Form number	Form name	Enrollment year	Fill in moment
1	CSE Program of Examinations	2022-2023 or later	At least 6 weeks before start preparation phase

Name: ID-Number:

Intended graduation   Month and year of enrollment:

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 via 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 five. When you want to change the program for other reasons, please hand in a revised form at the start of your preparation phase together with form 2. For more information on the CSE program check the online education guide.

1. In the red column you need to select three foundational courses. You can only pick one foundational course per focus area.
2. In the blue column you need to select three extra courses from your chosen focus area. These can be either foundational courses or deepening courses. Please indicate which focus area you picked by ticking the box *focus area*.
3. Next you need to select specialization electives. You need select 30 credits of specialization electives, which can come from the green column or from the list of specialization electives on page 3.
4. Additionally, on the third page you need to fill in your free electives (15 credits). Do you wish to include courses from another university? Please provide links to the course descriptions of these courses (e.g., a link to a course catalogue).
5. On the fourth page you can fill in your homologation courses if applicable and choose the seminar you wish to follow.
6. If you need to make changes to a previously approved program please indicate the changes made in the textbox on page five as well.

Course code	Course title	Foundational courses	Extra courses	Specialization electives
Focus areas				
Algorithms and Theory		◌ Focus area		
2IMA10	Advanced Algorithms	☐	☐	☐
2IMF25	Automated Reasoning	☐	☐	☐
2IMF10	Process Algebra	☐	☐	☐
2IMA20	Algorithms for Geovisualization		☐	☐
2IMA15	Geometric Algorithms		☐	☐
2IMA35	Massively Parallel Algorithms		☐	☐
2IMA25	Exact Algorithms for NP-hard Problems		☐	☐
2IMF15	Proving with Computer Assistance		☐	☐
2IMA30	Topological Data Analysis			☐
2IMA50	Algoritms for Collective Decision Making			

Architectures and Systems		○ focus area		
2IMN10	Architecture of Distributed Systems	☐	☐	☐
2IMF30	System Validation	☐	☐	☐
2IMD10	Engineering of Data Systems	☐	☐	☐
2IMF35	Algorithms for Model Checking		☐	☐
2IMN15	Internet of Things		☐	☐
2IMN20	Real-time Systems		☐	☐
2IMN25	Quantitative Evaluation of Cyber Physical Systems		☐	☐
2IMN35	VLSI Programming		☐	☐
Software and Analytics		○ focus area		
2AMI10	Foudations to Process Mining	☐	☐	☐
2IMP10	Program Verification Techniques	☐	☐	☐
2IMP25	Software Evolution		☐	☐
2AMM20	Research topics in Data Mining*		☐	☐
2IMN30	Machine Learning for Industry		☐	☐
2IMP40	Empirical Methods in Software Engineering		☐	☐
2AMD15	Big Data Management		☐	☐
2IMP30	System Design Engineering		☐	☐
2IMP20	Domain Specific Language Design			☐
2IMP60	Human-Computer Interaction			
	Subtotal credits	**15**	**15**	

* Only students that started their Program before the academic year 2023-2024 may take this course as foundational course in the Software and Analytics Focus Area

Specialization electives

Course code	Course title	
2IMS10	Physical Aspects of Digital Security	☐
2IMS25	Principles of Data Protection	☐
2IMD20	Language Virtual Machines Design and Implementation	☐
2DMI20	Software Security	☐
2IMS20	Cyberattacks, Crime and Defenses	☐
2AMM15	Machine Leaning Engineering	☐
2IMS15	Verification of Security Protocols	☐
2IMS30	Advanced Network Security	☐
2IMV10	Visual Computing Project	☐
2AMM10	Deep Learning	☐
2IMP15	Software Project Management	☐
2IMV15	Simulation in Computer Graphics	☐
2IMS40	Intrusion Detection Lab	
2IMS50	Introduction to Quantum Computing and Security	
2IMC10	Internship* (15 credits)	
	Subtotal credits	

Internship supervisor (if known):

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.

Free elective courses

Course code	Course title	Credits
	Subtotal credits	

Homologation courses (if applicable)** (homologation courses count towards the 15 credits in free elective courses)

**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.

Course code	Course title	Credits
	Subtotal credits	

Seminar

Course code	Course title	
2IMD00	Seminar Data Management	☐
2IMF00	Seminar Formal System Analysis	☐
2IMI00	Seminar Process Analytics	☐
2IMM00	Seminar Data Mining	☐
2IMN00	Seminar Interconnected Resource-aware Intelligent Systems (IRIS)	☐
2IMP00	Seminar Software Engineering and Technology	☐
2IMU00	Seminar Uncertainty in AI	☐
2IMV00	Seminar Visualization	☐
2IMA00	Seminar Algorithms	☐
2IMS00	Seminar Information Security Technology	☐
	Subtotal credits	

Graduation Project

Course code	Course title	Credits
2IMC15	Preparation Graduation Project (Not given in AY 21-22, but in AY 22-23)	10
2IMC00	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 Examinations Committee: Date: