

Module	Unit	Semester	CPs/SWS	Language
PB27 Traffic 2	PB27-2 Railway and Airport Construction	P6   SS+WS	2/2	English

Lecturer	Prof. Dr.-Ing. Schäfer and Dipl.-Ing. Atila Turay
Prerequisites	Knowledge of the contents from PB14-2 Project Management for Major Projects and PB12 Traffic 1, acquiring the necessary admission to exams in the second section of studies according to the study and exam regulations § 28 (3) Structure of the study programme
Teaching format	<input checked="" type="checkbox"/> Lecture <input type="checkbox"/> Project work <input checked="" type="checkbox"/> Tutorial <input type="checkbox"/> Work in a team <input type="checkbox"/> Laboratory <input type="checkbox"/> Miscellaneous
Learning objective (knowledge, skills, competencies)	The students have an overview of the essential principles of creating drafts for airport facilities and facilities for the connection of air, rail and road traffic by using the gained knowledge about the future development of the whole traffic industry. They know the structures of modern airport facilities and modern high-speed rail networks in passenger traffic, as well as in freight traffic, domestically, as well as internationally. They are able to roughly evaluate integrated traffic systems and to work out strengths and weaknesses. In order to accommodate internationalisation, this lecture is given in English.
Contents	<ul style="list-style-type: none"> <li>▪ Meaning of air and rail traffic for a modern and progressive economy</li> <li>▪ Development of air and rail traffic so far and in the future, international and domestic as well as passenger traffic and freight traffic, local and long-distance traffic</li> <li>▪ Demands on the design of modern traffic facilities and interconnection of different forms of transport for optimising travel times and the economic success of these facilities</li> <li>▪ Examples for realising modern airports and modern high-speed rail systems</li> <li>▪ Scheduling process for the construction of airport and railway facilities</li> <li>▪ Presentation exercises of the students for the most important design parameters for airports (runways, terminals)</li> </ul>
Exam prerequisite	Attendance mandatory; at least 75 % of the lectures must be attended
Exam	<input type="checkbox"/> Written exam <input type="checkbox"/> Oral exam <input checked="" type="checkbox"/> Coursework
Workload	Attendance: 30.0 h Preparation and post-processing: 15.0 h Exam duration: 15.0 h
Forms of media	<input checked="" type="checkbox"/> Projector/Laptop <input checked="" type="checkbox"/> Blackboard <input type="checkbox"/> Script <input checked="" type="checkbox"/> Miscellaneous
Literature	<i>Zilch, K. et al.:</i> Handbuch für Bauingenieure: Technik, Organisation und Wirtschaftlichkeit, Springer-Verlag, Heidelberg 2012 <i>de Neufville, R., Odoni, A.:</i> Airport Systems: Planning, Design and Management, Mc Gray-Hill books, New York 2013 <i>Horonjeff, R. et al.:</i> Planning and Design of Airports, Mc Gray-Hill books, New York 2010
Last changed	30.10.2014