TH Aschaffenburg
university of applied sciences

Engineering and Commissioning of Renewable Power Systems

Course number	7252
Hours per week:	3
ECTS:	3
Scheduled:	Summer Term
Format	Lecture and Lab
Examination:	Study Work with oral examination The students may decide whether to perform the presentations and exams in German or English.
Lecturer:	Prof. Dr.-Ing. Michael Mann
Objectives:	**Knowledge:** The students know the engineering of complex sytsems in theory and practice at the example of a photovoltaic power station. **Proficiencies:** The students autonomously acquire theoretical fundamentals and methods. They command a variety of planning tools, apply the tools in practice and check for errors. **Skills:** The students are empowered to conceptualize assemblies and subassemblies of complex systems, e.g. photovoltaic power stations in teams. The definition and handling of interfaces can be implemented taking the impact on the entire system into account. The commissioning and partial commissioning of a complex system is planned methodically and realized methodically. In order to transpose the curriculum in theory and practice, visits to the environmental station of the city of Aschaffenburg (Umweltstation Aschaffenburg) are an integral part of the curriculum.
Contents:	- Theory of planning tools - Planning and realization of systems - Safety at Work - Installation and Commissioning
Pre-requisites	none
Recommended Reading:	Depending on the current project: Engineering Design, A Systematic Approach: Gerhard Pahl, Wolfgang Beitz, Jörg Feldhusen, Karl-Heinrich Grote , ISBN: 978-1-84628-318-5 (Print) 978-1-84628-319-2 (Online) Das Ingenieurwissen: Entwicklung, Konstruktion und Produktion: Karl-Heinrich Grote, Frank Engelmann, Wolfgang Beitz, Max Syrbe, Jürgen Beyerer, Günter Spur ISBN: 978-3-662-44392-7 (Print) 978-3-662-44393-4 (Online) Pahl/Beitz Konstruktionslehre, Methoden und Anwendung erfolgreicher Produktentwicklung Jörg Feldhusen, Karl-Heinrich Grote ISBN: 978-3-642-29568-3 (Print) 978-3-642-29569-0 (Online)

	Frank Konrad Planung von Photovoltaik-Anlagen Ismail Kasikci Planung von Elektroanlagen K. W. Helbing Handbuch Fabrikprojektierung Thomas Bindel• Dieter Hofmann Projektierung von Automatisierungsanlagen All books in current edition.