Title	Code
Software engineering	**1010331451010330640**
Field: **Computer Science**	Year / Semester: **3 / 5**
Specialty: **-**	Course: **core**
Hours: Lectures: **1** Classes: **-** Laboratory: **1** Projects / seminars: **-**	Number of credits: **4**
	Language: **polish**

Lecturer:

dr inż. Barbara Begier
Instytut Automatyki i Inżynierii Informatycznej
e-mail: Barbara.Begier@put.poznan.pl

Faculty:

Faculty of Electrical Engineering
ul. Piotrowo 3A
60-965 Poznań
tel. (061) 665-2539, fax. (061) 665-2548
e-mail: office_deef@put.poznan.pl

Status of the course in the study program:

Obligatory

Assumptions and objectives of the course:

Engineering approach to software development.
Practical skills in object modeling using the UML standard

Contents of the course (course description):

Concept of engineering and the role of software engineering. Primary and supporting processes in software development according to the standard ISO 12207. Overview of models of the software development cycle: waterfall model, RAD, pyramid, V, spiral, WinWin, incremental, and iterative-incremental. Specification of requirements. UML standard: use cases and relationships among them, modeling of classes and their relationships. Other important concepts applied in the UML and their notation: interface, stereotype, derived element, package, subsystem. Diagrams introduced to model object behavior: statechart, activity diagram, sequence diagram, collaboration diagram, and interaction control diagram. Component and deployment diagrams. Software documentation. Repository. Practices in software production, practices in RUP (Rational Unified Process). Capability Maturity Model for Software. Key areas assigned to maturity levels in the CMM model.

Introductory courses and the required pre-knowledge:

Basic knowledge in computer science. Concepts typical for object programming.

Courses form and teaching methods:

Lectures and laboratory classes

Form and terms of complete the course - requirements and assessment methods:

Exam in next semester includes the content of lectures in fifth semester.
Each UML diagram developed during laboratory classes is assessed separately. Student's activity in the class is considered, too.

Basic Bibliography:

-

Additional Bibliography:

-