

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⁾	MA
1.6 Study programme/ Qualification	Engineering and Management in Aviation / Master

2. Data about the course

2.1 Name of course	Airport Management and Ground Services							
2.2 Course convenor	Catrina CHIVU							
2.3 Seminar/ laboratory/ project convenor	Catrina CHIVU							
2.4 Study year	II	2.5 Semester	3	2.6 Evaluation type	E	2.7 Course status	Content ³⁾	AC
							Attendance type ⁴⁾	EC

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

3.1 Number of hours per week	4	out of which: 3.2 lecture	2	3.3 seminar/ laboratory/ project	0/2/0
3.4 Total number of hours in the curriculum	56	out of which: 3.5 lecture	28	3.6 seminar/ laboratory/ project	0/28/0
Time allocation					hours
Study of textbooks, course support, bibliography and notes					20
Additional documentation in libraries, specialized electronic platforms, and field research					10
Preparation of seminars/ laboratories/ projects, homework, papers, portfolios, and essays					26
Tutorial					10
Examinations					3
Other activities.....					
3.7 Total number of hours of student activity		69			
3.8 Total number per semester		125			
3.9 Number of credits ⁵⁾		5			

4. Prerequisites (if applicable)

4.1 curriculum-related	• Not specified
4.2 competences-related	•

5. Conditions (if applicable)

5.1 for course development	• Room with video projector
5.2 for seminar/ laboratory/ project development	• Computer room

6. Specific competences and learning outcomes

Professional competences	<p>Cp.5. Production control</p> <p>L.O.5.2. The graduate will be able to ensure the monitoring of quality standards regarding the products/services offered.</p> <p>L.O.5.4. The graduate will be able to provide an effective framework for managing customer complaints.</p>
Transversal competences	<p>Ct.1 Finds solutions to problems</p> <p>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</p> <p>L.O.2.1. The graduate will be able to assume responsibilities, to exercise results-oriented leadership.</p> <p>L.O.2.2. The graduate will be able to organize and coordinate the team, outlining clear tasks to all team members.</p>

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

7.1 General course objective	<ul style="list-style-type: none"> Developing the skills and knowledge necessary for the efficient and effective management of airport operations and ground services, ensuring safety, passenger comfort and operational efficiency in the context of international regulations and standards.
7.2 Specific objectives	<ul style="list-style-type: none"> Understanding airport structures and functions Planning and development of airport infrastructure Ground Service and Operations Management Implementing security and safety in airports Promoting sustainability and eco-friendly practices

8. Content

8.1 Course	Teaching methods	Number of hours	Remarks
1. Introduction to Airport Management	Lecture	2	
2. Airport Planning and Development		2	
3. Airport Operations Management		4	
4. Ground Handling Services		4	
5. Airport Security and Safety		4	
6. Financial and Economic Aspects of Airport Management		4	
7. Information Technology and Digitalization in Airports		4	
8. International Regulations and Policies		2	
9. Projects and Innovations in Airport Management		2	
Bibliography			
1. Price, Jeffrey; Forrest, Jeffrey - <i>Practical Airport Operations, Safety, and Emergency Management Protocols for Today and the Future</i> . Elsevier Publishing House, 2016, ISBN 9780128005156			
2. Neuffville, Richard; Odoni, Amedeo - <i>Airport Systems. Planning, Design, and Management</i> . McGrawHill, 2019, ISBN 9780071770590			
3. Young, Seth; Wells, Alexander - <i>Airport Planning and Management</i> . McGraw-Hill Publishing House, 2019, ISBN 9780071750240			
4. Udoka, M - <i>Airport Management and Internal Security</i> . 2021, ISBN ebook 9781098364410			
5. Graham, Anne - <i>Managing Airports: An International Perspective</i> . Routledge Publishing House, 2023, ISBN 9781032216386			

8.2 Seminar/ laboratory/ project	Teaching-learning methods	Number of hours	Remarks
1. The role and importance of airports. Study on the structure and operation of major airports	Case study	2	
2. Design and development of an airport: 2.1. Identification of the size and type of airport 2.2. Design of the general structure and layout 2.3. Dimensional design of each layout component 2.4. Functional design/ equipment/ instruments/ waiting/relaxation areas 2.5. Design of storage systems/ transport systems	Teamwork	20 2 2 6 5 5	
3. Practical study on the efficiency of ground handling operators	Case study	2	
4. Development and evaluation of an innovative project for airports	Teamwork	4	
Bibliography 1. Neuffville, Richard; Odoni, Amedeo - <i>Airport Systems. Planning, Design, and Management</i> . McGrawHill, 2019, ISBN 9780071770590 2. Young, Seth; Wells, Alexander - <i>Airport Planning and Management</i> . McGraw-Hill Publishing House, 2019, ISBN 9780071750240 3. Udoka, M - <i>Airport Management and Internal Security</i> . 2021, ISBN ebook 9781098364410 4. *** Airports Council International (ACI) – www.aci.aero 5. *** Federal Aviation Administration (FAA) – www.faa.gov 6. *** International Civil Aviation Organization (ICAO) – www.icao.int 7. *** International Air Transport Association (IATA) – www.iata.org 8. *** European Union Aviation Safety Agency (EASA) – www.easa.europa.eu 9. *** Air Transport Action Group (ATAG) – atag.org 10. *** SITA – Leading IT provider for the air transport industry (www.sita.aero) 11. *** Center for Aviation Safety Research – casr.slu.edu 12. *** Aviation Innovation Network – www.aviation-innovation.net			

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 relation to the employers' requirements, so that the learning results 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	1. Use of specific language 2. Identification of the principles of design of airport systems 3. Criteria and principles for the design of an airport system and ground services	Quiz	10%
10.5 Seminar/ laboratory/ project	Project: 1. Design and development of an airport 2. Streamlining ground handling systems	Project	90%
10.6 Minimal performance standard			

- Identifying the size and type of airport
- Design of the general structure and layout
- Dimensional design of each component of the layout

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

Assoc.Prof. Eng Flavius SÂRBU, PhD
Head of Department

Assoc.Prof.Eng. Catrina CHIVU, PhD
Course holder

Assoc.Prof.Eng. Catrina CHIVU, 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).