



Software Engineering

Field of study: Computing

Programme description

The term “software engineering” was coined in 1968, during the NATO conference in Garmish. It was used in response to the problems associated with a software development that then still young IT sector was facing. Although more than 40 years have passed, the software development in many IT companies is still chaotic. Software is frequently delivered after the deadline, it costs much more than anticipated at the beginning, developers are often forced to work over-hours, and despite all these efforts, the software that is delivered does not meet customer needs and contains too many defects.

The goal of Software Engineering as a discipline, is to deliver solutions that can be used to mitigate the problems associated with the software development by applying engineering methods to its development.

Since 1998, Poznan University of Technology offers a M.Sc. Programme in Software Engineering. The curriculum aims at providing graduates with the necessary knowledge and skills to perform three important roles in IT projects:

- Project Manager – project management methodologies, risk management, planning (size and effort estimation of software development);
- Analyst – business process modeling, elicitation of functional and non-functional requirements for information systems, and preparation of acceptance tests;
- Architect, senior developer – object-oriented design, software architectures, real-time systems, and software testing.

An important element of the curriculum is the Software Development Studio (SDS). This is a very practical form of studying. During the SDS course students are involved in projects delivering real software for real customers. Therefore, they have an opportunity to use different methods, standards, and tools for software development in practice. Each team is composed of four 4th-year students working towards Bachelor Degree and two or three students from the M.Sc. Programme in Software Engineering. Fourth-year students play the roles of designers and programmers, while the Software Engineering students are supposed to act as project managers, analysts or architects.

All the courses offered within the M.Sc. Programme in Software Engineering are in English. The candidates should have Bachelor Degree in Computer Science, Computer Engineering, Informatics or related fields.

Course summary:

Semester 1

- Software Design and Modeling
- Data Mining and Analysis
- Project Management and Requirements Engineering
- Technical and Scientific Writing
- Software Development Studio 1
- Technologies of Software Development
- Database System Performance

Semester 2

- Software Architecture and Verification
- Software Development Studio 2
- IT Applications (elective)
- Pre-diploma Seminar
- Elective Course 1
- Elective Course 2
- Master Thesis – Part 1

Semester 3

- Diploma Seminar
- Elective Course 3
- Elective Course 4
- Master Thesis – Part 2



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University	Poznan University of Technology Poznan, POLAND
Degree to be obtained	Master of Science
Department	Faculty of Computing
Address	Piotrowo 3 60-965 Poznan Phone: +48 61 665 3427 Fax: +48 61 665 3421
Programme web site	http://www.put.edu.pl/
Contact	Lifelong Learning and International Education Office Pl. M. Skłodowskiej-Curie 5 60-965 Poznan
Phone	+48 61 665 3544
Fax	+48 61 665 3956
E-mail	study@put.poznan.pl
Language of instruction	English
Tuition fee	EU citizens: free of charge NON-EU citizens: 2000 EUR per year
Registration fee	EU citizens: 85 PLN NON-EU citizens: 200 EUR
ECTS points	90
Duration	1,5 years (3 semesters)
Programme begins	end of February
Programme ends	end of June
Deadline for application	3 months before the course starts – end of November
Education requirements	English language – level B2 (Common European Framework), Bachelor of Science degree (or equivalent) in Computer Science, Computer Engineering, Informatics or related fields. Full list of the required documents is available at http://www.put.edu.pl/
Mode of instruction	Lectures, classes, laboratory classes, projects, internships

