

UČNI NAČRT PREDMETA / COURSE SYLLABUS

Predmet: Družba prihodnosti
Course title: Society of the Future

Študijski program in stopnja **Študijska smer** **Letnik** **Semester**
Study programme and level **Study field** **Academic year** **Semester**

| | | | |
|--|---|-----------------|------------------|
| Poslovna informatika, magistrski študijski program druge stopnje | - | Prvi ali drugi | Drugi ali tretji |
| The second cycle masters study programme Business Informatics | - | First or second | Second or third |

Vrsta predmeta / Course type

Izbirni / Elective

Univerzitetna koda predmeta / University course code:

4-PI-MAG-IP-DP-2022-05-27

| Predavanja | Seminar | Vaje | Klinične vaje | Druge oblike študija | Samost. delo | ECTS |
|-------------------|----------------|-----------------|----------------------|-----------------------------|----------------------|-------------|
| Lectures | Seminar | Tutorial | work | | Individ. work | |
| 20 | / | 30 | / | / | 100 | 5 |

Nosilec predmeta / Lecturer: Doc. dr. Victor Cepoi

Jeziki / Predavanja /
Languages: Lectures: Slovenski / Angleški

Vaje / Tutorial: Slovenski / Angleški

Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:

Prerequisites:

Ni posebnih pogojev za vključitev v delo.

No special requirements.

Vsebina:

Predmet na temeljni ravni obravnava Industrijo 5.0 in odgovorno digitalno transformacijo, uvaja v sociokulturni, politični in ekonomski kontekst informacijskih in komunikacijskih tehnologij s kompleksnimi vzročno-posledičnimi zvezami, ki se ob tem pojavljajo in sodelovanje človeka z umetno inteligenco (UI).

Izpostavljene bodo predvsem naslednje teme:

- Razumevanje modernizacije družbe,
- različni vidiki Industrije 5.0 in digitalne transformacije,
- ključni dejavniki uspeha sodobnih procesov v Industriji 5.0 in digitalni transformaciji,
- Strateško upravljanje IKT za načrtovanje odgovorne digitalne transformacije,
- vpliv digitalne revolucije na delovanje in poslovanje v družbi prihodnosti,
- vloga Industrije 5.0 in digitalne transformacije pri razvoju poslovnih modelov prihodnosti,
- dobre prakse Industrije 5.0 in digitalne transformacije.

Content (Syllabus outline):

Course on the fundamental level deals with the Industry 5.0 and responsible digital transformation, by establishing the socio-cultural, political and economic context of information and communication technologies with complex cause and effect associations and human collaboration with artificial intelligence (AI).

Following themes are especially emphasized:

- Understanding the modernization of the society
- Various aspects of industry 5.0 and digital transformation
- Key success factors of modern processes of industry 5.0 and Digital Transformation
- Strategic ICT management for responsible digital transformation planning
- The impact of the digital revolution on operations and business in the society of the future
- The role of Industry 5.0 and digital transformation in the development of the business model of the future
- Good practices of Industry 5.0 and digital transformation

Temeljni literatura in viri / Readings:

- Bounfour, A. (2016): Digital Futures, Digital Transformation. From Lean Production to Acceluction. Springer. DOI 10.1007/978-3-319-23279-9.
- Aagaard, A., ed. (2019): Digital Business Models. Driving Transformation and Innovation. Palgrave Macmillan. DOI 10.1007/978-3-319-96902-2.
- Oswald, G. and Kleinmeier, M. (2018): Shaping the Digital Enterprise. Trends and Use Cases in Digital Innovation and Transformation. Cham: Springer.
- Perkin, N. and Abraham, P. (2021): Building the Agile Business through Digital Transformation. London: Kogan Page.
- Bartodziej C. J. (2017): The Concept Industry 4.0: An Empirical Analysis of Technologies and Applications in Production Logistics. Gabler Verlag.

- Cevikcan, E. and Ustundag, A. (2018): Industry 4.0: managing the digital transformation. Springer.

Cilji in kompetence:

Splošne kompetence:

- Sposobnost interpretacije poslovnih podatkov in priprave poročil na njihovi osnovi.
- Sposobnost iskanja virov in pridobivanja podatkov za potrebe digitalizacije poslovanja.
- Sposobnost fleksibilne uporabe znanja v praksi.
- Kritično razmišljanje o omejitvah poslovnih podatkov in njihovi etični uporabi.

Predmetno-specifične kompetence:

- Splošen pregled nad digitalizacijo poslovanja in Industrijo 5.0.
- Identifikacija pomena človeškega sodelovanja z umetno inteligenco.
- Sposobnost predlagati praktične/relevantne (nove) rešitve Industrije 5.0 in digitalne transformacije za dvig dodane vrednosti.
- Usposobljenost za zasnovo, načrtovanje, implementacijo in analizo konceptov Industrije 5.0 in digitalne transformacije.

Objectives and competences:

General competences:

- The ability to interpret business data and prepare reports based on them.
- The ability to find sources and obtain data for the needs of digitalization of business.
- The ability of flexible usage of knowledge in practice.
- Critical thinking about limitations of business data and their ethical usage.

Subject-specific competences:

- General overview of the digitalization of business and Industry 5.0.
- Identification of the importance of human collaboration with AI.
- Ability to propose (new) practical / relevant Industry 5.0 solutions and digital transformations to increase added value.
- Competence in the design, planning, implementation and analysis of Industry 5.0 and digital transformation concepts.

Predvideni študijski rezultati:

- Študenti bodo zmožni; pridobili napredna znanja ter razvije sposobnost za zasnovo, načrtovanje, implementacijo in analizo konceptov Industrije 5.0 in digitalne transformacije na različnih področjih in so pripravljeni prispevati praktične/relevantne ideje in perspektive o dodani vrednosti, ki jih te spremembe prinašajo v okolje.
- Svoje vedenje o postopkih implementacije elementov Industrije 5.0 in digitalne transformacije sposobni prenašati na druge.

Intended learning outcomes:

- Students will be able to: acquire advanced knowledge and develop skills for the design, planning, implementation, and analysis of various concepts of Industry 5.0 and digital transformation and are ready to contribute practical / relevant ideas and perspectives on the added value that these changes bring into the environment.
- transfer their knowledge about the procedures of implementation of

- Znali ustvarjalno in tvorno uporabljati moderna orodja in postopke za zasnovano, načrtovanje, izvedbo in analizo različnih konceptov digitalne transformacije na osnovi vpogleda, kot tudi izkušnje s praktičnimi izvedbami projektov Industrije 5.0, in digitalne transformacije (npr. sodelovanje človeka z UI) v različnih poslovnih in organizacijskih okoljih.
- interpretirati konkretne primere digitalne transformacije iz prakse.

- elements of Industry 5.0 and digital transformation to others.
- now how to creatively use modern tools and processes for design, planning, execution, and analysis of various concepts of Industry 5.0 and digital transformation and have insight, as well as experience with practical implementations of Industry 5.0 and digital transformation projects (e.g. cooperation of human and AI) in various business and organizational environments.
- interpretate concrete cases from practice.

Metode poučevanja in učenja:

- Predavanja z aktivno udeležbo študentov (razlaga, diskusija, vprašanja, primeri, reševanje problemov);
- Vaje na seminarski način (refleksija prebranih besedil in lastnih izkušenj, timsko delo, metode kritičnega mišljenja, diskusija, sporočanje povratne informacije);
- Vaje, ki temeljijo na izkušnjskem, sodelovalnem in problemskem učenju (samostojno učenje, diskusija, razlaga, opazovanje, timsko delo, študija primera, metode kritičnega branja in pisanja, evalvacija, samooocenjevanje);
- Individualne in/ali skupinske konzultacije (diskusija, dodatna razlaga, obravnava specifičnih vprašanj);
- Mentoriranje in samostojen študij (motiviranje, usmerjanje, samouravnavanje, samorefleksija).

Learning and teaching methods:

- Lectures with active participations by the students (explanation, discussion, questions, cases, problems solving);
- Seminars (reflections of the read texts and own experience, team work, methods of critical thinking, discussions, reporting feedback information);
- Seminars based on experience-based learning, participation in problem learning (independent study, discussion, explanation, observation, team work, case study, methods of critical reading and writing, evaluation, self-evaluation);
- Individual and/or groups consultations (discussion, additional explanation, dealing with specific issues);
- Mentorship and independent study (motivating, guiding, self-tuning, self-reflection).

Delež (v %) /

Načini ocenjevanja:

Weight (in %) **Assessment:**

| | | |
|---|------|--|
| Način (pisni izpit, ustno izpraševanje, naloge, projekt): | | Type (examination, oral, coursework, project): |
| Seminarska naloga | 90 % | Seminar work |
| Predstavitev in zagovor | 10 % | Presentation and defense |

Reference nosilca / Lecturer's references:

CEPOI, Victor. A meta-analysis and explanation of innovation processes through the outline of social fields theory. *Research in social change*. Sep. 2020, vol. 12, iss. 3, str. 15-31.

CEPOI, Victor. National Case Study in the Danube Region : Ukraine. V: RONČEVIĆ, Borut (ur.), COSCODARU, Raluca (ur.), FRIC, Urška (ur.). *Go with the flow : high performance computing and innovations in the Danube region*. London; Budapest; Ljubljana: Vega Press, cop. 2019. Str. 257-268.

RONČEVIĆ, Borut, MAKAROVIČ, Matej, TOMŠIČ, Matevž, CEPOI, Victor. Methodological solutions for comparative research on transformations. V: VIHALEMM, Peeter (ur.), MASSO, Anu (ur.), OPERMANN, Signe (ur.). *The Routledge International Handbook of European Social Transformations*. Abingdon; New York: Routledge, 2018.

CEPOI, Victor, GOLOB, Tea. Innovation performance in the EU comparative perspective : the interplay of social forces in the context of national innovation systems. *Comparative sociology*. 2017, vol. 16, iss. 4, str. 555-579

CEPOI, Victor. Trust and participation in the information society : new and traditional information sources. V: RONČEVIĆ, Borut (ur.), TOMŠIČ, Matevž (ur.). *Information society and its manifestations : economy, politics, culture*. Frankfurt am Main [etc.]: PL Academic Research, cop. 2017.

CEPOI, Victor. Do social forces matter? : a model for innovation and development performance. *Research in social change*. Sep. 2016, vol. 8, iss. 3, str. 4-27.

CEPOI, Victor, GOLOB, Tea. Regional innovation performance : measuring development in cultural, social and economic perspectives. *Innovative issues and approaches in social sciences*. 2016, vol. 9, no. 1, str. 242-260.