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| <b>Course title:</b>             | <b>Object Oriented Programming</b>   |
| <b>Department:</b>               | F-3, Department of Computer Science  |
| <b>Course code:</b>              | F3-OOP   |
| <b>Erasmus subject code:</b>     | Informatics, Computer Science  |
| <b>Number of contact hours:</b>  | 45 hours   |
| <b>Course duration:</b>          | 1 semester   |
| <b>ECTS credits:</b>             | 6  |
| <b>Course description:</b>       | basics of object oriented techniques: classes, interfaces, abstract classes, inheritance, encapsulation, implementation hiding; design patterns – definitions and example projects; C# realization of object oriented features; elements of test driven development (TDD) approach to software development   |
| <b>Literature:</b>               | <ol style="list-style-type: none"><li>1. "Programming C#. Building .NET Applications with C#", Jesse Liberty</li><li>2. "Microsoft Visual C# 2010 Step by Step", John Sharp</li><li>3. "Head First Design Patterns", Elisabeth Freeman, Eric Freeman, Bert Bates, Kathy Sierra, Elisabeth Robson</li><li>4. "Design Patterns in C#", Steven John Metsker</li><li>5. "The Object-Oriented Thought Process (3rd Edition)", Matt Weisfeld</li></ol> |
| <b>Course type:</b>              | Lectures and laboratories  |
| <b>Assessment method:</b>        | Attendance, evaluation of small projects, exam   |
| <b>Prerequisites:</b>            | basics of programming languages (procedural programming, loops, conditional statements etc., other object oriented languages appreciated but not necessary)  |
| <b>Primary target group:</b>     | 2-nd – 4-th year computer science students   |
| <b>Lecturer:</b>                 | Michał Bereta, PhD, Eng.   |
| <b>Contact person:</b>           | Michał Bereta, PhD, Eng. mbereta@pk.edu.pl   |
| <b>Deadline for application:</b> | 15th of September  |
| <b>Remarks:</b>                  |  |