

Module description

Name of module:	Reliability
Keywords:	
Module number:	Not compulsory
Target groups:	exchange students
ECTS - Credits:	2
Language of instruction:	English
Module owner:	Prof. Dr.-Ing. Andreas Fritz
Date of last change:	30.09.2015

Extent of work (hours)

Workload	Contact hours	Self study	Exam preparation
60	25	25	10

Prerequisites:	
Total target:	The aim of the module is to provide an introduction to the methods and tools used to determine the reliability of components and of engineering systems.
Module number:	Not compulsory
Module content:	<ul style="list-style-type: none"> • Definition, significance and overview of reliability, techniques in the product • development and in the product life cycle • Statistics, probability theory, life time distribution, reliability of systems • FMEA • Boolean system theory • Proof of reliability, planning of tests, collecting field data • Availability of systems • Repairable systems • Reliability software • Markov theory
Reference material:	Lecture notes
Offered:	WS
Relevance for other study programs:	Automotive Engineering

Submodules and assessments

Title of submodule:	
Type of instruction / form of learning:	Lectures
Hours per week:	2
Target groups:	exchange students
Aims, learning outcomes:	See above
Estimated student workload:	60 h
Type of assessment:	written exam