Study Plan M.Sc. Electrochemical Engineering for Sustainability (starting in winter semester)

		Compulsory					Compulsory Elective		Elective		
		Foundations (12 CP)	**Applications (24 CP)**		**Software (6 CP)**	**Master Thesis (30 CP)**	**Practical Module (12 CP)**		**Advanced Modules Electro-chemistry (24 CP)**	**Elective Modules (12 CP)**	**∑ 120 CP**
1. Year	1. Sem.	Physical Chemistry of Materials (6 CP)	Corrosion and Protection of Materials (6 CP)	Materials in Electrochemical Devices (6 CP)	Modeling with Python (6 CP)				Elective Module Advanced EC (6 CP)		30
	2. Sem.	Electrochemical Systems (6 CP)	Electrochemical Energy Storage (6 CP)	Sustainable Electrochemical Processes (6 CP)					Elective Module Advanced EC (6 CP)	Elective Module Engineering (6 CP)	30
2. Year	3. Sem.						Project (12 CP)	Intern-ship (12 CP)	Elective Module Advanced EC (12 CP)	General Studies (6 CP)	30
	4. Sem.					Master Thesis (30 CP)					30

Studienverlaufsplan M.Sc. Electrochemical Engineering for Sustainability (SoSe Anfänger)

Entwurf zur geplanten Masterprüfungsordnung ab Wintersemester 2026/27

		Pflichtbereich					**Wahlpflicht-bereich**		**Wahl-bereich**		
		Foundations (12 CP)	**Applications (24 CP)**		**Software (6 CP)**	**Master Thesis (30 CP)**	**Practical Module (12 CP)**		**Advanced Modules (24 CP)**	**General Studies (12 CP)**	**∑ 120 CP**
1. Jahr	1. Sem.	Electrochemical Systems (6 CP)	Electrochemical Energy Storage (6 CP)	Sustainable Electrochemical Processes (6 CP)	Modelling with Python (6 CP)				Elective Module (6 CP)		30
	2. Sem.	Physical Chemistry of Materials (6 CP)	Corrosion and Protection of Metals (6 CP)	Materials in Electrochemical Devices (6 CP)					Elective Modules (12 CP)		30
2. Jahr	3. Sem.						Project (12 CP)	Internship (12 CP)	Elective Module (6 CP)	General Studies (12 CP)	30
	4. Sem.					Master Thesis (30 CP)					30

CP = Credit Points

Elective Advanced Modules:

- Electrochemical Systems
- Industrial Electrochemistry
- Process Control and Management Systems
- Solar energy conversion
- Biochemical and bioelectrochemical processes
- Characterization of Materials and process monitoring
- Thermodynamic of Mixtures
- Particle processes
- Circular economy
- Sustainable mobility
- Electroanalytical Methods
- Advanced Particle Technology: Transport, Interactions and Simulation