Object Oriented Programming					
Course Code	**Student Workload**	**Credits** (according to ECTS)	**Semester**	**Frequency**	**Duration**
CIF62003	150 hours	7,5 ECTS (6 for theory and 1.5 for practical work)	Sem. 2	each even-semester	16 meetings

1	**Types of courses**	**contact hours**	**independent study**	**class size**
	compulsory (study programme level)	105 hours	45 hours	20-40 students

2	**Prerequisites for participation** Have completed Basic Programming course
3	**Learning outcomes** IF-PLO-2 Graduates have the ability to be scientific, work collaboratively, have a professional attitude, and have good adaptation skills when working in groups or as an individual IF-PLO-3 Graduates are able to develop professional careers in the field of computer science based on quality aspects, data-based decision making, be responsible, and make continuous improvements. IF-PLO-4 Graduates have the ability to think computationally, design-based thinking, conduct analysis with scientific writing, and are able to apply the values of Technopreneurship in creating product innovations in the Systems or Information Technology domain. IF-PLO-7 Mastering the theoretical concept and principles of computer science, especially in the aspect of algorithms, programming, intelligent systems, information management, parallel and distributed computing, information security, human-computer interaction, software engineering, and fundamentals of computer systems and networks. IF-PLO-13 Graduates are able to perform abstraction, modeling, representation, and data acquisition in order to perform the data analysis.
4	**Subject aims** Students are able to understand the basic concepts of object-oriented programming, inheritance, polymorphism. Students are able to understand the concepts of encapsulation, access rights and collection.

	Students are able to understand and use abstract classes, interfaces, exceptions and generic classes. Students are able to create programs using object-oriented programming concepts.
5	**Teaching methods** lectures, case study, class discussion, presentation
6	**Assessment methods** assignment, mid-term examination, end-term examination, project evaluation, practical-skill assessment
7	**This module is used in the following degree programs as well**
8	**Responsibility for module**
9	**Other information** 1 Y. Daniel Liang, Introduction to Java Programming Comprehensive Edition 11th Edition. Pearson. 2 Bernd Bruegge & Allen H. Dutoit, 2010, Object-Oriented Software Engineering using UML, Patterns, and Java™ Third Edition