

# Project module

Module no. or code	6		
Module name	Project module		
(If applicable) the module's courses			
Module content	<p>The students will work in groups to solve projects using AI techniques (supervised by at least one professor). The topics are provided by professors of the FIW, other faculties or external partners. In general the project will contain a software development (potentially accompanied by a technical solution) and a respective documentation or other form or presentation.</p>		
Module's learning outcomes	<p>Students can methodically process and solve comprehensive tasks. The students can develop and implement suitable solution strategies in a team. They know how team processes work and can assess how to contribute their own personality. The students can independently set up, implement, accompany and present a small AI project in a team. They can select and use appropriate development technologies and test and document their code.</p>		
Semester			
Duration of module	Over two semesters		
Frequency			
ECTS-Credits	10		
Workload	Workload (Total)	Attendance time	Self-Study time (incl. exam preparation)
	300	120	180
Type of module	Compulsory		
Applicability of module	Provides the opportunity to apply the gained knowledge in a practical analysis and implementation. Could be used to identify a potential master thesis topic.		

Conditions for participation	-
Responsible for module	Prof. Dr. Frank-M. Schleif
Lecturer	CAIRO Professors and other Professors FHWS
Language of instruction, L. of examination	english
Type of examination; Conditions for the award of CPs	soP (A) Project
Teaching and learning formats of the module	Seminar-based teaching
Literature	<ol style="list-style-type: none"> <li>1. Hands-on Machine Learning with Scikit-Learn, Keras, and TensorFlow: Concepts, Tools, and Techniques to Build Intelligent Systems, A. Geron, O'Reilly, 2019</li> <li>2. The Data Science Design Manual, S. Skiena, Springer, 2017</li> <li>3. Deep Learning, I. Goodfellow, MIT Press, 2016</li> </ol> <p>Further literature will be given based on the respective project tasks.</p>