

Module name	Software Technology Project
Module number	INF-IST-C-SWTP, INF-MT-E-SWTP
Lecturer in charge	Prof. Dr. Uwe Aßmann uwe.assmann@tu-dresden.de
Objectives	After completing the module, students have practical engineering skills in the implementation of team-oriented, work-sharing software projects. Students are able to work with a customer to analyze their requirements and to design, implement and test a software system and have it accepted by the customer.
Contents	The content of the module is the implementation of a team-oriented software development process that records and processes customer requirements. This includes the application to be realized for the customer, the creation of a requirements specification, a software design and small prototypes for familiarization with the frameworks or technologies to be used, as well as implementation and documentation. Further content includes quality assurance, such as the creation of a test suite and the evaluation of software analyses. The module also includes project management activities such as group meetings and their minutes, customer meetings, recording working hours, reflection and controlling of the project status at well-defined milestones and a final presentation to the customer.
Modes of teaching and learning	4 hours per week practical lab courses and self-study.
Prerequisites	The skills to be acquired in the module Software Technology are required. This includes, in particular, methods for developing large software systems, object orientation, the use of a modeling language such as the Unified Modeling Language (UML) in analysis, design and implementation as well as programming in an object-oriented programming language such as Java.
Usability	The module is a compulsory module in the basic studies of the degree programme Information Systems. Further, it is a compulsory elective module from the compulsory elective area of Methods and Applications of the main course of study in the Diploma degree programme Mechatronics in accordance with § 6 section 3 of the study regulations and § 33 section 3 of the exam regulations. It creates the prerequisites for the modules that list that module in the "Prerequisites" field.
Requirements for the award of credit points	The credit points are awarded when the module assessment is passed. The module assessment consists of a ungraded complex assignment of 100 hours.
Credit points and grades	6 credit points can be obtained by the module. The module is assessed as "passed" or "failed".

Frequency	The module is offered every winter semester.
Workload	The total effort is 180 hours.
Duration	The module takes one semester.