

<b>Module title</b>		<b>Abbreviation</b>
The fundamental principles of technical education in the subject Arbeit-Wirtschaft Technik [3]		o6-AL-Technik-092-mo1
<b>Module coordinator</b>		<b>Module offered by</b>
Subject Representative (Fachvertreter) Arbeitslehre Didactics		
<b>ECTS</b>	<b>Method of grading</b>	<b>Only after succ. compl. of module(s)</b>
5	numerical grade	--
<b>Duration</b>	<b>Module level</b>	<b>Other prerequisites</b>
1 semester	undergraduate	By way of exception, additional prerequisites are listed in the section on assessments.
<b>Contents</b>		
a) Fundamental principles of technology: relevance and history of technology; natural-scientific foundations of technology; structures involved in technology (basic categories material, energy, and information); aspects of energy and manufacturing engineering; aspects of communication and information technology. b) Evaluation of technology: technology assessment; methods for the evaluation of technology (value engineering, life cycle); introduction to methods for technical education.		
<b>Intended learning outcomes</b>		
After successful completion of the module, students will: have developed an essential knowledge of the relevance, development, and natural-scientific foundations of technology; have gained an overview of the structures involved in technology and of the basic categories of technology; have developed knowledge and skills in the area of technology assessment (examples); have developed knowledge of methods for the evaluation of technology; be able to describe the structures of selected technological systems; have gained an insight into aspects of manufacturing and energy engineering as well as communication and information technology; have become familiar with fundamental methods for technical education in the classroom; be able to apply selected methods for fundamental technical education in practice.		
<b>Courses</b> (type, number of weekly contact hours, language — if other than German)		
This module comprises 2 module components. Information on courses will be listed separately for each module component. <ul style="list-style-type: none"> <li>o6-AL-Technik-1-092: Ü (no information on SWS (weekly contact hours) and course language available)</li> <li>o6-AL-Technik-2-092: S (no information on SWS (weekly contact hours) and course language available)</li> </ul>		
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
Assessment in this module comprises the assessments in the individual module components as specified below. Unless stated otherwise, successful completion of the module will require successful completion of all individual assessments.		
<b>Assessment in module component o6-AL-Technik-1-092:</b> The fundamental principles and evaluation of technology (VHB)[4] <ul style="list-style-type: none"> <li>2 ECTS, Method of grading: (not) successfully completed</li> <li>exercises as specified by Virtuelle Hochschule Bayern (vhb) (usually approx. 2 exercises per teaching unit); documentation of solutions to be printed out and submitted to lecturer in Würzburg who will be responsible for grading</li> </ul>		
<b>Assessment in module component o6-AL-Technik-2-092:</b> Practical methods for technical education in the subject of Arbeitslehre <ul style="list-style-type: none"> <li>3 ECTS, Method of grading: numerical grade</li> <li>a) designing a seminar (approx. 60 minutes) with presentation (20 to 45 slides) or b) term paper (approx. 12 pages) or c) documentation portfolio (25 to 30 hours) Designing a seminar includes providing subject-specific input, giving instructions for assignments, moderating/coordinating the participants' contributions, summarising these contributions as well as demonstrating/delivering/designing a class.</li> </ul>		

- Other prerequisites: Admission prerequisite to assessment: regular attendance (minimum 70%) of seminars.

**Allocation of places**

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**Additional information**

Additional information will be listed separately for each module component.

- 06-AL-Technik-1-092: Additional information on module duration: 1 to 2 semesters. Exercise comprises participation in an online seminar offered by Virtuelle Hochschule Bayern (vhb) (approx. 14 teaching units).
- 06-AL-Technik-2-092: Additional information on module duration: 1 to 2 semesters.

**Workload**

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**Teaching cycle**

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**Referred to in LPO I** (examination regulations for teaching-degree programmes)

§ 38 (1) 1. Didaktik der Hauptschule Arbeitslehre

§ 38 (1) 1. Didaktik der Mittelschule Arbeitslehre

**Module appears in**

First state examination for the teaching degree Hauptschule Didactics in ergonomics (Teaching at the German Hauptschule) (2009)

First state examination for the teaching degree Sonderpädagogik Didactics in ergonomics (Teaching at the German Hauptschule) (2009)

First state examination for the teaching degree Sonderpädagogik Ergonomics (Teaching at the German Mittelschule) (2013)

First state examination for the teaching degree Mittelschule Ergonomics (Teaching at the German Mittelschule) (2013)