

Module title: Global Distributed Software Development

Module ID	Workload	Credits	Semester	Frequency of Offering	Duration
MI25	150 h	5	2	yearly	1 semester

Workload	Attendance	Preparation and Follow-Up	Private Study	Preparation for Exam and Exam	Total
P	60 h / 4 SWS	15 h	135 h		150 h

1 **Scheduled Group Size:** P: 15 students

2 **Subject Knowledge / Skills**

After finishing this module students have in-depth knowledge of how to design and implement a mid size distributed (Web-) application in a global setting. They understand how to cooperate with team members with different cultural background at other locations and in other time zones. They know how to apply programming techniques for building applications that meet a customers requirements.

3 **Content / Syllabus**

Students will engage in a group project in order to experience and practice key aspects of software engineering in a setting that simulates globally distributed software development companies. They will act in the typical roles as developers, technical leads and managers.

The module will offer comprehensive and advanced coverage of practical methods and tools of software engineering, as well as its organizational, teamwork and communicational aspects. Special emphasis will be on iterative, incremental, agile and user centered design methodologies and on global software engineering, where teams are located in geographically and culturally dispersed areas. Basics of intellectual property, licensing, digital right management, copyright an software engineering ethics will be discussed.

This project provides an integrative experience in software project organization and teamwork, thus complementing student's fundamental skills in computer science.

4 **Teaching Format**

Project with accompanying practical work in a laboratory; guest and student presentations

5 **Prerequisites**

None

6 **Recommended Qualifications for the Participation**

Good programming skills in C, Java or PHP (mandatory), knowledge of JavaScript and HTML

7 **Assessment**

Written assignments which are presented orally.

8	Prerequisites for Granting ECTS Credits <i>Exam passed</i>
9	Usage of this Module in Other Degree Courses <i>None</i>
10	Contribution to Final Score <i>5,56 %</i>
11	Convenor Professor of Project Management, System Analysis and Development of Complex Software Systems
12	Language of Instruction <i>English</i>
13	Reading List <i>To be announced in class (depending on the actual task in the project)</i>