

Module Handbook

TUK MODHB Homepage

Module INF-73-82-M-7

Image Processing and Augmented Reality (Projekt) (M, 8.0 LP)

Module Identification

Module Number	Module Name	CP (Effort)
INF-73-82-M-7	<i>Image Processing and Augmented Reality (Projekt)</i>	8.0 CP (240 h)

Basedata

CP, Effort	8.0 CP = 240 h
Position of the semester	1 Sem. in WiSe
Level	[7] Master (Advanced)
Language	[EN] English
Module Manager	Stricker, Didier, Prof. Dr. (PROF DEPT: INF)
Lecturers	Stricker, Didier, Prof. Dr. (PROF DEPT: INF)
Area of study	[INF-KI] Intelligent Systems
Reference course of study	[INF-88.79-SG] M.Sc. Computer Science
Lifecycle-State	[NORM] Active

Courses

Type/SWS	Course Number	Choice in Module-Part	SL	PL	CP	Sem.
4L	INF-73-82-K-7	P	PRAES	PL1	8.0	WiSe

- About [INF-73-82-K-7]: Title: "Image Processing and Augmented Reality (Projekt)"; Presence-Time: 56 h; Self-Study: 184 h
- About [INF-73-82-K-7]: The study achievement "[PRAES] presentation" must be obtained.

Examination achievement PL1

- Form of examination: **presentation**
- Examination number: 67382 ("Image Processing and Augmented Reality (Projekt)")

Evaluation of grades

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

Contents

From [INF-73-82-K-7] Image Processing and Augmented Reality (Projekt):

Depends on the topic: Research, design, implementation and evaluation of algorithms and methods to tackle Computer Vision and Tracking problems in various applications

Competencies / intended learning achievements

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

- practically apply engineering methods and techniques and apply advanced knowledge in the fields of computer vision and tracking,
- evaluate the algorithms and procedures from the fields of computer vision and tracking used in the project
- familiarize themselves with existing software libraries to implement the project in an object-oriented programming language (C++)
- use development, management and testing tools,
- go through a complete development and test cycle of teamwork,
- independently define requirements for a system solution according to heuristic criteria
- divide agreed and self-chosen tasks into subtasks and to work on them together in a cooperative manner,
- estimate and plan the project effort in detail and to use resources in a goal-oriented way,
- document and manage work results comprehensively and accurately and to present results
- present a specialist lecture using suitable media to a heterogeneous specialist audience,
- lead and moderate a well-founded discussion on the chosen topic based on a technical lecture,
- assess one's own scope for action and decision-making and the responsibility associated with it and, if necessary, to obtain specific information,
- define priorities, derive tasks, develop solutions and monitor progress
- recognize misunderstandings and role conflicts in communication situations at an early stage and to contribute to conflict resolution,
- argue goal-oriented in controversial discussions and to deal with criticism objectively,
- participate constructively and actively in heterogeneous working groups,
- represent independent points of view and, if necessary, points of view that differ from others in a very comprehensible way and to argue plausibly and convincingly,
- frequently lead, instruct and motivate a working group, to lead heterogeneously composed groups responsibly and to represent work results to third parties,
- develop their own professional, methodological, technological, interdisciplinary, social and personal skills independently

Literature

From [INF-73-82-K-7] Image Processing and Augmented Reality (Projekt):

Topic specific.

Requirements for attendance of the module (informal)

None

Requirements for attendance of the module (formal)

None

References to Module / Module Number [INF-73-82-M-7]

Course of Study	Section	Choice/Obligation
[INF-88.79-SG] M.Sc. Computer Science	[Specialisation] Specialization 1	[WP] Compulsory Elective