

## Specialisation Energy Systems

### 1. Specialisation module with laboratory course 1-2 (M1-M2). Choose two modules from this list:

	Module	ECTS	Contact person	Summer term (SS) or winter (WS) term
Module 1	Process Simulation with laboratory course	7,5	Prof. Dr.-Ing. Bastian Etzold	WS
Module 2	Process Control and Plant Safety with laboratory course	7,5	Dr.-Ing. Peter Treiber	SS
Module 3	Phosphors for Light Conversion in Photovoltaic Devices and LEDs with laboratory course	7,5	PD Dr.-Ing. habil. Miroslaw Batentschuk	WS
Module 4	Power electronics for decentral energy systems with laboratory course ( <i>from Energy Technologies</i> ) ***	7,5	Prof. Dr.-Ing. Martin März	SS
Module 5	Photovoltaic Systems – Fundamentals with laboratory course ( <i>from Energy Technologies</i> ) ***	7,5	Prof. Dr.-Dipl.-Ing Christoph J. Brabec	WS

### 2. Specialisation module 1-4 (M3-M6). Choose four modules from this list:

	Module	ECTS	Contact person	Summer term (SS) or winter (WS) term
Module 1	Efficient heat transfer	5	Prof. Dr.-Ing. habil. Andreas Paul Fröba	SS
Module 2	Life cycle assessment	5	Prof. Dr. Martin Hartmann	SS

\* Module “Aeroacoustics” shall be taken after Module “Aerodynamics” only

\*\* Only open to students of the specialisation of “Energy Systems”

\*\*\* if chosen for M1-M2, can't be chosen for M10-M11

**Clean Energy Processes (M. Sc.), List of modules – Sp. Energy Systems***subject to change*

Module 3	<b>Phosphors for Light Conversion in Photovoltaic Devices and LEDs</b>	5	PD Dr.-Ing. habil. Miroslaw Batentschuk	WS
Module 4	<b>Process Control and Plant Safety</b>	5	Dr.-Ing. Peter Treiber	SS
Module 5	<b>Process simulation</b>	5	Prof. Dr.-Ing. Bastian Etzold	WS
Module 6	<b>Quantitative Methods in Energy Market Modelling</b>	5	Prof. Dr. Gregor Zöttl	SS
Module 7	<b>Energy transition analysis: Bridging techno-economic, business, and policy perspectives **</b>	5	Dr. Aksornchan Chaianong	WS
Module 8	<b>Power electronics for decentral energy systems</b>	5	Prof. Dr.-Ing. Martin März	SS
Module 9	<b>Photovoltaic Systems – Fundamentals</b>	5	Prof. Dr.-Dipl.-Ing Christoph J. Brabec	WS
Module 10	<b>Renewable thermal power plants</b>	5	Prof. Dr.-Ing. Michael Wensing	WS
Module 12	<b>Electrical Energy Storage Systems</b>	5	Dr.-Ing. Bernd Eckardt	SS

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**3. Compulsory elective module 1-3 (M7-M9). Choose three modules from this list:**

	<b>Module</b>	<b>ECTS</b>	<b>Contact person</b>	<b>Summer term (SS) or winter (WS) term</b>
Module 1	<b>Scientific computing in engineering 2</b>	5	Prof. Dr. Jens Harting	WS
Module 2	<b>Polymer Recycling</b>	5	Dr. Jochen Schmidt	WS
Module 3	<b>Recycling of Electronic Wastes</b>	5	Dr. Monica Distaso	WS
Module 4	<b>Aerodynamics</b>	5	apl. Prof. Dr.-Ing. habil. Stefan Becker	SS
Module 5	<b>Aeroacoustics*</b>	5	apl. Prof. Dr.-Ing. habil. Stefan Becker	WS
Module 6	<b>Chemical Technologies for the Energy Transition</b>	5	apl. Prof. Dr. Marco Haumann	SS

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4. Elective module from other specialisation 1-2 (M10-M11). See module list of Specialisation Energy Technologies (only modules M3-M6). Choose two modules.
5. Elective module 1-2 (M12-M13). Soft skills, language courses (except English and native language), „Schlüsselqualifikationen” offered at the FAU. Choose two modules.
6. Seminar sustainability and environmental ethics (M14)
7. Internship (M15)
8. Advanced seminar (M16)
9. Master’s thesis (M17)

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