

DISCIPLINE RECORD

Academic year 2026/2027

1. Information about the program

University	Constanta Maritime University
Faculty	Navigation and Maritime Transport
Department	Management in Transport
Domain of study	Engineering and Management
Academic level	Master
Study programme/ qualification	Business Administration in Transport

2. Information about discipline

Course title	Digitalisation and New Business Models				
Lecture tenured	Assoc. Prof. Simona DINU PhD				
Application tenured	Assoc. Prof. Simona DINU PhD				
Year of study	VI	Semester	I	Type of examination	E
Conditions of discipline	Course category: DF – Fundamental subjects, DS – Specialization subjects, DC – Complementary subjects				DS
	Course type: DOB – compulsory subjects; DOP – elective subjects; DFA – optional subjects				DOB

3. The total time estimated

I a) Number of hours per week	3	Course	2	Seminar	1	Laboratory		Project	
I b) Total hours per semester from the curriculum	42	Course	28	Seminar	14	Laboratory		Project	

II Time distribution for the semester:	ore
II a) Study after manual, course support, bibliography and notes	44
II b) Additional documentation in library, specialized electronic platforms	16
II c) Training seminars / labs, homework, essays, portfolios and essays	23
III Tutorial	2
IV Examinations	2
V Other activities:	

Total hours of individual study II (a+b+c)	83
Total hours per semester (Ib+II+III+IV+V)	129
Number of credits	5

4. Prerequisites (if necessary)

Curriculum	• Not necessary
Expected learning outcomes	• Ability to apply knowledge and methods specific to the field of specialization

5. Conditions (if necessary)

Progress of the course	<ul style="list-style-type: none"> • Classroom with Video projector • Online course: virtual campus cmu-edu.eu 	
Progress of application	Seminar	<ul style="list-style-type: none"> • Classroom with Video projector • Online course: virtual campus cmu-edu.eu
	Laboratory	•
	Project	•

6. Objectives of discipline (based on the grid of specific skills acquired – no7)

The overall objective of discipline	• Increase sensory experiences and enhanced digital activities
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The specific objectives of discipline	<ul style="list-style-type: none"> • Increase greater learning to the conceptual, inquiry, critical thinking, creativity, and integrative learning skills needed to add value in a world where machines will work alongside human professionals
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7. Expected learning outcomes:

No.	Knowledge	Skills	Responsibility and autonomy
1	The student understands techniques for financial risk assessment.	The student analyzes internal organizational processes.	The graduate independently proposes risk mitigation strategies.
2	The student is aware of trends and innovations in the transport sector.	The student conducts qualitative and quantitative market research.	The graduate leads initiatives to improve the quality of transport services.
3	The student masters ICT solutions applicable to business problems.	The student advises on strategic business decisions based on data analysis.	The graduate assumes responsibility for implementing ICT innovations.
4	The student comprehends organizational behavior and needs analysis.	The student builds and maintains effective business relationships.	The graduate identifies and reports previously undetected organizational needs.
5	The student masters techniques for data acquisition and processing.	The student evaluates business performance through financial indicators.	The graduate takes responsibility for continuous professional development.

8. Competences covered by the discipline, according to the diploma supplement

Professional competences	<ul style="list-style-type: none"> • Provides advice on efficiency improvements • Analyzes external factors affecting companies • Negotiates with stakeholders • Adapts to changing situations • Exercises results-oriented leadership towards colleagues • Focuses on innovation in current practices
Transversal competences	<ul style="list-style-type: none"> • Seek innovation in current practices • Propose ICT solutions to business problems

9. Contents

Course	Nr. hours	Teaching methods	Obs.
<ul style="list-style-type: none"> • Assess the Environment, performance and digital maturity model current state: market analysis, competitor analysis, company performance, SWOT summary of the key business insights 	4	Interactive presentation (eCampus live presentation, ppt presentation). Case studies	
<ul style="list-style-type: none"> • Define & Communicate the Digital Transformation Strategy & Plan: digital maturity model - target state, strategic objectives, team & budget 	4	Interactive presentation (eCampus live presentation, ppt presentation). Case studies	
<ul style="list-style-type: none"> • Technologies to consider reaching digital transformation strategic objectives, potential initiatives to reach strategic objectives, key factors for digital transformation: Big Data, Artificial Intelligence, Cloud Computing, Cyber security, Blockchain, Internet of Things, Digital Marketing, 3-D Printing 	4	Interactive presentation (eCampus live presentation, ppt presentation). Case studies	
<ul style="list-style-type: none"> • Digital transformation initiatives prioritization, digital transformation plan 	4	Interactive presentation (eCampus live presentation, ppt presentation). Case studies	
<ul style="list-style-type: none"> • Management strategy changes and planning, communication and digital interaction 	4	Interactive presentation (eCampus live presentation, ppt presentation). Case studies	

<ul style="list-style-type: none"> Implementing, tracking & managing progress, digital transformation strategic objectives and KPIs status, estimating digital project financials: revenue, cost savings, cash flow, net present value (NPV), ROI, IRR, payback period, WACC 	4	Interactive presentation (eCampus live presentation, ppt presentation). Case studies	
<ul style="list-style-type: none"> Redesigning businesses thru profitable way: digital transformation lessons learned in last decade 	4	Interactive presentation (eCampus live presentation, ppt presentation). Case studies	
Bibliography			
<ul style="list-style-type: none"> "E-commerce will make the shopping mall a retail wasteland" ZDNet, January 17, 2013 "'Free Shipping Day' Promotion Spurs Late-Season Online Spending Surge, Improving Season-to-Date Growth Rate to 16 Percent vs. Year Ago" Comscore, December 23, 2012 "The Death of the American Shopping Mall" The Atlantic — Cities, December 26, 2012 Rodrigue, J-P. "Comparison Between Retail and E-commerce Cost Structures for a \$150 Apparel Piece". The Geography of Transport Systems, 2020 https://transportgeography.org/contents/chapter7/logistics-freight-distribution/ecommerce-cost-structure/. Accessed 5 June 2021. Altexsoft. "Using Business Model Canvas to Launch a Technology Startup or Improve Established Operating Model". AltexSoft, 27 Jul, 2018, https://www.altexsoft.com/blog/business/using-business-model-canvas-to-launch-a-technology-startup-or-improve-established-operating-model/. Accessed 5 June 2021. 			
Selective bibliography			
<ul style="list-style-type: none"> Course notes, online campus.cmu-edu.eu 			

Application (Seminar / laboratory / project)	Nr. hours	Teaching methods	Obs.
<ul style="list-style-type: none"> Digital maturity model current state: market analysis, competitor analysis, company performance, SWOT summary of the key business insights 	2	Case study, debate, conversation, problematization	
<ul style="list-style-type: none"> Digital Transformation Strategy & Plan: digital maturity model - target state, strategic objectives, team & budget 	2	Case study, debate, conversation, problematization	
<ul style="list-style-type: none"> Technologies for digital transformation: Big Data, Artificial Intelligence, Cloud Computing, Cyber security, Blockchain, Internet of Things, Digital Marketing, 3-D Printing 	2	Case study, debate, conversation, problematization	
<ul style="list-style-type: none"> Digital transformation plan 	2	Case study, debate, conversation, problematization	
<ul style="list-style-type: none"> Management strategy changes and planning, communication and digital interaction 	2	Case study, debate, conversation, problematization	
<ul style="list-style-type: none"> Digital transformation strategic objectives and KPIs status, estimating digital project financials 	2	Case study, debate, conversation, problematization	
<ul style="list-style-type: none"> Digital transformation lessons learned in last decade 	2	Case study, debate, conversation, problematization	
Bibliography			
<ul style="list-style-type: none"> "E-commerce will make the shopping mall a retail wasteland" ZDNet, January 17, 2013 "'Free Shipping Day' Promotion Spurs Late-Season Online Spending Surge, Improving Season-to-Date Growth Rate to 16 Percent vs. Year Ago" Comscore, December 23, 2012 "The Death of the American Shopping Mall" The Atlantic — Cities, December 26, 2012 Rodrigue, J-P. "Comparison Between Retail and E-commerce Cost Structures for a \$150 Apparel Piece". The Geography of Transport Systems, 2020 https://transportgeography.org/contents/chapter7/logistics-freight-distribution/ecommerce-cost-structure/. Accessed 5 June 2021. Altexsoft. "Using Business Model Canvas to Launch a Technology Startup or Improve Established Operating Model". AltexSoft, 27 Jul, 2018, https://www.altexsoft.com/blog/business/using-business-model-canvas-to-launch-a-technology-startup-or-improve-established-operating-model/. Accessed 5 June 2021. 			
Selective bibliography			

- Course notes, online campus.cmu-edu.eu

Additional Notes

- Students may take photographs or make audio-video recordings in classrooms where teaching activities are conducted **only with the consent of the instructor and under the conditions established by the instructor.**
- Upon entering the classroom, students are kindly requested to **switch their mobile phones to silent mode and refrain from using them during classes.**
- All materials received by students, either directly or through postings on the platform *campus.cmu-edu.eu*, are subject to **national and international copyright legislation.** These materials may be used by students **solely for educational purposes.** Any other use or posting on publicly accessible websites without the consent of the copyright holder may be punished in accordance with **Law no. 8/1996 on copyright and related rights** and the **Berne Convention.**

10. The corroboration of contents of discipline with expectations epistemic community representatives, professional associations and representative employers in the corresponding program

- The content is oriented towards practical aspects of digital working technologies, in line with the latest technoques being applied worldwide

11. Examination

Type of activity	Examination Criteria	Methods of examination	Percentage of final grade
Course	knowledge of the notions and theoretical and practical aspects presented in the course	written exam	70%
Seminar	working themes and scenarios	ongoing assessment	30%
Laboratory			
Project			

Grading Requirements

Minimum score required: **50 points: grade 5**

- If a student participates in conferences (student, local, national, or international) or competitions (national or international) related to the subject of this course, they may receive additional points or equivalence for certain assignments, papers, and/or attendance, depending on the results obtained.
- During written examinations, students are not allowed to use mobile phones or any other electronic devices, except for simple scientific calculators.

Minimum performance standards

Obtaining a score of 50 points for written exam

Date of completion	Signature of lecture tenured	Signature of application tenured
24.09.2025	Assoc. Prof. Simona DINU PhD	Assoc. Prof. Simona DINU PhD

Date of approval in the department	Signature of Director of Department
26.09.2025	Lecturer Ana Cornelia OLTEANU PhD

Date of approval in the faculty council	Signature of Dean
29.09.2025	Associated Professor Nicoleta ACOMI EngD