INSA | INSTITUT NATIONAL DES SCIENCES APPLIQUÉES TOULOUSE

Software engineering and service oriented architectures

ECTS
4 crédits

Hourly volume
41h

Introducing

Objectives

At the end of this module, the student will have understood and be able to explain (main concepts):

- Software project lifecycle
- The challenges of software development
- Project management methods, particularly the agile method
- Service oriented architecture
- Resource oriented architecture (RESTful)
- Microservice architecture

The student will be able to:
- Control the conduct of a software development project with a team by following the scrum agile method
- Perform requirement analysis: expression, analysis and transformation into technical requirements
- Design and develop a service oriented architecture
- Implement Web services SOAP and Rest
- Develop a service composition (orchestration) via BPEL
- Develop microservices
- Understand and implement a RESTfull API

Necessary prerequisites

Algorithmic, Object oriented programming (Java), Object oriented design (UML), XML, and XML schema

Practical info

Location(s)

⦿ Toulouse

Non-contractual information

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