

SuRE Curriculum

Last Update 18.04.2024

Valid from Winter Term 2023/24

Start 1st Semester:
Every Winter Term

Mandatory Module	Elective Module
Mandatory Course	Elective Course

For navigation in StudIP:
pre017 to pre132
05.06.M101 ...

Module Code Number
Lecture Code Number

1st Semester - Winter Term

pre017 Renewable Energy Laboratories 6 CP		pre014 Fundamentals for Renewable Energy 6 CP		phy641 Energy Resources and Systems 6 CP		pre022 Solar Energy 6 CP		pre025 Wind Energy & Storage 6 CP	
Introductory Laboratory 5.06.M101	Renewable Energy Laboratories 5.06.M106	Python Programming and Modelling 5.06.M113	Renewable Energy Management 2.02.320	Energy Meteorology 5.06.M117	Energy Systems 5.06.M119	Photovoltaics 5.06.M121	Renewable Energy Heat 5.06.M123	Basics of Wind Energy 5.06.M125	Energy Storage 5.06.M127

2nd Semester - Summer Term

pre041 Sustainability of Renewable Energy 6 CP	pre051 Renewable Energy Systems Laboratory and Modelling 6 CP		Specialisation <i>Choose one of the specialisations below including two of the respective modules</i> 12 CP				pre205 Advanced Topics in Renewable Energy 6 CP		
Sustainability of Renewable Energy 5.06.M201	Simulation of Renewable Energy 5.06.M203		Laboratory: Performance of Renewable Energy 5.06.M205		Specialisation: Solar Energy				Advanced Topics in Renewable Energy <i>Here you select a 6CP Modul from the Specialization and/or Lab Courses (left) you did not opt for. However, mind the preconditions for those courses. Additional options in the "Advanced Topics" are for example:</i> Intelligente Energiesysteme 2.01.515
					pre113 Photovoltaic Systems 6 CP		pre114 Solar Energy Meteorology 6 CP		
					Photovoltaic Systems <i>Lecture + Seminar</i> 5.06.M207		Solar Energy Meteorology 5.04.M211		
	Specialisation: Wind Energy				phy616 Computational Fluid Dynamics 6 CP		phy648 Wind Resources and its Applications 6 CP		
	Computational Fluid Dynamics I 5.04.4072		Computational Fluid Dynamics II 5.04.4074		Advanced Wind Energy Meteorology 5.04.4065		Wind Energy Applications - from Wind Resource to Wind Farm Operations 5.06.M213		
	Specialisation: System Integration of Renewable Energy				phy649 Design of Wind Energy Systems 6CP		phy987 Control of Wind Turbines and Wind Farms 6 CP		
	Wind Physics Students' Laboratory: Wind Turbine Rotor in Turbulent Inflow 5.04.4239				Design of Wind Energy Systems <i>Lecture + Project</i> 5.04.4235		Control of Wind Turbines and Wind Farms <i>Lecture + Exercise</i> 5.04.4256		
	Digitalised Energy System Co-Simulation 2.01.5120				phy647 Future Power Supply Systems 6 CP		inf511 Smart Grid Management 6 CP		
	Future Power Supply Systems <i>Lecture</i> 5.06.M215		Future Power Supply Systems <i>Seminar</i> 5.06.M216		Digitalised Energy System Modeling and Control <i>Lecture + Exercise</i> 2.01.5112				

3rd Semester - Winter Term

pre290 Renewable Energy Project 6 CP	pre280 Internship 6 CP	pre064 Complementary Topics and Transferable Skills 6 CP	pre152 Resilient Energy Systems 6 CP	pre200 Selected RE Technologies 6 CP	
Renewable Energy Project 5.06.M301	Internship 5.06.M305	Here you select courses totalling a workload of 6CP. Agree with module coordinator if a course is eligible. Some exemplary options are: German courses, python or additional courses not included in the specializations from Faculties II or V, such as: Ecological Economics, 2.12.042; International Environmental Governance 2.12.133	Resilient Energy Systems <i>Lecture + Seminar</i> 5.06.M308	Hidden champions of RE 5.06.M315	Hydrogen & Fuel Cells 5.06.M317

4th Semester - Summer Term

mam Master's Thesis Module 30 CP	
Master Thesis (supervising professor and PPRE staff member and/or local supervisor)	Master Thesis Colloquium 5.06.000 W

New Lecture Code Numbers
5.06.MXYYY

5 - Faculty
06 - PPRE
M - Master

X - Semester
YYY - Course Number