

Module Handbook (<https://modhb.uni-kl.de/>)

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Module INF-10-45-M-4

Visualization and Scientific Computing (Project) (M, 8.0 LP)

Module Identification

Module Number	Module Name	CP (Effort)
INF-10-45-M-4	<i>Visualization and Scientific Computing (Project)</i>	8.0 CP (240 h)

Basedata

CP, Effort	8.0 CP = 240 h
Position of the semester	1 Sem. in WiSe/SuSe
Level	[4] Bachelor (Specialization)
Language	[DE/EN] German or English as required
Module Manager	Garth, Christoph, Prof. Dr. (PROF DEPT: INF) (/staff/523/)
Lecturers	Garth, Christoph, Prof. Dr. (PROF DEPT: INF) (/staff/523/) Gauger, Nicolas, Prof. Dr. (PROF DEPT: INF) (/staff/503/) Leitte, Heike, Prof. Dr. (PROF DEPT: INF) (/staff/514/)
Area of study	[INF-VIS] Visualisation and Scientific Computing
Reference course of study	[INF-82.79-SG] B.Sc. Computer Science (/mhb/FB-INF/cos-506/)
Lifecycle-State	[NORM] Active

Notice

- The offer of projects may vary from semester to semester and will be announced on the websites of the supervising working group.
- Therefore, please contact early the responsible supervisors of the respective teaching area and inform yourself about the current project offer on the websites of the working group.

Courses

Type/SWS	Course Number	Choice in Module-Part	SL	PL	CP	Sem.
4L	INF-10-45-K-4 (/mhb/courses/INF-10-45-K-4/)	P	PRAES	no	8.0	WiSe/SuSe

- About [INF-10-45-K-4]: Title: "Visualization and Scientific Computing (Project)"; Presence-Time: 56 h; Self-Study: 184 h
- About [INF-10-45-K-4]: The study achievement [PRAES] presentation must be obtained.

Evaluation of grades

The module is not graded (only study achievements)..

Contents

From [INF-10-45-K-4] Visualization and Scientific Computing (Project) (/mhb/courses/INF-10-45-K-4/):

Depending on the selected topic in the specialization.

Competencies / intended learning achievements

Upon successful completion of the module, students will be able to

- establish basic requirements for a system solution in discussions with users,
- subdivide agreed tasks into subtasks and work on them together in a cooperative manner,
- roughly estimate and plan the project expenditure and use resources in a goal-oriented manner
- document and manage work results and present results
- present a specialist lecture to a homogeneous specialist audience using suitable media,
- lead a discussion on the selected topic based on a technical talk,
- assess their own scope for action and decision-making and the associated responsibility and, if necessary, obtain specific information, define priorities, derive tasks, develop solutions and monitor progress.
- recognize misunderstandings and role conflicts in communication situations and to contribute to conflict resolution.
- argue goal-oriented in controversial discussions and to deal with criticism objectively,
- participate constructively and actively in homogeneous working groups,
- present independent and, where appropriate, divergent positions and to argue plausibly.
- lead, instruct and motivate a working group in phases
- lead homogeneously composed groups in phases and to represent work results to third parties
- develop their own professional, methodological, technological, interdisciplinary, social and personal skills independently.

Literature

From [INF-10-45-K-4] Visualization and Scientific Computing (Project) (/mhb/courses/INF-10-45-K-4/):

Depending on the selected topic in the specialization.

Requirements for attendance (informal)

None

Requirements for attendance (formal)

None

References to Module / Module Number [INF-10-45-M-4]

Course of Study	Section	Choice/Obligation
[INF-82.79-SG] B.Sc. Computer Science (/mhb/FB-INF/cos-506/)	Computer Science Specialization	[P/WP] Compulsory or compulsory elective (depending on the chosen specialization / study profile)
[MAT-88.105-SG] M.Sc. Mathematics (/mhb/FB-MAT/cos-538/)	Subsidiary Topic (Minor)	[WP] Compulsory Elective
[MAT-88.118-SG] M.Sc. Industrial Mathematics (/mhb/FB-MAT/cos-539/)	Computer Science and Computational Methods	[WP] Compulsory Elective
[MAT-88.276-SG] M.Sc. Business Mathematics (/mhb/FB-MAT/cos-548/)	Computer Science and Computational Methods	[WP] Compulsory Elective