Al Engineering of Autonomous Systems

at Technische Hochschule Ingolstadt from 13.02.2023

					Exams		Weighting for the overall examination grade (in %)	ECTS credit points (ECTS)	Sum calculation		
No.	Module s		Language of instruction and examination	Type of course	Art	Duration in minutes			Number of modules per entry	Weight	ECTS
1	Machine Perception and Cognition	4	English	SU/Ü	schrP	90 - 120	6,0	5,0	1	6,0	5,0
2	System Identification, Modeling and Simulation	4	English	SU/Ü	schrP	90 - 120	6,0	5,0	1	6,0	5,0
3	Data Engineering and Analytics	4	English	SU/Ü	schrP	90 - 120	6,0	5,0	1	6,0	5,0
4	Scientific Seminar	2	English	S	SA		3,0	2,5	1	3,0	2,5
5	Ethical Considerations in Autonomous System Design	2	English	SU/Ü	mdlP	15 - 30	3,0	2,5	1	3,0	2,5
6	Sensor Networks Technologies and Sensor Data Fusion	4	English	SU/Ü	schrP	90 - 120	6,0	5,0	1	6,0	5,0
7	Principles of Autonomy and Decision Making	4	English	SU/Ü	prP		6,0	5,0	1	6,0	5,0
8	Computing and Connectivity Technologies	4	English	SU/Ü	mdlP	15 - 30	6,0	5,0	1	6,0	5,0
9	Systems Engineering and Architecting for Edge Computing	4	English	SU/Ü	schrP	90 - 120	6,0	5,0	1	6,0	5,0
10	Team Project ³⁾	4	English	Prj	Proj		6,0	5,0	1	6,0	5,0
11	General Elective ²⁾	4	German	SU/Ü	LN		6,0	5,0	1	6,0	5,0
12	Science Elective ²⁾	8	English	SU/Ü	LN		6,0	5,0	2	12,0	10,0
13	Master Thesis ¹⁾						28,0	30,0	1	28,0	30,0
13.1	Master Thesis		English		MA						
13.2	Colloquium		English		Coll						
	Total	48								100,0	90,0

Footnotes

- D A colloquium is held for the Master's thesis. The assessment is made by the grade "passed with success" or "passed without success". Only the grade of the Master's thesis is shown on the transcript.
- ²⁾ Subject-specific compulsory elective modules should be completed by modules with 4 SWS or can be completed by modules with 2 SWS. If subject-specific compulsory elective modules are completed with 2 SWS.

the number of credits to be taken increases accordingly.

³⁾ The topic of the project is shown on the certificate.

Type of course

- S Seminar
- SU Seminar-based teaching
- Ü Exercise
- SU/Ü Seminars with exercises
- Pr Internship

Type_of_ examination

schrP written examination	The written examination is a written examination of 90 minutes unless explicitly stated otherwise.
mdIP oral examination	The oral examination is an interview lasting 15 minutes per person unless explicitly stated otherwise.
LN Performance record	The certificate of achievement can be a written examination, an oral examination, a seminar paper, a seminar paper or a practical examination. The Further details are specified by the Faculty Council in the curriculum.
prP Practical exam	The student's "real actions" are to be used to demonstrate that the student has mastered the practical application of the competences taught. The practical examination lasts 15 minutes unless explicitly stated otherwise.
StA Student research project	The term paper is a term paper without an oral presentation. A term paper comprises at least 3000 to a maximum of 6000 words (approx. 10 to 20 Pages: Word processor approx. 8 to 15 pages or presentation approx. 15 to 20 pages).
SA Seminar paper	The seminar paper is a term paper with an oral presentation. A term paper comprises at least 3000 to a maximum of 6000 words (approx. 10 to 20 pages: Word processor approx. 8 to 15 pages or presentation approx. 15 to 20 pages). The oral presentation has a total length of 15-20 minutes. and can also take place during the semester.
Proj Project work	The project work is a group work in which several students work on a common task in a team and present the results orally and in writing. Each student has to contribute individually to the joint task and deliver an oral presentation of 15 minutes. The written part has a length of approx. 5-25 pages.
MA Master thesis	Written thesis in the Master's degree programme: Maximum processing time (= period between registration of the Master's thesis and submission) of 6 months/scope 60-80 Pages (without cover pages, indexes and appendices) created with a word processing programme.
Coll Colloquium	The colloquium is an oral examination of 10-15 minutes in which the student defends the result of his/her elaboration.