

# PPRE Curriculum

Start 1<sup>st</sup> Semester:  
Every Winter Term

Mandatory Lecture	Elective Lecture
Mandatory Module	Elective Module

Module Responsibility:  
PPRE Staff (Professor)



For navigation in StudIP:

pre011 to pre151 Module Code Number

05.04.4064 Lecture Code Number (to be added)

1 <sup>st</sup> Semester - Winter Term									
3 CP	6 CP	9 CP	12 CP	15 CP	18 CP	21 CP	24 CP	27 CP	30 CP
Energy Meteorology (Heinemann)	Energy Systems (Heinemann)	Photovoltaics (Knecht)	Basics of Wind Energy (Hölling)	Fuel Cells & Energy Storage (Steinberger-Wilkens, Holtorf)	Solar Thermal Energy (Torío)	Introductory Laboratory (Knecht)	Laboratory: Physical Principles of Renewable Energy Converters (Knecht)	Primers (Knecht)	Socio-Economic Fundamentals (Golba, Malz)
					Biomass Energy (Wark, Pehlken)				
					Hydro Power (Holtorf)				
pre021 Energy Resources & Systems Torío (Heinemann) 6 CP		pre031 Renewable Energy Technologies I Holtorf (Agert) 12 CP				pre011 Fundamentals for Renewable Energy Knecht (Agert) 12 CP			

2 <sup>nd</sup> Semester - Summer Term									
3 CP	6 CP	9 CP	12 CP	15 CP	18 CP	21 CP	24 CP	27 CP	30 CP
Sustainability Seminar (Torío, Golba)	Modeling and Simulation (Torío, Knecht)	Laboratory: Performance of Renewable Energy Systems (Torío, Knecht)	Future Power Supply Systems Lecture (Agert)	Future Power Supply Systems Seminar (Agert)	Photovoltaic Systems (Holtorf)	Smart Grids Lecture (Lehnhoff)	Advanced Solar Energy Meteorology (Heinemann)	Advanced Wind Energy Meteorology (Heinemann)	
			pre141 System Integration of Renewable Energy Torío (Agert) 12 CP				Photovoltaic Systems (Holtorf)	Physical Basics of Photovoltaics Lecture (Richter)	
			Photovoltaic Systems (Holtorf)	Biomass in Developing Countries (Günther)	Rural Energy Supply in Developing Countries (Golba, Günther)	Future Power Supply Systems Lecture (Agert)	Biomass in Developing Countries (Günther)		
			pre151 Renewable Energy in Developing Countries Golba (Agert) 12 CP				Smart Grids Lecture (Lehnhoff)	Smart Grids Seminar (Lehnhoff)	
			Physical Basics of Photovoltaics Lecture (Richter)	Physical Basics of Photovoltaics Exercises (Richter)	Advanced Solar Energy Meteorology (Heinemann)	Photovoltaic Systems (Holtorf)	Fluid Dynamics II (Peinke)	Computational Fluid Dynamics I (Stoevesandt)	
			pre111 Photovoltaic Physics Knecht (Agert) 6 CP		pre112 Photovoltaic Systems & Meteorology Knecht (Agert) 6 CP		Wind Physics Measurement Project (Kühn, Schmidt)	Wind Energy Applications (Waldl)	
			Design of Wind Energy Systems Lecture + Project (Kühn)		Advanced Wind Energy Meteorology (Heinemann)	Wind Energy Applications (Waldl)	Ecological Economics (Siebenhüner)	International Environmental Governance (Siebenhüner)	
			pre131 Design & Simulation of Wind Turbines Holtorf (Kühn) 12 CP				Project management (Kobusch)	Language course (Assmuth-Düster)	
			Fluid Dynamics II (Peinke)	Computational Fluid Dynamics I (Stoevesandt)	Computational Fluid Dynamics II (Stoevesandt)	Wind Physics Measurement Project (Kühn, Schmidt)	Conflict Management (Tjarks)	Working in International Teams (Tjarks)	
			pre041 Sustainability of Renewable Energy Golba (Agert) 6 CP	pre051 Renewable Energy Systems Laboratory & Modelling Knecht (Peinke) 6 CP		pre121 Wind Energy Converters & Fluid Dynamics Holtorf (Peinke) 12 CP			pre061 Renewable Energy Complementary Topics Holtorf (Agert) 6 CP

# PPRE Curriculum

3 <sup>rd</sup> Semester - Winter Term									
3 CP	6 CP	9 CP	12 CP	15 CP	18 CP	21 CP	24 CP	27 CP	30 CP
Case Study (Holtorf)		Excursion (Holtorf)	External Internship (Local Supervisor)		Internship Seminar (Golba)	Tutoring Primers (Knecht)	Tutoring Laboratories (Knecht)	Hydro Power (Holtorf)	Solar Thermal (Torío)
						Project management (Kobusch)	Language Course (Assmuth-Düster)	Biomass Energy (Wark, Pehlken)	
pre081 Renewable Energy Project Holtorf (Heinemann) 9 CP			pre071 Internship Golba (Agert) 9 CP			pre091 Transferable Skills Knecht (Agert) 6 CP		pre033 Renewable Energy Technologies II Torío (Agert) 6 CP	

4 <sup>th</sup> Semester - Summer Term									
3 CP	6 CP	9 CP	12 CP	15 CP	18 CP	21 CP	24 CP	27 CP	30 CP
Master Thesis (supervising professor and PPRE staff member and/or local supervisor)								Master Thesis Colloquium Holtorf (all thesis supervisors)	
Master Thesis Hans Holtorf (all thesis supervisors) 30 CP									