

COURSE OUTLINE

1. Data about the study programme

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|------------------------------------|---|
| 1.1 Higher education institution | Transilvania University of Brasov |
| 1.2 Faculty | Technological Engineering and Industrial Management |
| 1.3 Department | Engineering and Industrial Management |
| 1.4 Field of study ¹⁾ | Engineering and Management |
| 1.5 Study level ²⁾ | Master |
| 1.6 Study programme/ Qualification | Engineering and Management in Aviation / Master |

2. Data about the course

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|---|--|--------------|---|---------------------|---|-------------------|-------------------------------|----|
| 2.1 Name of course | Project Management | | | | | | | |
| 2.2 Course convenor | Assoc.Prof.Eng. Lucia-Antoneta CHICOȘ, PhD | | | | | | | |
| 2.3 Seminar/ laboratory/ project convenor | Assoc.Prof.Eng. Lucia-Antoneta CHICOȘ, PhD | | | | | | | |
| 2.4 Study year | II | 2.5 Semester | 4 | 2.6 Evaluation type | V | 2.7 Course status | Content ³⁾ | PC |
| | | | | | | | Attendance type ⁴⁾ | EC |

3. Total estimated time (hours of teaching activities per semester)

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|---|----|---------------------------|----|----------------------------------|--------|
| 3.1 Number of hours per week | 3 | out of which: 3.2 lecture | 1 | 3.3 seminar/ laboratory/ project | 0/2/0 |
| 3.4 Total number of hours in the curriculum | 42 | out of which: 3.5 lecture | 14 | 3.6 seminar/ laboratory/ project | 0/28/0 |
| Time allocation | | | | | hours |
| Study of textbooks, course support, bibliography and notes | | | | | 10 |
| Additional documentation in libraries, specialized electronic platforms, and field research | | | | | 10 |
| Preparation of seminars/ laboratories/ projects, homework, papers, portfolios, and essays | | | | | 5 |
| Tutorial | | | | | 5 |
| Examinations | | | | | 3 |
| Other activities | | | | | |
| 3.7 Total number of hours of student activity | | 33 | | | |
| 3.8 Total number per semester | | 75 | | | |
| 3.9 Number of credits ⁵⁾ | | 3 | | | |

4. Prerequisites (if applicable)

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| 4.1 curriculum-related | • Not specified |
| 4.2 competences-related | • Advanced knowledge in the use of IT tools |

5. Conditions (if applicable)

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| 5.1 for course development | • Room with video projector, computers and related software (MS Project software system) |
| 5.2 for seminar/ laboratory/ project development | • Room with video projector, computers and related software (MS Project software system) |

6. Specific competences and learning outcomes

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|--------------------------|--|
| Professional competences | |
| Transversal competences | <p>Ct.1 Finds solutions to problems L.O.1.2 The graduate will be able to work together with colleagues in order to ensure a common understanding of the work tasks.</p> <p>Ct.2 Practices results-oriented leadership towards colleagues L.O.2.2. The graduate will be able to organize and coordinate the team, outlining clear tasks to all team members. L.O.2.3. The graduate will be able to provide project management, for the management and planning of material, human, financial and informational resources for a given project as well as for the evaluation of the technical-economic results of that project.</p> |

7. Course objectives (resulting from the specific competences to be acquired)

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| 7.1 General course objective | <ul style="list-style-type: none"> Acquiring competencies regarding the methods of development and implementation of projects |
| 7.2 Specific objectives | <ul style="list-style-type: none"> Identifying project management principles and processes Applying knowledge, operating with project-specific concepts, methods and tools Understanding how to organize through projects and knowing the typology of projects Planning the phases of a project and estimating costs Operating with planning tools (PERT, GANTT) Using the MS Project software system in planning and monitoring a project |

8. Content

| 8.1 Course | Teaching methods | Number of hours | Remarks |
|---|---|-----------------|---------|
| Introduction to project management. Concept. Areas. Objectives. Deliverables | Interactive lecture, Exposure, PowerPoint presentation on video projector | 1 hour | |
| Project typology. Project organizational structure | | 1 hour | |
| Project evaluation methods and criteria | | 1 hour | |
| Project life cycle. Stages/processes of a project | | 2 hours | |
| Project stakeholders. Roles and responsibilities. Project manager skills | | 1 hour | |
| Project planning methods and tools. Detailed project work breakdown structure (WBS). Critical Path planning, PERT method. GANTT charts. | | 2 hours | |
| Project resource definition | | 2 hours | |
| Project budget. Cost-benefit analysis. Payback period. | | 2 hours | |
| Project monitoring and control | | 1 hour | |
| Risks management related to a project | | 1 hour | |
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|---|---|-----------------|---------|
| <p>Bibliography</p> <ol style="list-style-type: none"> Chicoș, L.A., Suport de curs (in format electronic) Opran, C., Stan, S., (2002), Managementul proiectelor-note de curs, Ed. Comunicare, Bucuresti *** (2000), Project Management Institute – A Guide to the project management Body of Knowledge Pascu, R.V., (2010), Managementul Proiectelor, Editura Universității „Lucian Blaga” din Sibiu, [Online], Disponibil pe: http://ccimn.ulbsibiu.ro/ documente/carti/introductura_in_ managementul_ proiectelor.pdf, accesat 03.02.2023 *** (2015). Rădulescu, C. et al., (2017) Planificarea și conducerea proiectelor. Material elaborat în cadrul proiectului: „Dezvoltarea capacității de planificare strategică la nivelul autorităților administrației publice locale ale orașelor din România”, cod SMIS 27520, cofinan at prin Fondul Social European, Programul Opera ional Dezvoltarea Capacită ii Administrative 2007-2013, http://www.mdrap.ro/userfiles/ghid_MP.pdf Rădulescu, C. et al., (2017) Planificarea și conducerea proiectelor, Editura U.T.PRESS UTCN, Cluj Napoca, ISBN 978-606-737-256-4 A Guide to the Project Management Body of Knowledge (2000), Project Management Institute Westland, J., (2019), The 10 Project Management Knowledge Areas (PMBOK), https://www.projectmanager.com/blog/10-project-management-knowledge-areas *** (2015) Manual Implementare Fonduri Structurale. Material elaborat în cadrul proiectului „ Instruire aplicata pentru continuarea intaririi capacitatii institutionale a administratiei publice din Romania pentru o gestionare eficienta a fondurilor structurale”- cod SMIS 48159. Proiect co-finantat din Fondul European de Dezvoltare Regionala prin POAT 2007-2013, https://www.anfp.gov.ro/R/Doc/2020/Proiecte/Manuale /Manual%20Expert%20implementare%20fonduri%20structurale%20nov%202015.pdf | | | |
| 8.2 Seminar/ laboratory/ project | Teaching-learning methods | Number of hours | Remarks |
| Overview of MS Project. Creating a new project. Setting initial project options and settings. Project work calendar | Interactive, Discussions, Presentation on video projector, Practical applications in MS Project | 4 hours | |
| Defining activities, with durations, dependencies and restrictions. Recurring activities. Modifying activities | | 5 hours | |
| Establishing relationships between activities. Establishing lags, priorities, constraints | | 3 hours | |
| Establishing the critical path | | 2 hours | |
| Defining project resources and resource types | | 3 hours | |
| Resource management: costs, resource conflicts. Modifying resources and costs. Allocating resources to activities | | 5 hours | |
| Establishing the Baseline plan | | 2 hours | |
| Project monitoring using Tracking Gantt chart and Project Baseline. Analysis of physical and financial progress | | 4 hours | |
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| | | | |
| <p>Bibliography</p> <ol style="list-style-type: none"> Chicoș, L.A., Suport de curs (in format electronic) Opran, C., Stan, S., (2002), Managementul proiectelor-note de curs, Ed. Comunicare, Bucuresti *** (2000), Project Management Institute – A Guide to the project management Body of Knowledge Pascu, R.V., (2010), Managementul Proiectelor, Editura Universității „Lucian Blaga” din Sibiu, [Online], Disponibil pe: http://ccimn.ulbsibiu.ro/ documente/carti/introductura_in_ managementul_ proiectelor.pdf, accesat 03.02.2023 *** (2015). Rădulescu, C. et al., (2017) Planificarea și conducerea proiectelor. Material elaborat în cadrul proiectului: „Dezvoltarea capacității de planificare strategică la nivelul autorităților administrației publice locale ale orașelor din România”, cod SMIS 27520, cofinan at prin Fondul Social European, Programul Opera ional Dezvoltarea Capacită ii | | | |

Administrative 2007-2013, http://www.mdrap.ro/userfiles/ghid_MP.pdf

6. Rădulescu, C. et al., (2017) Planificarea și conducerea proiectelor, Editura U.T.PRESS UTCN, Cluj Napoca, ISBN 978-606-737-256-4

7. A Guide to the Project Management Body of Knowledge (2000), Project Management Institute

8. Westland, J., (2019), The 10 Project Management Knowledge Areas (PMBOK), <https://www.projectmanager.com/blog/10-project-management-knowledge-areas>

9. *** (2015) Manual Implementare Fonduri Structurale. Material elaborat în cadrul proiectului „ Instruire aplicata pentru continuarea intaririi capacitatii institutionale a administratiei publice din Romania pentru o gestionare eficienta a fondurilor structurale” - cod SMIS 48159. Proiect co-finantat din Fondul European de Dezvoltare Regionala prin POAT 2007-2013, <https://www.anfp.gov.ro/R/Doc/2020/Proiecte/Manuale/Manual%20Expert%20implementare%20fonduri%20structurale%20nov%202015.pdf>

9. Tutoriale MS Project, <https://www.itlearning.ro>

9. Correlation of course content with the demands of the labour market (epistemic communities, professional associations, potential employers in the field of study)

| | |
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| The contents were developed in relation to the requirements of employers, so that the learning outcomes can be applied in the industrial environment and in research. | |
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10. Evaluation

| Activity type | 10.1 Evaluation criteria | 10.2 Evaluation methods | 10.3 Percentage of the final grade |
|---|---|----------------------------------|------------------------------------|
| 10.4 Course | Working with project-specific concepts, methods and tools | Written assessment | 50% |
| 10.5 Seminar/ laboratory/ project | Use of IT tools in project planning and monitoring | Assessment during the laboratory | 50% |
| 10.6 Minimal performance standard | | | |
| <ul style="list-style-type: none"> Knowledge of specific project management concepts, methods and tools Planning a medium complexity project using MS Project | | | |

This course outline was certified in the Department Board meeting on 17/09/2024 and approved in the Faculty Board meeting on 26/09/2024.

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| Prof. Eng Tudor Ion DEACONESCU, PhD Dean | Assoc.Prof. Eng Flavius SÂRBU, PhD Head of Department |
| Assoc.Prof.Eng. Lucia-Antoneta CHICOȘ, PhD Course holder | Assoc.Prof.Eng. Lucia-Antoneta CHICOȘ, PhD Holder of seminar/ laboratory/ project |

Note:

- 1) Field of study – select one of the following options: Bachelor / Master / Doctorat (to be filled in according to the forceful classification list for study programmes);

- 2) Study level – choose from among: Bachelor / Master / Doctorat;
- 3) Course status (content) – for the Bachelor level, select one of the following options: **FC** (fundamental course) / **DC** (course in the study domain)/ **SC** (speciality course)/ **CC** (complementary course); for the Master level, select one of the following options: **PC** (proficiency course)/ **SC** (synthesis course)/ **AC** (advanced course);
- 4) Course status (attendance type) – select one of the following options: **CPC** (compulsory course)/ **EC** (elective course)/ **NCPC** (non-compulsory course);
- 5) One credit is the equivalent of 25 study hours (teaching activities and individual study).