Course description:
The lecture is directed to architects of future systems and to all developers interested in perfecting his workshop. The aim of the course is to acquaint students with the canon of modern tools in the design of object-oriented software. Lecture material comprising:

- UML basics to the extent required by the projects and technical analysis
- SOLID principles and GRASP
- directory overview of design patterns (GoF) (eg Observer Builder Bridge, State, Strategy, Facade, Adapter, mediator, etc.)
- directory overview of the application architecture patterns (architectural patterns) (eg Model-ViewController, Object-Relational Mapping, Dependency Injection, Service Locator, Mock Object, etc.)
- an overview of patterns directory systems architecture (Enterprise Service Bus, Single Sign-on)

The purpose of the workshop is practical contact with the material of the course.

Requirements: completed course in Java or C # (all examples will be based on C #) Literature:

1. Wrycza, Marcinkowski, Wyrzykowski - UML 2.0 modeling systems information
2. Fowler - Refactoring: Improving the Design of Existing Code Gamma, Helm, Johnson, Vlissides: Design Patterns: Elements of Reusable Object-Oriented Software
3. Fowler - Patterns of Enterprise Application Architecture Microsoft Patterns & Practices - Application Architecture Guide