

Module description: Human Factors						
Module Code	t.BA.AV.HF-EN.19HS					
ECTS Credits	4					
Language of Instruction/Examination	English					
Organizational Unit	ZAV					
Module Coordinator	Ruth Esther Häusler Hermann					
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 3c*** 2 lecture lessons per semester week each yearly starting-class + 2 lab lessons per semester week and class					
Module Description	Human Factors in Aviation is an interdisciplinary field of research and application focused on safety and performance in human-machine system environments. Students are taught basic knowledge of Human Factors in aviation, and applications in cockpit, air traffic control and maintenance. Students gain practical experience in the implementation, analysis and reporting of a human factors question within the framework of a small research project.					
Module Content	<ul style="list-style-type: none"> This course teaches the basics of human factors in aviation ("Human Performance & Limitation", ICAO & EASA requirement) 					
Prerequisite Knowledge	Statistics (possibly acquired in parallel)					
Learning Objectives (Competences)	Students...		Competencies	Taxonomies		
	Students learn to examine practical questions scientifically and methodically.		M, F	K3, K4		
	Students recognize the relevance of human factors topics in a work and training environment.		SE, F, SO, M	K3, K4, K5, K6		
	The students know the challenges of a comprehensive and sustainable approach for human performance and safety management.		F	K4, K5, K6		
	Students acquire practical basic knowledge for a differentiated consideration of human factors topics.		F	K2, K3		
Performance Assessment	End-of-module exam	Assessment	Length (min.)	Weighting	Form	
	written exam	Grade	90	60	acc. to module agreement	
	Performance assessment during the semester		Assessment	Length (min.)	Weighting	Form
	report		Grade	0	20	acc. to module agreement
	Research Proposal <i>Outline of research question and hypotheses</i>		Grade		10	acc. to module agreement
	Review of research project <i>Learnings from the project and potential for improvement</i>		Grade		10	acc. to module agreement

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Classroom Attendance Requirement	None Participation is required (no live streaming)
Learning material	<ul style="list-style-type: none">• Wickens, C. & Gordon, S. & Liu, Y. (1998). Human Factors Engineering. New York: Longman. ISBN 0-321-01229-1.• Lehto, M. & Landry, S. (2013). Introduction to Human Factors and Ergonomics for Engineers. 2nd Edition. Boca Raton, London, New York: CRC Press Taylor & Francis. ISBN 978-1-4665-8416-7.• Sandom, C. & Harvey, R. (2009). Human Factors for Engineers. 1st Edition. London, UK: The Institution of Engineering and Technology. ISBN 0 86341 329 3.
Comments	