

## Renewable Energy Systems (M. Eng.)

<b>Module – Number</b>		<b>873</b>		<b>Compulsory</b>	
<b>Name of Module</b>		<b>Scientific Practice</b>			
Person Responsible		Prof. Dr.-Ing. Viktor Wesselak			
Title of the Course		Scientific Practice			
Trial Identification					
Semester		Qualification semester			
Form of Course	Language	Lecture	English		
SWS/ ECTS/ Workload		4	5	150	
Formal Prerequisites		Only for graduates holding a Bachelor of Engineering degree			
<b>1. Contents and Qualification Objectives</b>					
<b>Contents:</b>					
Students are taught the acquisition, evaluation and preparation of technical information as a central working technique in the engineering sciences, both in preparation for their master thesis and for their professional life.					
<b>1 What does scientific research mean?</b>					
<b>2. Literature research</b>					
Libraries and databases for the engineering sciences - Search techniques - Online search in free and fee-based databases - Content indexing of a library using the example of the University of Applied Sciences Nordhausen - Dealing with tesaurs					
<b>3. Technical standards</b>					
Objectives and procedures of technical standardization - National and international standards boards - Researching and reading technical standards					
<b>4. Patents and industrial property rights</b>					
Objectives and procedures in industrial property protection – patents, utility models, trademarks and designs - national and international patent organizations – German employee invention law - searching and reading patents - patentability of software					
<b>5. Writing of academic texts and lectures</b>					
Objectives and structure - Literature references - Lecture structure - Presentation techniques - Examples of bad practice					
<b>Learning goals:</b>					
After successful completion of the module, students are able to research scientific or technical information, to procure it and to classify the research results with regard to their completeness and credibility. Furthermore, they are aware of the importance and practice of correct citation.					
<b>2. Forms of Teaching</b>					
The module is a lecture with practical computer exercises and with active involvement of the students. The students apply their knowledge in writing a short academic paper on a given technical topic.					
<b>3. Prerequisites for Participating</b>					
none					
<b>4. Usability of the Module</b>					
This module is a compulsory module in the qualification semester for the Renewable Energy Systems (M. Eng.) Master's Programme.					
<b>5. Requirements for the Award of Credits</b>					
Prerequisite for the award of credit points is the successful completion of the academic paper and its timely submission or presentation.					
<b>6. Credits and Grades</b>					
The module grade corresponds to the grade of the academic paper. With the module grade 5 credit points (ECTS) are awarded.					
<b>7. Frequency of the Module</b>					
The module is offered for the qualification semester every winter semester.					
<b>8. Work Load</b>					
Participation in the course (25 h); preparation and follow-up (to the lectures/seminars) (25 h); writing an academic paper (100 h)					
<b>The entire workload encompasses 150 hours, which corresponds to 5 ECTS credit points.</b>					
<b>9. Duration of Module</b>					
The module must be completed within one semester.					