**3.2. Course description**

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| **Generic information** |
| Head of Course | **dr. sc. Edvard Tijan** |
| Course | **Information technologies in logistics** |
| Study Programme | **Logistics and Management in Maritime Industry and Transport** |
| Type of Course | core |
| Year of Study | 2nd |  |
| Estimated Student Workload and Methods of Instruction | ECTS coefficient of Student Workload | 6 |
| Number of Hours (L+E+S) | 30 + 15 + 0 |

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| **1. GENERAL COURSE DESCRIPTION** |
| *1.1. Course Objectives* |
| *The objective of the course is to acquaint students with information and communication technologies (ICT) and their application in maritime transport, transport in general and logistics, to define basic concepts related to information technologies, their development, application, types and to motivate students for further learning in the field of ICT.**Students will be provided with ICT knowledge in terms of hardware, software, human resources and computer networks. Students will be introduced to information and communication technologies in companies in the field of maritime transport, transport in general and logistics.* |
| *1.2. Prerequisites for Course Registration* |
| Successfully completed course "Applied computer science |
| *1.3. Expected Learning Outcomes* |
| *Students will be able to:**1. Describe the state of the art and trends of development of modern information and communication technologies and systems**2. Understand the key aspects of hardware, software and computer networks**3. Understand the processes, methods and technologies of managing IT services and resources**4. Explain the principles of databases, business applications and business systems**5. State e-commerce technologies**6. Classify information technologies applicable in transport, maritime transport and ports**7. Explain ethical principles, legislation and standards applicable to ICT* |
| *1.4. Course Outline*  |
| *The term, types, features and activities of a system and an information system. Fundamentals of information system development. Historical development of ICT, informatics, computer science, ICT society, information organization.**Hardware. Software. Computer networks. Internet. Databases. E-business, e-banking, m-banking. Procurement and development of information systems. ICT in transport, information flows in transport chain. ICT in maritime transport (VTS, VTMIS, AIS, ECDIS, PMIS…). ICT in ports.* |
| *1.5. Modes of* *Instruction*  | [x] Lectures[ ]  Seminars and workshops [x]  Exercises [ ]  E-learning[ ]  Field work | [x]  Practical work [ ]  Multimedia and Network [ ]  Laboratory[ ]  Mentorship[ ]  Other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| *1.6. Comments*  |       |
| *1.7. Student Obligations*  |
| The student is required to attend and actively participate in lectures and exercises and be present in at least 70% of classes. All continuous assessments affect the grade, none of which should be satisfied with less than 50%. |
| *1.8. Assessment1 of Learning Outcomes*  |
| Course attendance | 1,5 | Class participation | 0,5 | Seminar paper |     | Experiment |     |
| Written exam |     | Oral exam | 1,5 | Essay |     | Research |     |
| Project |     | Continuous Assessment | 2,5 | Presentation |     | Practical work |  |
| Portfolio |     |  |     |  |     |  |     |

1 **NOTE:** Name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course. Use empty fields for additional activities.

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| *1.9. Assessment of Learning Outcomes and Examples of Evaluation during Classes and on the Final Exam*  |
|  *The evaluation is based on the continuous knowledge assessments (through 2 midterm examinations - total 70%), the final part of the exam (30%) and additional tasks.**Examples of evaluating learning outcomes are follows:**• List the trends in the development of modern ICT**• Explain the key aspects of computer architecture**• Describe methods for managing ICT services**• List the data models and explain the database schema**• Describe potential applications for a mobile business**• Explain the benefits of implementing AIS and ECDIS systems in maritime transport**• List the main features of the electronic document and electronic signature* |
| *1.10. Main Reading*  |  |  |
| Mile Pavlić: Informacijski sustavi, Školska knjiga, Zagreb, 2011. |
| *1.11. Recommended Reading*  |  |  |
| 1. Velimir Srića et al.: Poslovna informatika, Element, Zagreb, 2009.
2. Vlatko Ćerić, Mladen Varga (ur): Informacijska tehnologija u poslovanju, Element, Zagreb, 2004.
3. Mark Charlton: A Handbook of Information Technology, Global media New Delhi, 2009.
4. Information Communication Technologies (resource materials), National Institute of Education, Maharagama, Sri Lanka, 2006.
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| *1.12. Number of Main Reading Examples*  |  |  |
| *Title*  | *Number of examples*  | *Number of students*  |
| Mile Pavlić: Informacijski sustavi, Školska knjiga, Zagreb, 2011. | 10 | 70 |
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| *1.13. Quality Assurance*  |
| The quality of study is constantly monitored in accordance with the ISO 9001 system implemented at the Faculty of Maritime Studies in Rijeka. An analysis of the exams is made annually and a student survey is conducted once a semester. All data, including exam, written work and assessment, are at all times public data for all students who have enrolled in the course (on the e-learning platform). |