

Annex 1 to the Study and Examination Regulations for the advanced course of education leading to the Master's degree: Electromobility and Vehicle Electrification at the Technical University of Ingolstadt dated 16/10/2017

1 Serial no.	2 Modules	3 Semester hours per week	4 Form of teaching	5 Examinations		7 Scope	8 Scope	9 Weighting for the overall examination grade (in %)	10 ECTS-credit points
				Type	6 Duration in minutes	Written composition	Presentation		
1	Compulsory elective modules¹⁾ (3 out of 4)	12						12	15
1.1.	Algorithmic Thinking and Programming in High-level Languages	4	S / P	pE	15			4	5
1.2.	Modelling and Simulation of Dynamic Systems	4	S / P	pE	15			4	5
1.3.	Methodological Skills in Engineering	4	S / P	orEx	15			4	5
1.4.	Personal and Social Skills at the Workplace	4	S / P	orEx	15			4	5
2	Electrical Engineering and Electronics	4	S / P	wrEx	90			4	5
3	Signal Processing in Vehicles	4	S / P	wrEx	90			7	5
4	Control Technology in Vehicles	4	S / P	wrEx	90			7	5
5	Electric Machines	4	S / P	wrEx	90			7	5
6	Power Electronics and Electric Energy Laws	4	S / P	wrEx	90			7	5
7	Electrical Energy Stores and Energy Management	4	S / P	orEx	15			7	5
8	Vehicle Information Processing	4	S / P	srp		8 - 15 pages		7	5
9	Electronic Vehicle Systems and Components	4	S / P	orEx	15			7	5
10	Electrified Drive	4	S / P	wrEx	90			7	5
11	Master's Thesis			MT		60 - 80 pages		25	30
	Summe	48						100	90

Fußnoten

Re: Compulsory elective modules¹⁾

This involves a module group with several optional modules, for which 5 ECTS credits can be obtained upon successful completion of the respective module. In total, 15 ECTS credits must be achieved. Technical scientific elective modules should have a close technical connection to the field of study and should have the following objectives: - achieving a deeper scientific understanding of the knowledge already acquired during the course of studies - acquisition of additional specialist competences in specific areas that were not mediated during the course not or only to a limited extent. General scientific core elective modules serve to consolidate and strength multidisciplinary skills and qualifications (rhetoric, presentation and moderation techniques, time management, leadership skills, etc.). The detailed qualification objectives of the compulsory modules result from the respective module descriptions. 3 with 4 hours per week must be selected from the compulsory modules. Closer details are provided by the Advanced Education Council in the curriculum/module handbook. All individual credits must have been passed with at least a 'satisfactory' grade.

Form of teaching

S
P

Seminar tuition
Practise

Type of examination

wrEx

written examination

The written exam shall be an examination lasting 90 minutes, unless otherwise explicitly specified.

orEx

oral examination

The oral examination is carried out as an interview of 15 minutes per person, unless otherwise explicitly specified.

pE

practical examination

"Real actions" of the students should be used to demonstrate that they have mastered the practical applications of the imparted skills. The practical examination shall be 15 minutes in length, unless otherwise explicitly specified.

srp

student research paper

The study paper shall be a term paper without an oral presentation. The term paper should amount to at least 3000 up to a maximum 6000 words (approx. 8 to 15 pages).

MT

master thesis

Final written paper for the Master course of study: maximum processing time (= time

Duration in minutes

15

90

8 - 15 pages

10 - 20 pages

60 - 80 pages

Type of module

CM

Compulsory module

CEM

Compulsory elective module