


Data:	PP. MA. Nr. 3215 / Examination number: 44504	Version: 08.03.2022 	Start Year: WiSe 2018
Module Name:	Personal Programming Project		
(English):			
Responsible:	Eidel, Bernhard / Prof. Dr.-Ing. habil.		
Lecturer(s):	Rheinbach, Oliver / Prof. Dr. Kiefer, Björn / Prof. PhD. Prakash, Aruna / Dr.-Ing. Eidel, Bernhard / Prof. Dr.-Ing. habil.		
Institute(s):	Institute of Numerical Mathematics and Optimization Institute of Mechanics and Fluid Dynamics		
Duration:	22 Week(s)		
Competencies:	The students will develop and document their own software tool for a subject relevant to the course Computational Materials Science (e.g., Dislocation or Molecular Dynamics, Finite Elements Method FEM, Discrete Element Method or advanced data analysis). Furthermore, they will use this method to simulate material behavior, to calculate a physical property or to analyze existing/own simulated data.		
Contents:	Most important ingredients are: Developing the tool, commenting the source file, documentation and running a successful example to verify the code.		
Literature:	None		
Types of Teaching:	S1 (WS): By the end of the second semester, the students decide on a topic. Then, the students design a concept for their project, which has to be discussed and approved by the responsible lecturer. After approval, the students register at examination office for the project. The final report has to be delivered within 22 weeks. / project (22 Wo)		
Pre-requisites:	Recommendations: None		
Frequency:	yearly in the winter semester		
Requirements for Credit Points:	For the award of credit points it is necessary to pass the module exam. The module exam contains: AP: Final Report (source code, documentation, analysis of an example solved with their numerical tool) AP: Presentation and defending of the project [20 min]		
Credit Points:	7		
Grade:	The Grade is generated from the examination result(s) with the following weights (w): AP: Final Report (source code, documentation, analysis of an example solved with their numerical tool) [w: 4] AP: Presentation and defending of the project [w: 1]		
Workload:	The workload is 210h.		