



## UČNI NAČRT / COURSE SYLLABUS

<b>Predmet / Course</b>	<b>Trajnostno digitalno gospodarstvo in poslovanje / Sustainable Digital Economy and Business</b>
<b>Šifra predmeta / Course Code</b>	B13TDGP-PSD
<b>Nosilec predmeta / Course Coordinator</b>	Prof. dr. Dušan Lesjak, mag. Andrej Guštin* (*v postopku izvolitve v naziv)
<b>Vrsta predmeta / Type of the course</b>	Izbirni / Elective
<b>Jezik / Language</b> - <b>Predavanja / Lecture</b> - <b>Seminar / seminar</b> - <b>Vaje / Tutorials</b>	Slovenian/ English
<b>Študijski program / Programme</b>	Poslovanje v sodobni družbi (1. stopnja) / Business in Contemporary Society (1st Cycle)
<b>Letnik / Year</b>	3.
<b>Pogoji za vključitev / Requirements</b>	/

<b>Predavanja Lectures</b>	<b>Vaje Tutorials</b>	<b>Druge oblike študija Other Type of Study</b>	<b>Samostojno delo Individual work</b>	<b>Ure dela Work hours</b>	<b>ECTS</b>
20	40	0	90	150	6

### Vsebina / Content:

<p>1. Uvod v digitalno gospodarstvo in trajnost</p> <ul style="list-style-type: none"><li>• Razumevanje digitalnega gospodarstva</li><li>• Pomen trajnosti v sodobnem poslovnem okolju</li><li>• Ključna gonila digitalnega gospodarstva in trajnosti</li></ul> <p>2. Osnove trajnosti</p> <ul style="list-style-type: none"><li>• Načela trajnosti - ESG</li><li>• Okoljska, socialna in gospodarska trajnost</li><li>• Trajnostni okviri in metrike</li></ul> <p>3. Digitalna preobrazba in trajnost</p> <ul style="list-style-type: none"><li>• Digitalizacija in njen vpliv na trajnost</li><li>• Vloga podatkovne analitike v trajnostnih praksah</li><li>• Študije primerov podjetij, ki uporabljajo digitalno tehnologijo za trajnost</li></ul> <p>4. Zelena informacijska tehnologija</p> <ul style="list-style-type: none"><li>• Trajnostne IT prakse in strategije</li><li>• Energetsko učinkoviti podatkovni centri in računalništvo</li><li>• Ravnanje z e-odpadki in recikliranje</li></ul> <p>5. Trajnostne dobavne verige v digitalni dobi</p> <ul style="list-style-type: none"><li>• Tehnologije digitalne dobavne verige</li><li>• Zmanjšanje vpliva na okolje z upravljanjem digitalne dobavne verige</li><li>• Etično pridobivanje virov in odgovorno naročanje</li></ul>	<p>1. Introduction to the Digital Economy and Sustainability</p> <ul style="list-style-type: none"><li>• Understanding the digital economy</li><li>• The importance of sustainability in the modern business environment</li><li>• Key drivers of the digital economy and sustainability</li></ul> <p>2. Basics of Sustainability</p> <ul style="list-style-type: none"><li>• Principles of sustainability - ESG (Environmental, Social, and Governance)</li><li>• Environmental, social, and economic sustainability</li><li>• Sustainability frameworks and metrics</li></ul> <p>3. Digital Transformation and Sustainability</p> <ul style="list-style-type: none"><li>• Digitalization and its impact on sustainability</li><li>• The role of data analytics in sustainable practices</li><li>• Case studies of companies using digital technology for sustainability</li></ul> <p>4. Green Information Technology</p> <ul style="list-style-type: none"><li>• Sustainable IT practices and strategies</li><li>• Energy-efficient data centers and computing</li><li>• Management of e-waste and recycling</li></ul> <p>5. Sustainable Supply Chains in the Digital Age</p> <ul style="list-style-type: none"><li>• Digital supply chain technologies</li><li>• Reducing environmental impact with digital supply chain management</li><li>• Ethical sourcing and responsible procurement</li></ul>
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<p>6. Krožno gospodarstvo in digitalne inovacije</p> <ul style="list-style-type: none"> <li>• Načela krožnega gospodarstva</li> <li>• Kako digitalne tehnologije omogočajo krožnost</li> <li>• Poslovni modeli, ki spodbujajo krožno gospodarstvo</li> </ul> <p>7. Ekonomija delitve in trajnost</p> <ul style="list-style-type: none"> <li>• Modeli ekonomije delitve in njihov vpliv na uporabo virov</li> <li>• Trajnostni izzivi in priložnosti v platformah enakovrednih</li> <li>• Študije primerov podjetij delitvene ekonomije</li> </ul> <p>8. Startupi in inovacije za trajnost</p> <ul style="list-style-type: none"> <li>• Podjetništvo v trajnostnem sektorju</li> <li>• Možnosti financiranja za trajnostna zagonska podjetja</li> <li>• Predstavljanje in razvoj trajnostnih poslovnih idej</li> </ul>	<p>6. Circular Economy and Digital Innovations</p> <ul style="list-style-type: none"> <li>• Principles of the circular economy</li> <li>• How digital technologies enable circularity</li> <li>• Business models that promote the circular economy</li> </ul> <p>7. Sharing Economy and Sustainability</p> <ul style="list-style-type: none"> <li>• Models of the sharing economy and their impact on resource utilization</li> <li>• Sustainability challenges and opportunities in peer-to-peer platforms</li> <li>• Case studies of sharing economy companies</li> </ul> <p>8. Startups and Innovations for Sustainability</p> <ul style="list-style-type: none"> <li>• Entrepreneurship in the sustainability sector</li> <li>• Funding opportunities for sustainable startups</li> <li>• Presentation and development of sustainable business ideas</li> </ul>
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### Splošne kompetence / General Competencies:

<p><i>Študent bo pridobil znanje in spretnosti na naslednjih splošnih vsebinskih področjih:</i></p> <p><b>SPL1:</b> Delo s podatki in informacijami; <b>SPL4:</b> Sodelovalno, timsko delo, delo v skupini; <b>SPL6:</b> Etičnost; <b>SPL8:</b> Spretnosti kritičnega mišljenja; <b>SPL9:</b> Ustvarjanje novih zamisli (ustvarjalnost);</p>	<p><i>Student will acquire knowledge and skills in the following general areas:</i></p> <p><b>SPL1:</b> Work with data and information; <b>SPL4:</b> Cooperation, teamwork, group work; <b>SPL6:</b> Ethics; <b>SPL8:</b> Critical thinking; <b>SPL9:</b> Creativity;</p>
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### Predmetno specifične kompetence / Course Specific Competencies:

<p><i>Študent bo pridobil znanje in spretnosti na naslednjih specifičnih vsebinskih področjih:</i></p> <p><b>PSP2:</b> Pregled poslovanja, problemi, izzivi in njihovo reševanje, svetovalni načrt.; <b>PSP7:</b> Upravljanje s spremembami; <b>PSP12:</b> Informacijski sistemi in programska oprema na vsebinskem področju predmeta; <b>PSP13:</b> Tehnika in tehnologija na vsebinskem področju predmeta. <b>PSP15:</b> Družbena in okoljska odgovornost na vsebinskem področju predmeta. <b>PSP18:</b> Splošna razgledanost na vsebinskem področju predmeta</p>	<p><i>Student will acquire knowledge and skills in the following specific areas:</i></p> <p><b>PSP2:</b> Organisational audit, problems and challenges in business, problem-solving, consultancy plans; <b>PSP7:</b> Change management; <b>PSP12:</b> Information systems and software in the fields of the course; <b>PSP13:</b> Engineering and technology in the fields of the course; <b>PSP15:</b> Social and environmental responsibility in the fields of the course; <b>PSP18:</b> General overview of the course content area</p>
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### Predvideni študijski izidi / Intended Learning Outcomes:

<p><i>Študent bo dosegel naslednje študijske izide:</i></p> <p>1. Pozna osnove in značilnosti digitalnega gospodarstva. 2. Razume osnove trajnosti. 3. Pozna razsežnosti digitalne preobrazbe in trajnosti. 4. Pozna zeleno informacijsko tehnologijo. 5. Razume vlogo in pomen trajnostnih dobavnih verig v digitalni dobi. 6. Pozna osnove krožnega gospodarstva in digitalnih inovacij. 7. Dojema ekonomijo delitve in trajnost. 8. razume startupe in inovacije v luči trajnosti</p>	<p><i>Student will achieve the following learning outcomes:</i></p> <p>1. Understands the basics and characteristics of the digital economy. 2. Understands the fundamentals of sustainability. 3. Knows the dimensions of digital transformation and sustainability. 4. Is familiar with green information technology. 5. Understands the role and importance of sustainable supply chains in the digital age. 6. Knows the basics of the circular economy and digital innovations. 7. Grasps the sharing economy and sustainability. 8. Understands startups and innovations in the light of sustainability.</p>
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### Oblike in metode poučevanja in učenja / Types and Methods of Teaching and Learning

<b>Oblike dela</b>	Samostojno delo študenta; Delo v manjših skupinah; e-učenje
<b>Types of Teaching and Learning</b>	Independent student work; Work in smaller groups or pairs; e-learning
<b>Metode dela</b>	Razlaga; Razgovor/diskusija/debata; Javni nastop; Reševanje nalog; Gost iz prakse
<b>Teaching and Learning Methods</b>	Explanation; Conversation/discussion/debate; Public presentation; Solving exercises; Guest from practice

### Načini ocenjevanja v % / Types of Student Assessment

Sprotno ustno ocenjevanje / Oral Assessment	/
Sprotno pisno ocenjevanje / Written Assessment	30
Sprotno preverjanje s testi / Verification tests	30
Daljši pisni izdelek /Longer written casework <sup>1</sup>	30
Javni nastop s predstavitvijo rezultatov / Presentations <sup>2</sup>	10
Končni pisni izpit / Final written examination/	/
Končni ustni izpit / Final oral examination	/
Udeležba in sodelovanje / Participation and cooperation	/
<b>Lestvica ocenjevanja / Grading scale</b>	številaska/numeric

### Obveznosti študenta/ Student obligations:

Obveznosti je možno opraviti le med izvedbo predmeta, saj delo poteka tudi v skupini, ocenjuje pa se delo posameznika ter prispevek posameznika k skupini in delo skupine kot celote.	Obligations can only be performed during the course, as the work also takes place in a group, and the work of the individual and the individual's contribution to the group and the work of the group as a whole are assessed.
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### Temeljna literatura / Literature:

<p>Mohammed El Amine Abdelli and Muhammad Shahbaz, Digital Economy, Energy and Sustainability, Opportunities and Challenges (Green Energy and Technology), Springer, 2023</p> <p>Mohammad Nabil Almunawar, Patricia Ordóñez de Pablos, Muhammad Anshari: Sustainable Development and the Digital Economy, 1.st Edition, Routledge, Taylor&amp;Francis Group, 2024</p> <p>Tim A. Herberger and Jörg J. Dötsch: Digitalization, Digital Transformation and Sustainability in the Global Economy: Risks and Opportunities Springer Proceedings in Business and Economics, 2021</p>
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### Reference nosilca / Lecturer's references:

<p><b>1.01 Izvirni znanstveni članek</b></p> <ol style="list-style-type: none"> <li>ZWILLING, Moti, LESJAK, Dušan. The future of crypto currency : gaps, challenges and concerns. <i>Issues in information systems</i>. 2023, vol. 24, iss. 3, str. 58-70, ilustr. ISSN 1529-7314. <a href="https://iacis.org/iis/2023/3_iis_2023_58-70.pdf">https://iacis.org/iis/2023/3_iis_2023_58-70.pdf</a>, DOI: <a href="https://doi.org/10.48009/3_iis_2023_106">10.48009/3_iis_2023_106</a>. [COBISS.SI-ID <a href="https://www.cobiss.si/id/168662019">168662019</a>],</li> <li>SADIKU, Artan, LESJAK, Dušan, KOHUN, Frederick, PUSHAVAT, Kongkiti, NATEK, Srečko. Future of traditional banking and its digitalization. <i>Issues in information systems</i>. 2022, vol. 23, iss. 3, str. 231-241. ISSN 1529-7314. <a href="https://iacis.org/iis/2022/3_iis_2022_231-241.pdf">https://iacis.org/iis/2022/3_iis_2022_231-241.pdf</a>. [COBISS.SI-ID <a href="https://www.cobiss.si/id/132928259">132928259</a>]</li> <li>ERMAN, Nuša, ROJKO, Katarina, LESJAK, Dušan. Traditional and new ICT spending and its impact on economy. <i>Journal of computer information systems</i>. 2022, vol. 62, iss. 2, str. 384-396, ilustr. ISSN 0887-4417.</li> </ol>
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\*V postopku izvolitve

<sup>1</sup> Seminarska ali projektna naloga, raziskovalna naloga ipd.

<sup>2</sup> Plakat, naloga, prispevek

4. ROJKO, Katarina, LESJAK, Dušan, ERMAN, Nuša. The COVID-19 Pandemic Crisis : impact on ICT spending. *Journal of computer information systems*. 2022, vol. , iss. , str. 1-16, ilustr. ISSN 0887-4417. DOI: [10.1080/08874417.2022.2103857](https://doi.org/10.1080/08874417.2022.2103857). [COBISS.SI-ID [117632003](#)],
5. LESJAK, Dušan, NATEK, Srečko, KOHUN, Frederick. Big data analytics in higher education. *Issues in information systems*. 2021, vol. 22, iss. 4, str. 320-333. ISSN 1529-7314. [https://iacis.org/iis/2021/4\\_iis\\_2021\\_346-359.pdf](https://iacis.org/iis/2021/4_iis_2021_346-359.pdf), DOI: [10.48009/4\\_iis\\_2021\\_346-359](https://doi.org/10.48009/4_iis_2021_346-359). [COBISS.SI-ID [80892931](#)],
6. NATEK, Srečko, LESJAK, Dušan. Internet of things in higher education. *Issues in information systems*. 2020, vol. 21, iss. 2, str. 75-84, preglednice. ISSN 1529-7314. [http://www.iacis.org/iis/2020/2\\_iis\\_2020\\_75-84.pdf](http://www.iacis.org/iis/2020/2_iis_2020_75-84.pdf).
7. ZWILLING, Moti, KLIEN, Galit, LESJAK, Dušan, WIECHETEK, Łukasz, CETIN, Fatih, BASIM, Hamdullah Nejat. Cyber security awareness, knowledge and behavior : a comparative study. *Journal of computer information systems*, ISSN 0887-4417, 2020, vol. , iss. , str. 1-16,
8. LESJAK, Dušan, ZWILLING, Moti, KLEIN, Galit. Cyber crime and cyber security awareness among students : a comparative study in Israel and Slovenia. *Issues in information systems*, ISSN 1529-7314, 2019, vol. 20, iss. 1, str. 80-87, preglednice. [http://www.iacis.org/iis/2019/1\\_iis\\_2019\\_80-87.pdf](http://www.iacis.org/iis/2019/1_iis_2019_80-87.pdf). [COBISS.SI-ID [40228869](#)]
9. ROJKO, Katarina, LESJAK, Dušan, ŠUŠTERŠIČ, Janez. Information and communication technology spending and the latest (2008-) economic crisis. *International journal of sustainable economy*, ISSN 1756-5804, 2015, vol. 7, iss. 4, str. 306-326, ilustr. <http://www.inderscience.com/info/inarticle.php?artid=72195>, doi: [10.1504/IJSE.2015.072195](https://doi.org/10.1504/IJSE.2015.072195). [COBISS.SI-ID [38071813](#)]
10. ZILLI, Dejan, LESKOVŠEK, Jožica, NATEK, Srečko, LESJAK, Dušan. Mobile applications for health care support. *Issues in information systems*, ISSN 1529-7314, 2015, vol. 16, iss. 2, str. 102-107, ilustr. [http://www.iacis.org/iis/2015/2\\_iis\\_2015\\_102-107.pdf](http://www.iacis.org/iis/2015/2_iis_2015_102-107.pdf). [COBISS.SI-ID [38072069](#)]
11. ROJKO, Katarina, LESJAK, Dušan. The impact of the latest (2008-) economic crisis on ICT products. *Issues in information systems*, ISSN 1529-7314, 2014, vol. 15, iss. 2, str. 258-269, graf. prikazi. [http://iacis.org/iis/2014/123\\_iis\\_2014\\_258-269.pdf](http://iacis.org/iis/2014/123_iis_2014_258-269.pdf). [COBISS.SI-ID [1537037764](#)]
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13. FLORJANČIČ, Viktorija, LESJAK, Dušan. Slovenian SMEs and e-business. *International journal of management and enterprise development*, ISSN 1468-4330, 2010, vol. 8, no. 1, str. 22-31, doi: [10.1504/IJMED.2010.029758](https://doi.org/10.1504/IJMED.2010.029758). [COBISS.SI-ID [14982197](#)]

#### 1.08 Objavljeni znanstveni prispevek na konferenci

1. LESJAK, Dušan. Electronic banking : presence and trends. V: SEDMAK, Suzana (ur.), LAPORŠEK, Suzana (ur.), NAHTIGAL, Matjaž (ur.). Managing geostrategic issues : proceedings of the joint international conference organised by University of Primorska, Faculty of Management, Slovenia, Lomonosov Moscow State University, Moscow School of Economics, Russian Federation Juraj Dobrila University of Pula, Faculty of Economics and Tourism, "Dr. Mijo Mirkovic", Croatia, (Management International Conference, ISSN 1854-4312). Koper: University of Primorska Press. 2019, str. 111-120. <http://www.hippocampus.si/ISBN/978-961-6832-68-7/11.pdf>, doi: [10.26493/978-961-6832-68-7.11](https://doi.org/10.26493/978-961-6832-68-7.11). [COBISS.SI-ID [1541980868](#)]
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3. LESJAK, Benjamin, LESJAK, Dušan. Informal quality assessment of legal services (by citizens) in Slovenia. V: DERMOL, Valerij (ur.), TRUNK ŠIRCA, Nada (ur.), ĐAKOVIĆ, Goran (ur.). *Active citizenship by knowledge management & innovation : proceedings of the Management, Knowledge and Learning International Conference 2013, 19-21 June 2013, Zadar, Croatia*, (MakeLearn, ISSN 2232-3309). Bangkok; Celje; Lublin: ToKnowPress. 2013, str. 1201-1209. <http://www.toknowpress.net/ISBN/978-961-6914-02-4/papers/ML13-387.pdf>. [COBISS.SI-ID [11912097](#)]
4. ROJKO, Katarina, LESJAK, Dušan. The latest economic crisis (2008-) and ICT users&spendings. V: *Proceedings of 2014 International Conference on Technology Innovation and Industrial Management : 28-30 May 2014, Seoul, South Korea*, (Proceedings of 2010 International Conference on Technology

Innovation and Industrial Management, ISSN 1906-7631). Seoul (South Korea): TIIM. 2014, str. S2-100-S2-113, ilustr. [COBISS.SI-ID [1536509124](#)]

### **1.16 Samostojni znanstveni sestavek ali poglavje v monografski publikaciji**

1. LESJAK, Dušan, NATEK, Srečko. Universities of the future. V: LIEBOWITZ, Jay (ur.). *Digital transformation for the university of the future*. Singapore; Hackensack; London: World Scientific Publishing, 2023. Str. 61-77. Digital transformation, Vol. 1. ISBN 978-981-125-414-7. DOI: [10.1142/9789811254154\\_0004](#). [COBISS.SI-ID 130551811]
2. KLEIN, Galit, ZWILLING, Moti, LESJAK, Dušan. A comparative study in Israel and Slovenia regarding the awareness, knowledge, and behavior regarding cyber security. V: VASSILEVA, Bistra (ur.). *Responsible AI and ethical issues for businesses and governments*. Hershey: Engineering Science Reference, cop.2021. Str. 128-147, ilustr. ISBN 978-1-7998-4286-6, ISBN 978-1-7998-4285-9, ISBN 978-1-7998-6438-7. <https://www.igi-global.com/chapter/a-comparative-study-in-israel-and-slovenia-regarding-the-awareness-knowledge-and-behavior-regarding-cyber-security/268490>, DOI: [10.4018/978-1-7998-4285-9.ch007](#). [COBISS.SI-ID [44278019](#)],

### **2.01 Znanstvena monografija**

1. LESJAK, Dušan, NATEK, Srečko. Universities of the future. V: LIEBOWITZ, Jay (ur.). *Digital transformation for the university of the future*. Singapore; Hackensack; London: World Scientific Publishing, 2023. Str. 61-77. Digital transformation, Vol. 1. ISBN 978-981-125-414-7. DOI: [10.1142/9789811254154\\_0004](#). [COBISS.SI-ID [130551811](#)]
2. KLEIN, Galit, ZWILLING, Moti, LESJAK, Dušan. A comparative study in Israel and Slovenia regarding the awareness, knowledge, and behavior regarding cyber security. V: VASSILEVA, Bistra (ur.). *Responsible AI and ethical issues for businesses and governments*. Hershey: Engineering Science Reference, cop.2021. Str. 128-147, ilustr. ISBN 978-1-7998-4286-6, ISBN 978-1-7998-4285-9, ISBN 978-1-7998-6438-7. <https://www.igi-global.com/chapter/a-comparative-study-in-israel-and-slovenia-regarding-the-awareness-knowledge-and-behavior-regarding-cyber-security/268490>, DOI: [10.4018/978-1-7998-4285-9.ch007](#). [COBISS.SI-ID [44278019](#)],