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	**Renewable thermal power plants with laboratory course**	7,5	Prof. Dr.-Ing. Michael Wensing	WS
Module 5	**Photovoltaic Systems – Fundamentals with laboratory course (*from Energy Technologies*) *****	7,5	Prof. Dr.-Dipl.-Ing Christoph J. Brabec	WS
Module 6	**Cooling of Power electronics with laboratory course**	7,5	Prof. Dr. Philipp Schlatter	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

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Module 2	**Life cycle assessment**	5	Prof. Dr. Martin Hartmann	SS
Module 3	**Phosphors for Light Conversion in Photovoltaic Devices and LEDs**	5	PD Dr.-Ing. habil. Miroslaw Batentschuk	WS
Module 4	**Process Control and Plant Safety**	5	Dr.-Ing. Peter Treiber	SS
Module 5	**Process simulation**	5	Prof. Dr.-Ing. Bastian Etzold	WS
Module 6	**Quantitative Methods in Energy Market Modelling**	5	Prof. Dr. Gregor Zöttl	SS
Module 7	**Energy transition analysis: Bridging techno-economic, business, and policy perspectives ****	5	Dr. Aksornchan Chaianong	WS
Module 8	**Photovoltaic Systems – Fundamentals**	5	Prof. Dr.-Dipl.-Ing Christoph J. Brabec	WS
Module 9	**Electrical Energy Storage Systems**	5	Dr.-Ing. Bernd Eckardt	SS
Module 10	**Cooling of Power electronics**	5	Prof. Dr. Philipp Schlatter	WS

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

	Module	ECTS	Contact person	Summer term (SS) or winter (WS) term
Module 1	**Scientific computing in engineering 2**	5	Prof. Dr. Jens Harting	WS
Module 2	**Polymer Recycling**	5	Dr. Jochen Schmidt	WS
Module 3	**Recycling of Electronic Wastes**	5	Dr. Monica Distaso	WS
Module 4	**Aerodynamics**	5	Prof. Dr.. Philipp Schlatter	SS
Module 5	**Aeroacoustics***	5	apl. Prof. Dr.-Ing. habil. Stefan Becker	WS
Module 6	**Chemical Technologies for the Energy Transition** ***(only for students from 3rd semester on)***	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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