

## Module description

Module title		Abbreviation
The fundamental principles of technical education in the suschaft Technik	o6-AL-Technik-152-mo1	
Module coordinator	Module offered by	
Subject Representative (Fachvertreter) Arbeitslehre Didac-		

ECTS	Method of grading		Only after succ. compl. of module(s)
5	numerical grade		
Duratio	n	Module level	Other prerequisites
1 seme	ster	undergraduate	Regular attendance of seminar is mandatory (minimum 70% of seminar sessions).

#### **Contents**

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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.

## **Intended learning outcomes**

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.

 $\textbf{Courses} \ (\textbf{type, number of weekly contact hours, language} - \textbf{if other than German})$ 

S (2) + Ü (2)

Course type: Ü eLearning, mostly Virtuelle Hochschule Bayern (vhb)

**Method of assessment** (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

Designing a seminar unit (introduction, moderating and preparing seminar materials) (approx. 60 minutes) including documentation of seminar unit (approx. 8 pages) creditable for bonus

## Allocation of places

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## **Additional information**

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## Workload

150 h

## Teaching cycle

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

§ 38 I Nr. 1

## Module appears in

First state examination for the teaching degree Sonderpädagogik Ergonomics (Teaching at the German Mittelschule) (2015)



# Module description

First state examination for the teaching degree Mittelschule Ergonomics (Teaching at the German Mittelschule) (2015)

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