

Modulname

International Environmental Engineering Project

Modul

635

Studiengang

Umweltingenieurwesen Master

ECTS Credits

7.5 CP

Art des Moduls und Zuordnung zum Curriculum

Wahlpflichtmodul, Katalog A Modul

Modulverantwortliche(r), Dozent(en)

Prof. Dr.-Ing. Iris Steinberg, Lehrbeauftragter

Dauer	1 Semester
Niveaustufe	4 / Modul zum Aufbau von Kenntnissen und Erfahrungen in einem Spezialgebiet.
SWS und Lehrform	4 SWS / 30% Seminar, 70% Projekt
Lehrsprache	Englisch
Notwendige Kenntnisse	Kenntnisse in Kreislaufwirtschaft/Abfalltechnik im Umfang von 5 CP
Empfohlene Kenntnisse	Kreislaufwirtschaft/Abfalltechnik 2 (M 710-UI-MA) Einführung in die Umweltverfahrenstechnik (M 115-UI-BA) Umweltrecht 2 (M 720-UI-MA)
Angebotshäufigkeit:	Wintersemester
Verwendbarkeit des Moduls	Master-Modul (M 900-UI-MA)
Lernergebnisse/ Kompetenzen	<p>After taking part successfully, students have learnt the following:</p> <p>The module aims to apply in depth knowledge of practical engineering tasks like plant design with regard to international markets.</p> <p>Students can describe appropriate processes in detail and are able to apply technical terms. They manage to select appropriate techniques. Furthermore, students have the means for planning and dimensioning of processes and can analyse and evaluate techniques critically.</p> <p>In addition, students can describe and apply aspects of international contract law (i.e. FIDIC yellow book).</p> <p>Students are capable to select and evaluate relevant literature and data on specific issues.</p> <p>They can participate in subject-specific and interdisciplinary discussions, develop cooperated solutions and defend their own work in front of colleagues, supervisors and external stakeholders.</p> <p>Students are able to give and accept professional constrictive criticism.</p> <p>They can independently tap knowledge from literature, business reports or test reports and transform it to the project. They are capable, in consultation with supervisors, to assess their learning level and to define further required steps to solve their tasks.</p> <p>Furthermore, they gain the knowledge to define project targets in accordance with potential social and cultural impact.</p>

Lerninhalte	<p>Students work in small groups on changing topics in the field of environmental engineering projects.</p> <p>Possible contents of a project may be</p> <ul style="list-style-type: none"> - Feasibility studies - Basic engineering of technical systems (for example, waste management and treatment systems) <p>Significant steps are</p> <ul style="list-style-type: none"> - Determination of legislative constraints - Collection of basic data - Conduction of mass and energy balances - Determining the capital and operational expenditures - Preparation of project documentation (reporting, calculations, process flow diagrams ...) <p>General Content:</p> <ul style="list-style-type: none"> - Application of English language, especially technical terms - Organisational and time management - Project Management <p>Arbeiten am PC, Beamer, Tafel</p>
Medienform	
Arbeitsaufwand	Gesamtzeit: 225 h, Präsenzzeit: 56 h, Selbststudium, Hausarbeiten u.a.: 169 h
Prüfungsart	Projektbericht und Präsentation
Literatur	<p>Einschlägige Lehrbücher und Fachzeitschriften zu sowie technische Regelwerke (VDI-Richtlinien etc.).</p> <p>Eine entsprechende Auflistung wird zu Beginn des Semesters bekannt gegeben.</p>