Modulbezeichnung	**Energy efficiency and energy management**
Semester	3
ECTS-Punkte (Dauer)	5 (1 Semester)
Art	Pflichtfach
Studentische Arbeitsbelastung	60 h Kontaktzeit + 90 h Selbststudium
Voraussetzungen (laut BPO)	
Empf. Voraussetzungen	
Verwendbarkeit	BaSES
Prüfungsform und -dauer	Klausur 1,5h oder mündliche Prüfung, Mündliche Präsentation und schriftliche Dokumentation
Lehr- und Lernmethoden	Vorlesung, studentische Arbeit
Modulverantwortlicher	M. Hanfeld

Qualifikationsziele
The students are capable to identify and estimate the potential for reducing the energy consumption of different applications and processes by technical means. They are familiar with the main economic and regulatory frame conditions affecting the application of energy efficiency measures. They are able to apply the DIN EN ISO 50001 norm for the design of energy efficient systems.

Lehrinhalte
Global energy demand, energy efficiency technologies for different applications (lighting, space heating, transportation and mobility, industrial processes), cogeneration, market barriers to energy efficiency, energy efficiency policies and regulations, energy management after DIN EN ISO 50001, economic aspects, energy data management.

Literatur
Wosnitza, F. and Hilgers, H.G.: Energieeffizienz und Energiemanagement, Springer, 2012.
Yang, M. and Yu, X.: Energy Efficiency, Springer, 2015.

Lehrveranstaltungen

Dozent	**Titel der Lehrveranstaltung**	**SWS**
N.N.	Energy efficiency and energy management	2
N.N.	Project energy efficiency and energy management	2