

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	3	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	12	out of which: 3.2 lecture	0	3.3 seminar/ laboratory/ project	0/0/12
3.4 Total number of hours in the curriculum	168	out of which: 3.5 lecture	0	3.6 seminar/ laboratory/ project	0/0/168
Time allocation					hours
Study of textbooks, course support, bibliography and notes					-
Additional documentation in libraries, specialized electronic platforms, and field research					32
Preparation of seminars/ laboratories/ projects, homework, papers, portfolios, and essays					30
Tutorial					12
Examinations					8
Other activities.....					
3.7 Total number of hours of student activity		82			
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.1 Applies advanced manufacturing systems L.O.1.4. The graduate will be able to generate and analyze complex solutions to the problems faced by the organization.</p> <p>Cp.4. Adapts to changing situations 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.1 Finds solutions to problems L.O.1.1 The graduate will be able to responsibly perform professional tasks within a research project. L.O.1.3 The graduate will be able to identify creative solutions for mitigating conflicts that arise in the organizational and external environment in conditions of professional autonomy and independence, based on effective documentation, logical reasoning, evaluation and decision-making analysis.</p> <p>Ct.2 Practices results-oriented leadership towards colleagues L.O.2.1. The graduate will be able to assume responsibilities, to exercise results-oriented leadership 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)

7.1 General course objective	<ul style="list-style-type: none"> Preparing a research report on the current state of development in the chosen field and highlighting the directions for improvement
7.2 Specific objectives	<ul style="list-style-type: none"> Application of documentation techniques Development of skills of documentation and synthesis of data and information collected from the specialized literature Use of specific tools for identifying, explaining and analysing phenomena Determining a scientific research plan

8. Content

8.1 Course	Teaching methods	Number of hours	Remarks
8.2 Seminar/ laboratory/ project	Teaching-learning methods	Number of hours	Remarks
1. Identification of specialized works in the field of the dissertation topic	Documentation / tutoring / individual study		
2. Synthesis of significant works			
3. Identifying current trends, gaps, and future directions for development			
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.

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	Ability to synthesize relevant scientific information	Project presentation	100%
10.6 Minimal performance standard			
<ul style="list-style-type: none"> • Compliance with the deadline for submitting the project • Relevance of the works in the field • Synthesis capacity • Identification of the main directions of the 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).