

## 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 <sup>1)</sup>	Engineering and Management
1.5 Study level <sup>2)</sup>	Master
1.6 Study programme/ Qualification	Engineering and Management in Aviation / Master

### 2. Data about the course

2.1 Name of course	Informatics for Managers							
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 <sup>3)</sup>	PC
							Attendance type <sup>4)</sup>	EC

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

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 <sup>5)</sup>	3				

### 4. Prerequisites (if applicable)

4.1 curriculum-related	• Not specified
4.2 competences-related	• Competences in using computers

### 5. Conditions (if applicable)

5.1 for course development	• Room with projector, internet, computers and related software (SAP IDES ERP software system)
5.2 for seminar/ laboratory/ project development	• Room with projector, internet, computers and related software (SAP IDES ERP software system)

## 6. Specific competences and learning outcomes

Professional competences	<p>Cp.3. Manages production systems</p> <p>L.O.3.2. The graduate will be able to interpret different phenomena and results regarding the company's performance in order to improve production, managerial and research activities.</p> <p>L.O.3.3. The graduate will be able to use appropriate IT tools for the purpose of solving problems in the field of production, management or scientific research.</p> <p>Cp.4. Adapts to changing situations</p> <p>L.O.4.1. The graduate will be able to use appropriate research methods and IT tools to correctly identify changes in the external environment.</p>
Transversal competences	<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"> <li>Acquiring competences in the use of ERP (Enterprise Resource Planning) systems and in particular of the SAP system (Systems, Applications and Products in Data Processing) as well as understanding the ways of integrating these competences in the economic activities carried out at the level of an organization</li> </ul>
7.2 Specific objectives	<ul style="list-style-type: none"> <li>Understanding the purpose, technical, operational, organizational and strategic implications of ERP systems and the motivation of organizations to implement ERP systems</li> <li>Using advanced software products dedicated to planning, controlling and improving organizational processes</li> <li>Understanding the basic concepts (organizational elements, master data, transactions) and learning essential techniques for working in SAP ERP, navigating the system, managing work sessions and menus, working with transactions, etc.</li> <li>Understanding and learning the processes related to the different modules (SD, production planning, MRP, goods movements, purchasing, reporting, etc.) in order to carry out practical applications in SAP ERP</li> </ul>

## 8. Content

8.1 Course	Teaching methods	Number of hours	Remarks
Introduction: ERP, SAP, ERP architecture. Components of an ERP system. Advantages of implementing an ERP system. Standard SAP ERP modules	Interactive lecture, Exposure, PowerPoint presentation on video projector, Explanation by working directly in SAP IDES ERP	2 hours	
Logging On, Interface, Menus. Navigating the SAP system. Multiple Sessions. Help; Basic concepts in SAP: Organizational elements, Master Data, Transactions		1 hour	
Sales and Distribution (SD)		1 hour	
Production Planning (PP)		2 hours	
Material Requirements Planning (MRP)		2 hours	

Purchasing Process		2 hours	
Outbound Delivery		1 hour	
Reports and Analyses		1 hour	
Bibliography			
1. Chicoș, L.A., Szabo, V.G., Aplicații în SAP® IDES ERP, Editura MatrixRom, ISBN 978-606-25-0576-9, 2020, București			
2. Chicoș, L.A., Sisteme Informatice Integrate I, Suport de curs, (in format electronic)			
3. Dickersbach, J. Th., Keller, G., Production Planning and Control with SAP ERP, ISBN: 978-1-59229-360-5, SAP Press, 2010			
4. Meniul Help al sistemului SAP IDES ERP			
5. <a href="https://help.sap.com/doc/saphelp_46c/4.6C/en-US/e1/8e51341a06084de10000009b38f83b/frameset.htm">https://help.sap.com/doc/saphelp_46c/4.6C/en-US/e1/8e51341a06084de10000009b38f83b/frameset.htm</a>			
6. Getting Started, Release 4.6C, SAP AG, 2000 ( <a href="https://help.sap.com/doc/saphelp_470/4.7/en-US/e1/8e51341a06084de10000009b38f83b/frameset.htm">https://help.sap.com/doc/saphelp_470/4.7/en-US/e1/8e51341a06084de10000009b38f83b/frameset.htm</a> )			
7. Material Master (LO-MD-MM), Release 4.6C, SAP AG, 2001 ( <a href="https://www.consolut.com/en/s/sap-ides-access/ides-online-help-pdfs/">https://www.consolut.com/en/s/sap-ides-access/ides-online-help-pdfs/</a> ; <a href="https://help.sap.com/doc/saphelp_46c/4.6C/en-US/e1/8e51341a06084de10000009b38f83b/frameset.htm">https://help.sap.com/doc/saphelp_46c/4.6C/en-US/e1/8e51341a06084de10000009b38f83b/frameset.htm</a> )			
8. Material Requirements Planning (PP-MRP), Release 4.6C, SAP AG, 2001 ( <a href="https://www.consolut.com/en/s/sap-ides-access/ides-online-help-pdfs/">https://www.consolut.com/en/s/sap-ides-access/ides-online-help-pdfs/</a> ; <a href="https://help.sap.com/doc/saphelp_46c/4.6C/en-US/e1/8e51341a06084de10000009b38f83b/frameset.htm">https://help.sap.com/doc/saphelp_46c/4.6C/en-US/e1/8e51341a06084de10000009b38f83b/frameset.htm</a> )			
9. Sales and Distribution (SD), Release 4.6C, SAP AG, 2001 ( <a href="https://www.consolut.com/en/s/sap-ides-access/ides-online-help-pdfs/">https://www.consolut.com/en/s/sap-ides-access/ides-online-help-pdfs/</a> ; <a href="https://help.sap.com/doc/saphelp_46c/4.6C/en-US/e1/8e51341a06084de10000009b38f83b/frameset.htm">https://help.sap.com/doc/saphelp_46c/4.6C/en-US/e1/8e51341a06084de10000009b38f83b/frameset.htm</a> )			
10. Purchasing (MM-PUR), Release 4.6C, SAP AG, 2001 ( <a href="https://www.consolut.com/en/s/sap-ides-access/ides-online-help-pdfs/">https://www.consolut.com/en/s/sap-ides-access/ides-online-help-pdfs/</a> ; <a href="https://help.sap.com/doc/saphelp_46c/4.6C/en-US/e1/8e51341a06084de10000009b38f83b/frameset.htm">https://help.sap.com/doc/saphelp_46c/4.6C/en-US/e1/8e51341a06084de10000009b38f83b/frameset.htm</a> )			
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12. Production Orders (PP-SFC) , Release 4.6C, SAP AG, 2001 ( <a href="https://download.consolut.com/direct/SAP_PrintDoku/en/PPSFC/PPSFC.PDF">https://download.consolut.com/direct/SAP_PrintDoku/en/PPSFC/PPSFC.PDF</a> , <a href="https://help.sap.com/doc/saphelp_46c/4.6C/en-US/a5/63198843a211d189410000e829fbbd/frameset.htm">https://help.sap.com/doc/saphelp_46c/4.6C/en-US/a5/63198843a211d189410000e829fbbd/frameset.htm</a> )			
8.2 Seminar/ laboratory/ project	Teaching-learning methods	Number of hours	Remarks
SAP Logging On, Interface, SAP Menus	Interactive, Discussions PowerPoint presentation on video projector, Practical applications in SAP IDES ERP	2 hours	
Favorites; Navigation options in SAP; Help: Field, Matchcode		1 hour	
Transactions: Codes, Launch. Master Data, Material Master Data		2 hours	
Sales Order. Stock/Requirements List		4 hours	
Material Requirements Planning: manual and automatic. Running MRP on different levels		4 hours	
Create planned orders, create production orders		4 hours	
Procurement: creating purchase requisitions, creating purchase orders		3 hours	
Goods Movement: Goods receipt, Goods Issue. Confirmation		3 hours	
Outbound Delivery, Transfer Order, Picking		2 hours	
Obtaining reports related to SD, PP, FI		3 hours	

## Bibliography

1. Chicoș, L.A., Szabo, V.G., Aplicații în SAP® IDES ERP, Editura MatrixRom, ISBN 978-606-25-0576-9, 2020, București
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## 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 were developed in relation to the requirements of employers, 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	Understanding the strategic implications of ERP systems	Written theoretical and applied assessment	50%
	Understanding the basic concepts of SAP ERP		
	The ability to use and interpret data related to the modules SD, MM, PP Purchasing, Reporting		
10.5 Seminar/ laboratory/ project	Application of the assimilated knowledge in practice	Practical applications in SAP ERP IDES	50%

10.6 Minimal performance standard			
<ul style="list-style-type: none"> <li>Knowing of the basics of the SAP ERP software system: basic concepts, navigation in the system, display of the basic data of the material and explanation of the significance of the most important fields in SD</li> <li>Creating sales order, outbound delivery on SO, reporting in SD</li> </ul>			

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.

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

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).