COURSES LANGUAGE AND INTERCULTURAL COMPETENCES

Online

EUROPEAN INTEGRATION 3 ECTS

Course start: 21/02/2022 Course end: TBA

Weekly teaching day/time: Monday, 14:45-16:15



The aim of the course is the process of European integration after the II World War. In particular, the following topics will be covered as part of the classes: beginnings of the process of European integration after II World War; European Economic Community and European Atomic Energy Community; main problems and events in the process of European integration in the 60's and 70's.; the Single European Act; reforming the European Union in the 90's; the pro-cess of enlargement of the EC and the EU; the Constitutional Treaty and the Lisbon Treaty.

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BUSINESS LANGUAGE 3 ECTS

Course start: 21/02/2022 Course end: TBA

Weekly teaching day/time: Friday, 10:45-12:15 or 14:45-16:15



The aim of this course is to enable students to communicate in Danish in simple situations and to provide them with the basic knowledge of the Danish grammar (main morphological and syntactic rules) corresponding to level A1. Students learn to read simple texts with the aid of dictionary, to produce their own written texts using simple language and to understand simple audio texts. The students learn to communicate correctly both in spoken and written forms in simple situations and get prepared to study Danish in level A2.

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Spring 2022

COURSES LANGUAGE AND INTERCULTURAL COMPETENCES

Online

LINGUISTIC COMMUNICATION 3 ECTS

Course start: 21/02/2022 Course end: TBA

Weekly teaching day/time:
Thursday, lecture 10:45-11:30
Workshop: would be created for VMU students if registered

Prerequisites: English B2



The course is designed to develop students' general and academic English language communicative competence at advanced level through activities integrating receptive (listening and reading), productive and interactive (speaking and writing), and mediation (translation) language skills. The contents of the course is based on study of authentic texts to improve advanced listening and reading skills, watching and analyzing video recordings, discussions on relevant general and academic topics, preparation, delivery, observation and assessment of presentations on self-chosen topics, advanced level grammatical and lexical competence development. The course is delivered in blended study form integrating face-to-face learning with work in virtual MOODLE environment. Various active learning methods are applied: group work, pair work, role-plays, simulations, discussions, text analysis, project method.

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Spring 2022

DIGITAL TRANSFORMATION AND SMART REGIONS

ALGORITHMICS AND ADVANCED DATA STRUCTURES 4 ECTS

Course start: 28/03/2022 Course end: TBA

Weekly teaching day/time: Friday, 09:00-11:30 – lecture Friday, 11:30 – 14:00 – laboratory



Algorithmics is the science of algorithms. It includes algorithm design, i.e. the art of building a schema that effectively solves a specific problem or class of problems and algorithm analysis. This module introduces the participant to advanced algorithm design methods and issues of algorithms and data structures analysis.

Online

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COMPUTER SIMULATIONS 4 ECTS

Course start: 28/03/2022 Course end: TBA

Weekly teaching day/time: Wednesday, 09:00 – 14:00 – lecture Monday, 11:30 – 14:00 – laboratory



The module aim is to give students the knowledge necessary for creating simulation models and conducting simulation experiments. The presented topics are related to various computer simulation techniques, simulation software, and simulators' applications in the design and optimisation of technical systems. Students will gain the abilities to build models with the use of simulation environments. Require programming skills at basic level.

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Spring 2022

DIGITAL TRANSFORMATION AND SMART REGIONS

IT FOR THE BLIND AND VISUALLY IMPAIRED 2 ECTS

Course start: 211/02/2022 Course end: TBA

Weekly teaching day/time: Thursday, 09:00-10:30



The classes introduce IT problems in blind and visually impaired users. The students learn the WCAG requirements necessary to create and implement IT solutions. They also learn about tools (both hardware and software) available for blind and visually impaired people.

Vilnius time

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MANAGEMENT OF DIGITAL TRANSFORMATION 6 ECTS

Course start: 11/04/2022 Course end: 12/07/2022

Weekly teaching day/time: TBA



Digitalisation and the associated technological breakthroughs offer enormous challenges and opportunities. Against this background, companies are faced with the question: How can competitive advantages be achieved and maintained in the "age of digital transformation"? The theory-based and action-oriented course gives students an insight into digital core technologies that drive the digital transformation of society and equips them with digital decision-making strategies and frameworks.

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Online

Vilnius time

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COMPUTER ETHICS 3 ECTS

Course start: 11/04/2022 Course end: 12/07/2022

Weekly teaching day/time: TBA



INTRODUCTION TO DEEP LEARNING 3 ECTS

Course start: 06/06/2022 Course end: 15/06/2022

Weekly teaching day/time: 16:00-21:00



Many computer scientists will be confronted with morally difficult situations at some point in their career – be it in research, in business, or in industry. Ethics for Nerds equips you with the crucial assets enabling you to recognize such situations, and to devise ways to arrive at a justified moral judgment regarding the question of what you are permitted to do and what you should better not do. For that, you will be made familiar with moral theories from philosophy, as well as different Codes of Ethics for computer scientists. Since one can quickly get lost when talking about ethics and morals, it is especially important to talk and argue clearly and precisely. In order to prepare you for that, Ethics for Nerds trains your formal and informal argumentation skills enabling you to argue beyond the level of everyday discussions at bars and parties. In the end, you will be able to assess a morally controversial topic from computer science on your own and give a convincing argument for your assessment.

Ethics for Nerds is intended to always be as clear, precise, and analytic as possible. What you won't find here is the meaningless bla-bla, needlessly poetic language, and vague and wordy profundity that some people tend to associate with philosophy. You will, however, get many interesting insights into philosophy, ethics, and computer science – or so we have been told.

Introduction to Python, introduction to Artificial neural networks (NN), Convolutional NN, Recurrent NN and mini-projects (implementation and revision)





Spring 2022

FROM DATA TO KNOWLEDGE: AN INTRODUCTION TO BIG DATA, OPEN DATA AND DATA MINING TECHNOLOGIES 3 ECTS

Course start: 02/05/2022 Course end: 25/05/2022

Weekly teaching day/time: 16:00-19:00



This course provides an overview of the knowledge discovery in databases pipeline, that is, the process of discovering useful knowledge from large collections of data.

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FINAL EXAMINATION

Is announced before the exam session

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