Annex to the academic study and examination regulations for the master programme Renewable Energy Systems at Technische Hochschule Ingolstadt dated 18.07.2016 as amended on 29.04.2024

1	2	3	4	5	6	7	8	9	10
No.	Modules	WEEK LY SEME STER HOU RS	Type of course	Examiı Kind	nations Duratio n in minutes	Sc written elaboration	ope Presentation	Weighting for the overall audit grade (in %)	ECTS- Credit points (ECTS)
1	Introductory Laboratory Course	4	Pr	PP				6,3	5
2	System Analysis and Control	4	SU/Ü	schrP	90			6,3	5
3	Energy Policies and Economies	4	S	SA		8-15 pages	15-20 slides	6,3	5
4	Numerical Methods and Computational Simulation	4	SU/Ü	schrP	90			6,3	5
5	Industrial Energy System Theory	4	SU/Ü	schrP	90			6,3	5
6	Industrial Energy System Project	4	S	Proj		5-25 pages	15-20 slides	6,3	5
7	Core Electives ¹⁾ (select 2 out of 3)	16						25,2	20
7.1	Building Energy System	8	S	PP				12,6	10
7.2	Off-Grid Energy System	8	S	PP				12,6	10
7.3	Urban Area Energy System	8	S	PP				12,6	10
8	Individual Elective ²⁾	4		LN				6,3	5
9	Hydrogen in Energy Technology and Energy Markets	4	SU/Ü	schrP	90			6,3	5
10	Master Thesis			MA				24,4	30
	Total	48						100	90

Footnotes

1)

Two modules with 8 weekly semester hours must be selected from the elective modules. The details are determined by the Faculty Council in the

module handbook.

2)

One module with 4 weekly semester hours must be selected from the elective modules. The details are specified by the Faculty Council in the module handbook.

Type of lectures

S SU Ü SU/Ü Pr Type<u>of examination</u>	Seminar Lectures Exercise Lectures with exercises internship	
schrP	written examination	The written examination is a written exam lasting 90 minutes, unless explicitly stated otherwise.
mdlP	Oral examination	The oral examination is an interview lasting 15 minutes per person, unless explicitly specified otherwise.
prP	Practical examination	Based on "real actions" of the student, it should be demonstrated that the student has mastered the practical application of the competences taught. The practical examination lasts 15 minutes unless explicitly stated otherwise.
LN	evidence of academic achievement	The evidence of academic achievement may be a written examination, an oral examination, a seminar paper, a term paper or a project paper. The details are specified by the Faculty Council in the module handbook.
StA	Student research project	The student research project is a term paper without an oral presentation. A term paper comprises a minimum of 3000 to a maximum of 6000 words (approx. 10 to 20 pages: Text documents approx. 8 to 15 pages or presentation approx. 15 to 20 slides).
SA	Seminar paper	The seminar paper is a term paper with an oral presentation. A term paper comprises a minimum of 3000 to a maximum of 6000 words (approx. 10 to 20 pages: Text documents approx. 8 to 15 pages or presentation approx. 15 to 20 slides). 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 assignment in which several students work on a joint task as a team and present the results orally and in writing. Each student must contribute individually to the joint task and deliver an oral presentation lasting 15 minutes. The written part has a length of approx. 5-25 pages per student.
РР	Portfolio review	The portfolio examination is a form of module examination that pursues the goal of competence-oriented examination in a special way. The type of examination is a summarised presentation of the work performed continuously and in various forms within the framework of a module. The competences are not assessed on the basis of a single performance, but on the basis of several partial performances that were completed during the semester. 2-6 partial performances can be offered as a portfolio examination. A combination of the examination types described in this document (schrP, mdIP, prP, StA, SA, Proj) can be selected. These partial performances must be announced in writing in the module handbook at the beginning of the module.
MA	Master's Thesis	Written thesis in the Master's Thesis programme: Maximum processing time (= period between registration of the Master's Thesis and submission) of 6 months / 60-80 pages.
Coll	Colloquium	The colloquium is an oral examination lasting 10-15 minutes, in which the student defends the results of their thesis.