

Exclosure to Subject Specific Regulations  
 from 25.07.2018  
 for Master-Programme  
 Regenerative Energien  
 at TUHH

Programme Director: Prof. Martin Kaltschmitt

Total: 120 CP

Number of Specilisations to choose: 1



# Course Scheme Master Renewable Energies (REMS)

Consolidated Version  
 for Study Cohort: WiSe21/22  
 en\_head\_sda  
 and Approval of Chair from:  
 19.05.2021  
 Replaces Version from: 08.04.2020  
 In Force on: 01.10.2021  
 Out of Force on: 30.09.2024

Information regarding the lectures are available in the TUHH modul manuals as well as in the course catalogue.

Re-com. Term	Module						Examination			Course Work		
	Module Name (German / English)	Language	ModuleResponsability	Institute	C/EC (1)	CM/OM (2)	CP (4)	Grade	Examination Form(3)	Compulsory	Course Work Type	Bonus (in %)
<b>Core qualification</b> Compulsory Courses: 72 LP Optional Courses: 0 LP												
1	Bioenergie / Bioenergy	DE	Prof. Kaltschmitt	V-9	C	CM	6	Y	KL			
1	Elektrische Energiesysteme I: Einführung in elektrische Energiesysteme / Electrical Power Systems I: Introduction to Electrical Power Systems	DE	Prof. Becker	E-6	C	CM	6	Y	KL			
1	Energieprojekte - Entwicklung und Bewertung / Energy Projects - Development and Assessment	DE	Prof. Kaltschmitt	V-9	C	CM	6	Y	KL			
1	Strömungsmechanik und Meeresenergie / Fluid Mechanics and Ocean Energy	DE	Prof. Schlüter	V-5	C	CM	6	Y	KL	Y	GD	10
1-2	Auslegung und Bewertung regenerativer Energiesysteme / Dimensioning and Assessment of Renewable Energy Systems	DE	Prof. Kaltschmitt	V-9	C	CM	6	Y	SA			
2	Elektrische Energie aus Solarstrahlung und Windkraft / Electrical Energy from Solar Radiation and Wind Power	DE	Dr. Höfer	V-9	C	CM	6	Y	KL			
2	Modellierung und technische Auslegung von Bioraffinerieprozessen / Modelling and technical design of bio refinery processes	DE	Prof. Kaltschmitt	V-9	C	CM	6	Y	SA			
2	Solarenergienutzung / Use of Solar Energy	DE	Prof. Kaltschmitt	V-9	C	CM	6	Y	KL			
2	Systemaspekte regenerativer Energien / System Aspects of Renewable Energies	DE	Prof. Kaltschmitt	V-9	C	CM	6	Y	KL			
3	Thermische Energiesysteme / Thermal Energy Systems	DE	NN	M-21	C	CM	6	Y	KL			
1-3	Nichttechnische Angebote im Master / Non-technical Courses for Master	DE / EN	Richter	0-TUHH	C	OM	6	Selection out of seperatly published Catalogue				
1-3	Betrieb & Management / Business & Management	DE / EN	Prof. Meyer	W-1	C	OM	6	Selection out of seperatly published Catalogue				

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<b>Specialisation Bioenergy Systems</b> Compulsory Courses: 0 LP Optional Courses: 18 LP												
2	Abfall und Energie / Waste and Energy	EN	Prof. Kuchta	V-9	EC	CM	6	Y	RE	Y	SA	20
2	Abfallbehandlung und Feststoffverfahrenstechnik / Waste Treatment and Solid Matter Process Technology	DE / EN	Prof. Kuchta	V-9	EC	CM	6	Y	KL			
2	Angewandte Optimierung in der Energie- und Verfahrenstechnik / Applied optimization in energy and process engineering	DE / EN	Prof. Skiborowski	V-4	EC	CM	6	Y	MP			
2	Aufbau und Eigenschaften der Faser-Kunststoff-Verbunde / Structure and properties of fibre-polymer-composites	DE / EN	Prof. Fiedler	M-11	EC	CM	6	Y	KL			
2	Bioprozess- und Biosystemtechnik / Bioprocess and Biosystems Engineering	EN	Prof. Zeng	V-1	EC	CM	6	Y	KL	Y	RE	20
3	Abwasserreinigung und Luftreinhaltung / Wastewater Treatment and Air Pollution Abatement	DE / EN	Dr. Pietsch	V-3	EC	CM	6	Y	KL			
3	Advanced Fuels / Advanced Fuels	DE / EN	Prof. Kaltschmitt	V-9	EC	CM	6	Y	KL			
3	Ausgewählte Prozesse der Feststoffverfahrenstechnik / Examples in Solid Process Engineering	DE / EN	Prof. Heinrich	V-3	EC	CM	6	Y	KL	Y	SA	0
3-4	Integration Erneuerbarer Energien / Integration of Renewable Energies	DE	Prof. Kaltschmitt	V-9	EC	CM	6	Y	KL			
<b>Specialisation Solar Energy Systems</b> Compulsory Courses: 0 LP Optional Courses: 18 LP												
2	Aufbau und Eigenschaften der Faser-Kunststoff-Verbunde / Structure and properties of fibre-polymer-composites	DE / EN	Prof. Fiedler	M-11	EC	CM	6	Y	KL			
2	Leistungselektronik / Power electronics	DE	Prof. Kaltschmitt	V-9	EC	CM	6	Y	KL			
2	Optoelektronik I - Wellenoptik / Optoelectronics I - Wave Optics	EN	Dr. Petrov	E-12	EC	CM	4	Y	KL			
2	Prozessmesstechnik / Process Measurement Engineering	DE / EN	Prof. Harig	E-6	EC	CM	4	Y	MP			
2	Risikomanagement, Wasserstoff- und Brennstoffzellentechnologie / Risk Management, Hydrogen and Fuel Cell Technology	DE	Prof. Kaltschmitt	V-9	EC	CM	6	Y	KL			
3	Advanced Fuels / Advanced Fuels	DE / EN	Prof. Kaltschmitt	V-9	EC	CM	6	Y	KL			
3	Energieinformationssysteme und Elektromobilität / Energy Information Systems and Electromobility	DE	Prof. Kaltschmitt	V-9	EC	CM	6	Y	MP			
3	Transportprozesse / Transport Processes	EN	Prof. Schlüter	V-5	EC	CM	6	Y	KL			
3-4	Integration Erneuerbarer Energien / Integration of Renewable Energies	DE	Prof. Kaltschmitt	V-9	EC	CM	6	Y	KL			

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<b>Specialisation Wind Energy Systems</b> Compulsory Courses: 0 LP Optional Courses: 18 LP												
2	Angewandte Optimierung in der Energie- und Verfahrenstechnik / Applied optimization in energy and process engineering	DE / EN	Prof. Skiborowski	V-4	EC	CM	6	Y	MP			
2	Aufbau und Eigenschaften der Faser-Kunststoff-Verbunde / Structure and properties of fibre-polymer-composites	DE / EN	Prof. Fiedler	M-11	EC	CM	6	Y	KL			
2	Hafenlogistik / Port Logistics	DE	Prof. Jahn	W-12	EC	CM	6	Y	KL	N	SA	15
2	Marine Bodentechnik / Marine Soil Technics	DE	Dr. Höfer	V-9	EC	CM	6	Y	KL			
2	Maritimer Transport / Maritime Transport	DE	Prof. Jahn	W-12	EC	CM	6	Y	KL	N	FFST	15
2	Risikomanagement, Wasserstoff- und Brennstoffzellentechnologie / Risk Management, Hydrogen and Fuel Cell Technology	DE	Prof. Kaltschmitt	V-9	EC	CM	6	Y	KL			
3	Advanced Fuels / Advanced Fuels	DE / EN	Prof. Kaltschmitt	V-9	EC	CM	6	Y	KL			
3	Energieinformationssysteme und Elektromobilität / Energy Information Systems and Electromobility	DE	Prof. Kaltschmitt	V-9	EC	CM	6	Y	MP			
3	Maritime Technik und Offshore-Windkraftparks / Maritime Technology and Offshore Wind Parks	DE	Prof. Abdel-Maksoud	M-8	EC	CM	6	Y	KL			
3-4	Integration Erneuerbarer Energien / Integration of Renewable Energies	DE	Prof. Kaltschmitt	V-9	EC	CM	6	Y	KL			
<b>Thesis</b> Compulsory Courses: 30 LP Optional Courses: 0 LP												
4	Masterarbeit / Master Thesis		Professoren der TUHH	0-TUHH	C	CM	30	Y	AB			

#### Explanation:

<sup>1</sup>C=Compulsory, EC=Elective Compulsory

<sup>2</sup>CM=Compulsory Defined Module, OM=Optional Defined Module

<sup>3</sup>KL=Written exam, SA=Written elaboration, FFA=Subject theoretical and practical work, FFST=Subject theoretical and practical work, MP=Oral exam, RE=Presentation, GD=Group discussion, AB=Thesis, SA It. FPrO=Written elaboration (accord. to Internship Regulations)

<sup>4</sup>CP=Credit Points

<sup>5</sup>VL=Lecture, SE=Seminar, GÜ=Recitation Section (small), PBL=Project-/problem-based Learning, PR=Practical Course, PS=Project Seminar, PK=Projection Course, HÜ=Recitation Section (large), IV=Integrated Lecture

<sup>6</sup>DE=German, EN=English, DE/EN=German and English

<sup>7</sup>SWS=Contact hours