Form number	Form name	Enrollment year	Fill in moment
Form number 1	**Form name** DSAI Program of Examinations	**Enrollment year** 2022-2023 or later	**Fill in moment** At the end of the 3rd quarter of your studies

Name: ID-Number:

Intended graduation cluster*: **-**   **-**   Month and year of enrollment:

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

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 the online education guide.

1. In the green column the mandatory study components (core) are already selected. Additionally, you need to select one 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.

Code	Course title	Core and core electives (30)	Specialization electives major/minor (30)	
Mandatory study components				
0LM190	Ethics in Data Science & AI			
2AMC15	Data Intelligence Challenge			
Program Trajectories			2 x 10 credits major + 2 x 5 credits minor	
DS&AI in Context			major	minor
2IMP40	Empirical Methods in Software Engineering			
Statistics			major	minor
2AMS11	Survival Analysis for Data Scientists			
2DI70	Statistical Learning Theory			
2AMS20	Statistics for Big Data			
2DD23	Time Series & Forecasting			
2AMS30	Network Statistics for Data Science			

Data Engineering and Management			major	minor
2AMD15	Big Data Management			
2IMD10	Engineering Data-Intensive Systems			
2IMS25	Principles of Data Protection			
2AMD20	Knowledge Engineering			
Artificial Intelligence and Machine Learning			major	minor
2AMU10	Foundations of Artificial Intelligence			
2AMU20	Generative AI Models			
2AMU30	Uncertainty Representation and Reasoning			
2AMM40	Advanced Topics in Artificial Intelligence			
2AMS40	Optimal Decision Making & Reinforcement Learning			
Data Mining & Machine Learning			major	minor
2AMM20	Research Topics in Data Mining			
2AMM15	Machine Learning Engineering			
2AMM10	Deep Learning			
2AMM30	Text Mining			
Process Mining and Visual Analytics (formerly: Explainable Data Analytics)			major	minor
2AMI10	Foundations of Process Mining			
2AMI20	Advanced Process Mining			
2AMV10	Visual Analytics			
Algorithmic Data Analysis			major	minor
2AMS50	Optimization for Data Science			
2IMA20	Algorithms for Geovisualization			
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 Information Security Technology (IST)			5
2IMU00	Seminar Uncertainty in AI			5
2IMV00	Seminar Visualization			5
2AMS00	Seminar Statistics, Probability and Operations Research (SPOR)			5

2IMN00	Seminar Interconnected Resopurce-aware Intelligent Systems (IRIS		5
2IMP00	Seminar Software Engineering and Technology (SET)	☐	5
2IMF00	Seminar Formal System Analysis (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: