

COURSE OUTLINE

1. Data about the study programme

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

2.1 Name of course	Practical Activities for Research and Design 3							
2.2 Course convenor	-							
2.3 Seminar/ laboratory/ project convenor	Dissertation coordinator							
2.4 Study year	2	2.5 Semester	4	2.6 Evaluation type	V	2.7 Course status	Content ³⁾	SC
							Attendance type ⁴⁾	CPC

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

3.1 Number of hours per week	8	out of which: 3.2 lecture	0	3.3 seminar/ laboratory/ project	0/0/8
3.4 Total number of hours in the curriculum	112	out of which: 3.5 lecture	0	3.6 seminar/ laboratory/ project	0/0/112
Time allocation					hours
Study of textbooks, course support, bibliography and notes					-
Additional documentation in libraries, specialized electronic platforms, and field research					40
Preparation of seminars/ laboratories/ projects, homework, papers, portfolios, and essays					60
Tutorial					30
Examinations					8
Other activities.....					
3.7 Total number of hours of student activity		138			
3.8 Total number per semester		250			
3.9 Number of credits ⁵⁾		10			

4. Prerequisites (if applicable)

4.1 curriculum-related	• Not specified
4.2 competences-related	• Computer utilisation, internet searching skills

5. Conditions (if applicable)

5.1 for course development	• -
5.2 for seminar/ laboratory/ project development	• Classroom equipped with a video projector, Internet access

6. Specific competences and learning outcomes

Professional competences	<p>Cp.2 Manages all process engineering activities</p> <p>L.O. 2.1 The graduate will be able to provide advice on process improvement and ensure the correct diagnosis and resolution of problems regarding the processes carried out.</p> <p>L.O.2.3. The graduate will be able to ensure the appropriate framework for planning, coordinating and directing processes, following the entire internal logistics flow of the product, from the raw material/semi-finished product stage to the finished product stage.</p> <p>Cp.4. Adapts to changing situations</p> <p>L.O.4.3. The graduate will demonstrate in-depth knowledge and complex understanding of a particular field of scientific research and will use the results of research projects in order to improve the performance of the organization.</p> <p>L.O.4.4. The graduate will be able to provide and analyze scientific data from qualitative and quantitative research, in order to adapt the organization to the dynamics of the external environment.</p>
Transversal competences	<p>Ct.2 Practices results-oriented leadership towards colleagues</p> <p>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> <p>Ct.3. Negotiates with stakeholders</p> <p>L.O.3.1. The graduate will be able to achieve effective communication on technical and/or commercial issues with various suppliers and/or customers</p>

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

7.1 General course objective	<ul style="list-style-type: none"> • Development of practical, managerial and technical skills, necessary to design and solve a research topic in the field of aviation
7.2 Specific objectives	<ul style="list-style-type: none"> • Development of synthesis skills regarding the information collected following the current stage of the topic • Development of skills to use specific tools for diagnosing the situation of a company in the field of aviation • Development of skills to propose technical, managerial solutions and to make decisions • Training of skills to perform a scientific research project in order to solve the topic of the dissertation

8. Content

8.1 Course	Teaching methods	Number of hours	Remarks
8.2 Seminar/ laboratory/ project	Teaching-learning methods	Number of hours	Remarks
Master's students will carry out the dissertation according to a plan established in agreement with the dissertation coordinator	Documentation / tutoring / individual study / research		
Bibliography			

1. The collection of the Transylvania library in Braşov
2. Internet sources
3. The book fund of the department
4. Documentation available within the organization
5. Bibliography by the recommendation of the dissertation coordinator

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

The contents have been developed in accordance to the employers' requirements, 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			
10.5 Seminar/ laboratory/ project	Evaluation of the dissertation	Dissertation presentation	100%
10.6 Minimal performance standard			
<ul style="list-style-type: none"> Compliance with the project submission deadline Compliance with the structure of the dissertation Development of the dissertation topic in compliance with the principles of academic writing and ethics regarding scientific research 			

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.

Prof Eng, Tudor Ion DEACONESCU, PhD, Dean	Associate Prof. Flavius Aurelian SÂRBU, PhD Head of Department
	Dissertation coordinator 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).