Module description: Product Development for Systems Engineering 3

Module Code	t.BA.ST.PM3-EN.19HS								
ECTS Credits	4								
Language of Instruction/Examination	English								
Organizational Unit	IMS								
Module Coordinator	Duncan Webster								
Legal Framework	The module description is part of the legal basis in addition to the general academic regulations. It is binding. During the first week of the semester a written and communicated supplement can specify the module description in more detail.								
Module Characteristic	Type 4*								
	4 lab lessons per semester week and half-class								
Module Description	Product development in the context of systems engineering 3								
Module Content	 Structure and properties of the FE program ANSYS/Workbench Creation of easily validatable finite element models and - Execution of the FE-simulation including result evaluation and assessment Handling of assemblies Calculation of contact problems Application of the FE analysis process using the example of a real component Application of the FE analysis process using the example of a real component 								
Prerequisite Knowledge									
Learning Objectives (Competences)	Students Students apply their acquired knowledge from the fields of mechanics, materials and design and deepen and complement it with content from the fields of systems engineering, development processes and simulation technology using the finite element method				Competencies F, SO, M		Taxonomies K2, K3, K4		
	mechanics, materials a complement it with cor engineering, developm technology using the fil	cquired knowled and design and ntent from the fie nent processes a nite element me	ge fro deep Ids o and s thod.	om the field pen and of systems simulation	ls of	F, SO,	Μ	K2, K3	3, K4
	mechanics, materials a complement it with cor engineering, developm technology using the fit Understanding of the fit conversion of CAD mo recognition and assess limitations in the applit mechanical analyses, it work of an industrially to simulation tools of strue development process.	cquired knowled and design and intent from the fie nent processes a nite element me undamentals of to odels into an FE sment of the pos cation of the FE introduction to the used FE system intral mechanics	ge fro deep lds o and s thod. the F mod ssibil meth ne inc , inte s intc	om the field oen and of systems simulation E method, lel (assemb lities and nod for strut dependent ggration of o the produc	ls of bly), ur- ct	F, SO,	M	K2, K3	3, K4 3, K4
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Performance Assessment	Students apply their act mechanics, materials a complement it with cor engineering, developm technology using the fit Understanding of the fit Conversion of CAD model recognition and assess limitations in the applic mechanical analyses, it work of an industrially of simulation tools of struct development process. End-of-module exam report Performance assess semester - None	cquired knowled and design and intent from the fie nent processes a nite element me undamentals of t odels into an FE sment of the pos cation of the FE introduction to th used FE system ctural mechanics Assessment Grade	ge fm deep lds o and s thod. he F mod ssibil meth le inc , inte s into	om the field ben and if systems simulation E method, lel (assemb lities and lod for strutt dependent gration of the produce ngth in.)	ls of oly), ur- ct 100 ent	F, SO, F, SO, ghting Length (min.) -	M Form acc. to r agreem We 2	K2, K3	3, K4 3, K4 Form -

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Comments