# SYLLABUS

## 1. Data about the program of study

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| 1.1 Institution | The Technical University of Cluj-Napoca |
| 1.2 Faculty | Faculty of Automation and Computer Science |
| 1.3 Department | Computer Science |
| 1.4 Field of study | Computer Science and Information Technology |
| 1.5 Cycle of study | Bachelor of Science |
| 1.6 Program of study/Qualification | Computer science / Engineer |
| 1.7 Form of education | Full time |
| 1.8 Subject code | 50. |

## 2. Data about the subject

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|---|---|---|---|---|---|
| 2.1 Subject name | | | | ***Project Management*** | |
| 2.2 Course responsible/lecturer | | | | Prof. dr. eng. Mihaela Dînșoreanu - mihaela.dinsoreanu@cs.utcluj.ro | |
| 2.3 Teachers in charge of seminars/ laboratory/ project | | | | - | |
| 2.4 Year of study | IV | 2.5 Semester | 7 | 2.6 Type of assessment (E - exam, C - colloquium, V - verification) | E |
| 2.7 Subject category | *DF – fundamentală, DD – în domeniu, DS – de specialitate, DC – complementară* | | | | DS |
| | *DI – Impusă, DOp – opțională, DFac – facultativă* | | | | DI |

## 3. Estimated total time

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|---|---|---|---|---|---|---|---|---|---|---|
| 3.1 Number of hours per week | 3 | of which: | Course | 3 | Seminars | | Laboratory | | Project | |
| 3.2 Number of hours per semester | 42 | of which: | Course | 42 | Seminars | | Laboratory | | Project | |
| 3.3 Individual study: | | | | | | | | | | |
| (a) Manual, lecture material and notes, bibliography | | | | | | | | | | 10 |
| (b) Supplementary study in the library, online and in the field | | | | | | | | | | 10 |
| (c) Preparation for seminars/laboratory works, homework, reports, portfolios, essays | | | | | | | | | | 10 |
| (d) Tutoring | | | | | | | | | | |
| (e) Exams and tests | | | | | | | | | | 3 |
| (f) Other activities: | | | | | | | | | | |

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| 3.4 Total hours of individual study (suma (3.3(a)...3.3(f))) | 33 |
| 3.5 Total hours per semester (3.2+3.4) | 75 |
| 3.6 Number of credit points | 3 |

## 4. Pre-requisites (where appropriate)

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| 4.1 Curriculum | Software Design, Software Engineering |
| 4.2 Competence | Software Development methodologies, Software Architectures |

## 5. Requirements (where appropriate)

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| 5.1. For the course | Video projector, internet connected computer, Moodle, Teams<br>Attendance compulsory min 50% |
| 5.2. For the applications | - |

## 6. Specific competence

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| 6.1 Professional competences | **C5** Designing, managing the lifetime cycle, integrating and ensuring the integrity of hardware, software and communication systems<br>**C5.1** Specifying the relevant criteria regarding the lifetime cycle, quality, security and the computing system's interaction with the environment and the human operator<br>**C5.2** Using interdisciplinary knowledge for adapting the computing system to the specifc requirements of the application field |

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|---|---|
| | **C5.3** Using fundamental principles and methods for ensuring the security, the safety and ease of exploitation of the computing systems<br>**C5.4** Proper utilization of the quality, safety and security standards in the field of information processing<br>**C5.5** Creating a project including the problem's identification and analysis, its design and development, also proving an understanding of the basic quality requirements |
| 6.2 Cross competences | N/A |

**7. Discipline objective (as results from the *key competences gained*)**

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| 7.1 General objective | Understand and apply appropriate project management techniques |
| 7.2 Specific objectives | • Acknowledge the interfaces and interdependencies between the disciplines in OOSE<br>• Present various project management techniques and their application in the two prominent methodologies<br>• Project Management Metrics and Indicators<br>• Understand the risks and the factors that lead to success or failure; Risk Management<br>• Reflections of Project Management on the Software Quality |

**8. Contents**

| 8.1 Lectures | Hours | Teaching methods | Notes |
|---|---|---|---|
| Introduction | 2 | Face to face lectures, Powerpoint slides, Quizes, homeworks and discussions. Course materials Moodle | |
| PM overview | 2 | | |
| Basics of Project Management for Agile Methodologies | 2 | | |
| Basics of Project Management for Plan-driven Methodologies | 2 | | |
| Planning and Tailoring the process | 2 | | |
| Planning the Disciplines | 2 | | |
| WBS development | 2 | | |
| Scheduling and Resource management | 2 | | |
| Monitoring and Control | 2 | | |
| Risk management | 2 | | |
| People management | 2 | | |
| Change management | 2 | | |
| Project Closure | 2 | | |
| Final review and concluding remarks | 2 | | |

Bibliography


1. Righting Software, Juval Lowy, O'Reilley, 2020
2. Project Management Institute, A Guide to the Project Management Body of Knowledge, 5th Edition, 2013.
3. Juana Clark Craig, Project Management Lite: Just Enough to Get the Job Done…Nothing More, 2012
4. The Unified Software Development Process, G. Booch, J. Rumbaugh, I. Jacobson, Addison Wesley, 1998.
5. Software Project Management: A Unified Framework, Walker Royce, Addison Wesley


| 8.2 Applications – Seminars/Laboratory/Project | Hours | Teaching methods | Notes |
|---|---|---|---|
| - | | | |

Bibliography

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**Se vor preciza, după caz: tematica seminariilor, lucrările de laborator, tematica și etapele proiectului.*

**9. Bridging course contents with the expectations of the representatives of the community, professional associations and employers in the field**

The discipline is a domain discipline in Computers and Information Technology, its content being fundamental in the management of software projects. The content of the discipline contains the techniques and tools for managing various aspects of projects: scope of projects, activities, time, resources, risks, ending projects, etc. The content is compatible with similar subjects taught at prestigious universities in the country and abroad. In developing the content, important companies from Romania were consulted and it was evaluated by Romanian government agencies

(CNEAA and ARACIS).

**10. Evaluation**

| Activity type | Assessment criteria | Assessment methods | Weight in the final grade |
|---|---|---|---|
| Course | Ability to apply appropriate PM techniques for given project situations, attendance, class activity | Written exam, Quizzes during the semester, homework | 100% |
| Seminar | - | | |
| Laboratory | - | | |
| Project | - | | |

Minimum standard of performance:
Grade calculus: 60% final exam, 40% class activity (Quizzes, homework)
Conditions for participating in the final exam: Attendance of lectures >= 50%
Conditions for promotion: final exam ≥ 5, class activity >=5

| **Date of filling in:** 29.05.2023 | **Teachers** | **Title First name Last name** | **Signature** |
|---|---|---|---|
| | Course | Prof. dr. eng. Mihaela Dînșoreanu | |
| | Applications | - | |

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| **Date of approval in the department** | Head of department,<br>Prof. dr. eng. Rodica Potolea |
| **Date of approval in the Faculty Council** | Dean,<br>Prof. dr. eng. Liviu Miclea |