

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 | 59.00 |

2. Data about the subject

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|---|---|--------------|---|---|----|
| 2.1 Subject name | <i>Graduation project defense</i> | | | | |
| 2.2 Course responsible / lecturer | Diploma project supervisor | | | | |
| 2.3 Teachers in charge of seminars / laboratory / project | As decided by the supervisor | | | | |
| 2.4 Year of study | IV | 2.5 Semester | 2 | 2.6 Type of assessment (E - exam, C - colloquium, V - verification) | E |
| 2.7 Subject category | <i>DF – fundamentală, DD – în domeniu, DS – de specialitate, DC – complementară</i> | | | | DS |
| | <i>DI – Impusă, DOp – opțională, DFac – facultativă</i> | | | | DI |

3. Estimated total time

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|--|----|-----------|--------|--|----------|--|------------|--|---------|--|
| 3.1 Number of hours per week | - | of which: | Course | | Seminars | | Laboratory | | Project | |
| 3.2 Number of hours per semester | - | of which: | Course | | Seminars | | Laboratory | | Project | |
| 3.3 Individual study: | | | | | | | | | | |
| (a) Manual, lecture material and notes, bibliography | | | | | | | | | | |
| (b) Supplementary study in the library, online and in the field | | | | | | | | | | |
| (c) Preparation for seminars/laboratory works, homework, reports, portfolios, essays | | | | | | | | | | |
| (d) Tutoring | | | | | | | | | | |
| (e) Exams and tests | | | | | | | | | | |
| (f) Other activities: | | | | | | | | | | |
| 3.4 Total hours of individual study (suma (3.3(a))...3.3(f)) | | | | | | | | | | |
| 3.5 Total hours per semester (3.2+3.4) | | | | | | | | | | |
| 3.6 Number of credit points | 10 | | | | | | | | | |

4. Pre-requisites (where appropriate)

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| 4.1 Curriculum | Graduating all previous disciplines from the curricula |
| 4.2 Competence | |

5. Requirements (where appropriate)

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| 5.1. For the course | |
| 5.2. For the applications | |

6. Specific competence

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| 6.1 Professional competences | <p>Graduates will have the following specific skills:</p> <ul style="list-style-type: none"> • modeling and designing software and hardware sub-systems, making the best decisions regarding the costs-results trade-off concerning the design decisions • implementing a hardware or software system • analyzing the way a computing system meets the criteria for which it was designed and proposing improvements and future developments demonstrating the knowledge and understanding of important concepts, principles and theories of computer science and engineering • identifying and analyzing specific problems and elaborating strategies for solving them • assuring the quality of products and services in the field of information technology using the information technology tools |
| 6.2 Cross competences | N/A |

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

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|-------------------------|---------------------------|
| 7.1 General objective | Defense of Diploma Thesis |
| 7.2 Specific objectives | |

8. Contents

| 8.1 Lectures | Hours | Teaching methods | Notes |
|--|-------|------------------|-------|
| Bibliography | | | |
| 8.2 Applications – Seminars/Laboratory/Project | Hours | Teaching methods | Notes |
| <ul style="list-style-type: none"> • study of the bibliography in order to see how actual and necessary the project is • comparative analysis of the existing products and systems • comparative analysis of the potential methodologies and/or technologies • preparation of the project specifications • implementation and deployment of the hardware or software system • product testing and validation • product documenting • assessment of results, possible further developments, original aspects, advantages and limits of solution | | | |
| <p>Bibliography</p> <p>For the diploma thesis preparation, the references are those recommended by the supervisor, as well as those obtained by studying the bibliography.</p> <p>For fundamental and specific knowledge assessment, the bibliography is identical to the minimal bibliography for the each of the undergraduate courses</p> | | | |

**Se vor preciza, după caz: tematica seminarilor, 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

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10. Evaluation

| Activity type | Assessment criteria | Assessment methods | Weight in the final grade |
|---------------|---------------------|--------------------|---------------------------|
| Course | - | - | - |
| Seminar | - | - | - |

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|---|---|--|------|
| Laboratory | - | - | - |
| Project | | Separate marks - for the diploma presentation and defending (P) - for the assessment of fundamental and specific knowledge (K) | 100% |
| Minimum standard of performance: Exam average mark: $M = (P + K) / 2$ Condition to get the credits: $P \geq 5,00$; $K \geq 5,00$; $M \geq 6,00$ | | | |

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|--|-----------------|--------------|-------------------|----------------------------|------------------|
| Date of filling in: 10.06.2024 | Teachers | Title | First name | Last name | Signature |
| | Course | | | Diploma project supervisor | |
| | Applications | | | | |

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| Date of approval in the department 20.02.2024 | Head of department, Prof.dr.eng. Rodica Potolea |
| Date of approval in the Faculty Council 22.02.2024 | Dean, Prof.dr.eng. Mihaela Dînsoreanu |