

	UČNI NAČRT PREDMETA/COURSE SYLLABUS
Predmet	Digitalizacija poslovnih procesov
Course title	Digitalization of Business Processes

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
Poslovna informatika / 1. stopnja	Računalništvo informatika	in 3. letnik	6.
Business Informatics / 1 st Cycle	Computer Information Science	and 3 rd year	6 th

Vrsta predmeta/Course type

obvezni/obligatory

Univerzitetna koda predmeta/University course code

I_RI_3_UN6

Predavanja Lectures	Seminar Seminar	Sem. vaje Tutorial	Lab. vaje Laboratory work	Teren. vaje Field work	Samost. delo Individ. work	ECTS
30			30		90	6

Nosilec predmeta/Lecturer:

dr. Stevanče Nikoloski, pred.
Učni načrt pripravil doc. dr. Mitja Cerovšek

Jeziki/
Languages:

Predavanja/Lectures: slovenski/Slovenian

Vaje/Tutorial: slovenski/Slovenian

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

Prerequisites:

- Vpis v tretji letnik študijskega programa.
- Študent mora pred izpitom pripraviti in predstaviti seminarsko nalogo.

- The prerequisite for inclusion is enrolment in the third year of study.
- Students have to successfully prepare and present a seminar paper before the examination.

Vsebina:

Content (Syllabus outline):

- Uvod v digitalizacijo poslovnih procesov in digitalno preobrazbo.
- Gradniki in domene digitalne preobrazbe: stranke, konkurenca, podatki, inovacije in vrednost.
- Generator strategije mreženja strank.
- Generator podatkovne vrednosti.

- Introduction to digitization of business processes and digital transformation.
- Building blocks and domains of digital transformation: customers, competition, data, innovation and value.
- Customer Networking Strategy Generator.
- Data value generator.

<ul style="list-style-type: none"> • Konvergentna in divergentna metoda za razvoj inovacij. • Moteči poslovni model. • Velepodatki. • Visokonivojske arhitekture podatkovnih platform za velepodatke: Kappa in Lambda arhitekture. • Umetna inteligenca kot vodilni stebr digitalni preobrazbi. • Internet stvari (IoT). • Industrija 4.0. • Pametne tovarne. • Novi pristopi in trendi na področju digitalizacije poslovnih procesov in digitalne preobrazbe. 	<ul style="list-style-type: none"> • Convergent and divergent method for innovation development. • Disruptive business model. • Big data. • High-level architectures of data platforms for big data: Kappa and Lambda architectures. • Artificial intelligence as a leading pillar of digital transformation. • Internet of Things (IoT). • Industry 4.0. • Smart factories. • New approaches and trends in the field of digitization of business processes and digital transformation.
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Temeljna literatura in viri/Readings:

Temeljna literatura/Basic literature

- Turban, E. et. al. (2015). *Electronic Commerce: A Managerial and Social Networks Perspective*. New York: Springer.
- Rogers, D. L. (2016). *The Digital Transformation Playbook - Rethink Your Business for the Digital Age*. New York: Columbia University Press.
- Gradiva pri predmetu (predavanja in vaje).

Priporočljiva literatura/Recommended literature

- Siebel, T. M. (2019). *Digital Transformation: Survive and Thrive in an Era of Mass Extinction*. RosettaBooks.
- Vashishta, V. (2023) *From Data To Profit. How Businesses Leverage Data to Grow Their Top and Bottom Lines*. Wiley.
- Članki v strokovnih in znanstvenih revijah / Articles in scientific and professional journals.

Cilji in kompetence:

Učna enota prispeva predvsem k razvoju naslednjih splošnih in specifičnih kompetenc:

- sposobnost poglobljenega razumevanja digitalizacije poslovnih procesov in digitalne preobrazbe,
- sposobnost definiranja, razumevanja in ustvarjalnega reševanja strokovnih izzivov na področjih digitalizacije poslovnih procesov in digitalne preobrazbe,
- razumevanje vloge in pomena informatike v konkurenčnem poslovnem okolju,
- razumevanje pristopov in trendov na področjih digitalizacije poslovnih procesov in digitalne preobrazbe,

Objectives and competences:

The learning unit mainly contributes to the development of the following general and specific competences:

- the ability for in-depth understanding of digitalization of business processes and digital transformation,
- the ability to define, understand and creatively solve professional challenges in the areas of digitalization of business processes and digital transformation,
- understanding the role and importance of informatics in a competitive business environment,

<ul style="list-style-type: none"> • sposobnost kreativnega sodelovanja v projektih digitalizacije poslovnih procesov in digitalne preobrazbe, • sposobnost uporabe sodobnih znanj na področjih digitalizacije poslovnih procesov in digitalne preobrazbe v gospodarstvu in negospodarstvu. 	<ul style="list-style-type: none"> • understanding approaches and trends in the areas of digitalization of business processes and digital transformation, • the ability to creatively participate in projects of digitalization of business processes and digital transformation, • the ability to use modern knowledge in the fields of digitalization of business processes and digital transformation in the economy and public sector.
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Predvideni študijski rezultati:

Intended learning outcomes:

<p>Študent/študentka:</p> <ul style="list-style-type: none"> • razume pomen povezovanja strategije digitalizacije s strategijo informatike in strategijo podjetja, • razume vlogo informacijskih tehnologij pri digitalizaciji poslovnih procesov in digitalni preobrazbi, • razume in pozna principe digitalizacije poslovnih procesov in digitalne preobrazbe, • razume pomen procesne orientiranosti podjetja, • se usposobi za kreativno sodelovanje v projektih digitalizacije poslovnih procesov in digitalne preobrazbe ter uporabo sodobnih znanj. 	<p>Students:</p> <ul style="list-style-type: none"> • understand the importance of integrating the digitalization strategy with IT strategy and the company strategy, • understand the role of information technology at digitalization of business processes and digital transformation, • understand and know the principles of digitalization of business processes and digital transformation, • understand the value of Business Process Orientation of the company, • develop skills for creative participation in projects of digitalization of business processes and digital transformation and for use modern knowledge.
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Metode poučevanja in učenja:

Learning and teaching methods:

<ul style="list-style-type: none"> • <i>predavanja</i> z aktivno udeležbo študentov (razlaga, diskusija, vprašanja, primeri, reševanje problemov), • <i>laboratorijske vaje</i>: refleksija izkušenj, praktično reševanje več tipičnih problemov, predstavitev in zagovor seminarske naloge, diskusija, sporočanje povratne informacije, • branje, razumevanje in predstavitev raziskovalno-razvojnih člankov o digitalni preobrazbi. 	<ul style="list-style-type: none"> • <i>lectures</i> with active student participation (explanation, discussion, questions, examples, problem solving), • <i>laboratory work</i>: reflection on experience, practical solving of several typical problems, presentation and defence of the seminar paper, discussion, feedback, • reading, understanding and presentation of research and development articles on digital transformation.
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Načini ocenjevanja:	Delež (v %) Weight (in %)	Assessment:
<p>Načini:</p> <ul style="list-style-type: none"> • izpit • izdelava, predstavitev in zagovor seminarske naloge <p>Ocenjevalna lestvica: ECTS.</p>	<p>60 %</p> <p>40 %</p>	<p>Types:</p> <ul style="list-style-type: none"> • exam • preparation, presentation and defence of the seminar paper <p>Grading scheme: ECTS.</p>