET	5
2IMF00	Seminar FSA	5
	Subtotal credits	

Free elective courses

Course code	Course title	credits
	Subtotal credits	

Homologation courses*

Course code	Course title	credits
	Subtotal credits	

*Homologation courses are bachelor courses assigned during the admission process to make up deficiencies in previous knowledge. Please check your admission letter to see if you have homologation courses. It is also possible to pick a maximum of three bachelor courses yourself to compensate deficiencies, if you think it is necessary. If you do that, a motivation for including the self-chosen homologation courses must be attached to this form.

Internship**

Course code	Course title	credits
2IMC10	Internship	15
	Subtotal credits	

**An internship is optional. Keep in mind, when you do an external internship (e.g. at a company), your graduation project needs to be executed internally (within TU/e), when you do an internal internship you cannot graduate with the same supervisor. Internship supervisor (if known):

Graduation Project

Course code	Course title	credits
2AMC05	Graduation Preparation	10
2AMC00	Master Project	30
	Subtotal credits	40

Total number of credits (at least 120 credits)

Changes to the previously approved program, links to course descriptions of courses followed at another university and/or motivation for self- chosen homologation courses (if applicable):

This section to be filled in by the Examination Committee

Approval Examination Committee:

Date: