UČNI NAČRT MIKRODOKAZILA / MICRO-CREDENTIAL SYLLABUS

Naziv mikrodokazila: *Micro-credential title:*	Strateška uporaba umetne inteligence v poslovanju Strategic Application of Artificial Intelligence in Business
Študijsko področje po KLASIUS P-16 *Study field according to KLASIUS P-16:*	0413
Razvrstitev v SOK: *SQF Classification in*	7
Razvrstitev v EOVK: *QF-EHEA Classification*	6
Razvrstitev v EOK: *EQF Classification*	6
Univerzitetna koda/*University code:*	TBD
Način izvedbe (klasično, hibridno, na daljavo) *Method of implementation (classic, hybrid, online)*	hibridno hybrid

Predavanja *Lectures*	**Seminar** *Seminar*	**Vaje** *Tutorial*	**Terenske vaje** *Field work*	**Druge oblike študija** *Other forms of study*	**Samostojno delo** *Individual work*	**ECTS**
12	**2**	**2**	**-**	**-**	**14**	**1**

Nosilec predmeta/*Lecturer*:	izr. prof.dr. Aneta Ivanovska
(So)izvajalci/(*Co)-Lecturers:*	TBD
Jezik izvedbe *Language of instruction*	**slovenski** **Slovenian**
Maksimalno število udeležencev *Maximum number of participants:*	30

Merila za izbor udeležencev v primeru večjega interesa od razpisanih mest: *Criteria for selecting participants in the event of greater interest than the number of places*

	available:
Ustreznost predhodne izobrazbe in poklicnih izkušenj glede na vsebino programa ter izkazana motivacija za uporabo umetne inteligence v poslovnem okolju.	Relevance of prior education and professional experience to the programme content, and demonstrated motivation to apply artificial intelligence in a business environment.

Pogoji za vključitev:	*Prerequisites:*
Zaključen dodiplomski študij najmanj na 1. bolonjski stopnji oziroma primerljiva izobrazba. Zaželene so osnovne izkušnje iz poslovanja, vodenja, analitike, informatike ali digitalne preobrazbe. Predhodno znanje programiranja ni potrebno.	Completion of an undergraduate degree at least at the first Bologna cycle level, or a comparable qualification Basic experience in business, management, analytics, information technology, or digital transformation is desirable. Prior programming knowledge is not require

Vsebina:	*Content (Syllabus outline):*
Predmet obravnava naslednje tematike: 1. Vloga, vrste, zmožnosti in omejitve umetne inteligence v poslovnem okolju, vključno z generativno AI. 2. Prepoznavanje poslovnih problemov in priložnosti za uporabo AI. 3. Vrednotenje in prioritizacija AI poslovnih primerov glede na strateško usklajenost, poslovno vrednost, izvedljivost, podatkovne zahteve, stroške, čas do rezultatov in tveganja. 4. Oblikovanje AI poslovnega primera: cilji, pričakovane koristi, kazalniki uspešnosti, deležniki in potrebni viri. 5. Pot od ideje do produkcije: preverjanje izvedljivosti, dokaz koncepta, pilot, uvedba, spremljanje in izboljševanje. 6. Podatkovni, tehnološki in organizacijski pogoji ter upravljanje sprememb. 7. Odgovorna AI: kakovost podatkov, pristranskost, transparentnost, zasebnost, varnost, človeški nadzor in osnovne zahteve Akta EU o umetni inteligenci. 8. Priprava strateškega predloga uvedbe AI-rešitve za izbrani poslovni problem.	The course examines the following topics: 1. The role, types, capabilities, and limitations of artificial intelligence in business, including generative AI. 2. Identification of business problems and opportunities for AI application. 3. Evaluation and prioritisation of AI use cases according to strategic alignment, business value, feasibility, data requirements, costs, time to value, and risks. 4. Development of an AI business case: objectives, expected benefits, performance indicators, stakeholders, and required resources. 5. From idea to production: feasibility assessment, proof of concept, pilot, deployment, monitoring, and improvement. 6. Data, technology, and organisational prerequisites, including change management. 7. Responsible AI: data quality, bias, transparency, privacy, security, human oversight, and the basic requirements of the EU Artificial Intelligence Act. 8. Preparation of a strategic proposal for implementing an AI solution for a selected business problem.

Literatura in viri/*Readings:*

1. Davenport, T. H., & Mittal, N. (2022). All-in on AI. Harvard Business Review Press.
2. Iansiti, M., & Lakhani, K. R. (2020). Competing in the Age of AI. Harvard Business Review Press.
3. Mikalef, P., & Gupta, M. (2021). Artificial intelligence capability: Conceptualization, measurement calibration, and empirical study on its impact on organizational creativity and firm performance. Information & Management, 58(3), 103434.
4. European Parliament and Council. (2024). Regulation (EU) 2024/1689 - Artificial Intelligence Act.
5. OECD. (2019, updated 2024). OECD Principles on Artificial Intelligence.

Druge pomembne sestavine (npr. licence, orodja, pripomočki ipd.):	*Other important components (e.g. licenses, tools, utilities, etc.):*
Računalnik z dostopom do interneta in spletnega učnega okolja; dostop do izbranega generativnega AI-orodja za vodene aktivnosti (plačljiva licenca ni pogoj); predlogi AI Business Case Canvas in načrta uvedbe AI-rešitve.	A computer with internet access and access to the online learning environment; access to a selected generative AI tool for guided activities (a paid licence is not required); AI Business Case Canvas and AI implementation roadmap templates.

Cilji in kompetence:	*Objectives and competences:*
Cilj mikrodokazila je udeležence usposobiti za strateško presojo, načrtovanje in odgovorno uvajanje umetne inteligence v poslovno okolje. Udeleženci razvijejo sposobnost povezovanja zmožnosti AI s konkretnimi poslovnimi problemi, vrednotenja in prioritizacije primerov uporabe ter oblikovanja utemeljenega poslovnega primera. Pridobijo razumevanje podatkovnih, tehnoloških in organizacijskih pogojev za uspešno uvedbo, merjenja poslovne vrednosti, upravljanja sprememb ter ključnih etičnih in regulativnih zahtev.	The objective of the micro-credential is to equip participants to strategically assess, plan, and responsibly implement artificial intelligence in a business environment. Participants develop the ability to connect AI capabilities with concrete business problems, evaluate and prioritise use cases, and formulate a justified business case. They gain an understanding of the data, technology, and organisational conditions required for successful implementation, business value measurement, change management, and key ethical and regulatory requirements.

Predvideni učni izidi:	*Intended learning outcomes:*
Po zaključku mikrodokazila bodo udeleženci sposobni: 1. Razložiti poslovni pomen, zmožnosti in omejitve različnih vrst AI; 2. Prepoznati poslovne probleme in procese, pri katerih lahko AI ustvari merljivo vrednost; 3. Ovrednotiti in prioritizirati AI poslovne primere glede na strateška, poslovna, podatkovna, tehnološka in tveganjska merila; 4. Oblikovati AI poslovni primer z jasno opredeljenimi koristmi, kazalniki uspešnosti, deležniki in viri; 5. Pripraviti osnovni načrt uvedbe AI-rešitve od preverjanja izvedljivosti do produkcije in spremljanja rezultatov; 6. Prepoznati ključna tveganja AI ter predlagati ukrepe za odgovorno uporabo, človeški nadzor in skladnost.	Upon completion of the micro-credential, participants will be able to: 1. Explain the business relevance, capabilities, and limitations of different types of AI; 2. Identify business problems and processes in which AI can create measurable value; 3. Evaluate and prioritise AI use cases using strategic, business, data, technology, and risk criteria; 4. Develop an AI business case with clearly defined benefits, performance indicators, stakeholders, and resources; 5. Prepare a basic AI implementation roadmap from feasibility assessment to production deployment and performance monitoring; 6. Identify key AI risks and propose measures for responsible use, human oversight, and compliance.

Metode učenja in poučevanja	*Learning and teaching methods:*

Predavanja z razlago konceptov in primeri iz poslovne prakse; vodena analiza študij primerov; samostojna priprava seminarske naloge; predstavitev, razprava in povratne informacije.	Lectures explaining concepts and presenting examples from business practice; guided analysis of case studies; independent preparation of a seminar assignment; presentation, discussion, and feedback.

Način preverjanja in ocenjevanja: *Type of examination and assessment:*

Način (pisni izpit, ustni izpit, naloge, idr.) • Seminarska naloga: strateški predlog uvedbe AI-rešitve • Predstavitev in zagovor seminarske naloge	Delež (v %): *Weight (in %)* 80 / 20	Type (written exam, oral exam, assignments, etc.) • Seminar assignment: strategic proposal for implementing an AI solution • Presentation and oral defence of the seminar assignment

Pogoji za pridobitev mikrodokazila: *Minimal standards for obtaining micro-credential:*

100-odstotna udeležba pri kontaktnih oblikah študija; pozitivno ocenjena seminarska naloga; uspešna predstavitev in zagovor seminarske naloge.	100% attendance at contact-based learning activities; a passing grade for the seminar assignment; successful presentation and oral defence of the seminar assignment.

Reference nosilca/*Lecturer's references:*

Prof. dr. Aneta Ivanovska je izredna profesorica za področje računalništva in informatike na Univerzi v Novi Gorici ter direktorica magistrskega študijskega programa Gospodarski inženiring. Doktorirala je na področju strojnega učenja leta 2010 na Mednarodni podiplomski šoli Jožefa Stefana. Med letoma 2005 in 2022 je bila raziskovalka na Odseku za tehnologije znanja Instituta Jožef Stefan. Njena strokovna področja vključujejo umetno inteligenco, strojno učenje, podatkovno analitiko in sisteme za podporo odločanju. Od novembra 2022 je direktorica umetne inteligence v podjetju MarineXchange, kjer se ukvarja z AI-strategijo, razvojem portfelja AI-rešitev, njihovo uvedbo v poslovno okolje in upravljanjem AI. Na UNG je nosilka oziroma izvajalka predmetov Umetna inteligenca za analizo podatkov, Poslovni informacijski sistemi, in Projekt 1.

Prof. Dr. Aneta Ivanovska is an Associate Professor of Computer Science and Informatics at the University of Nova Gorica and Director of the Master's programme in Engineering and Management. She obtained her PhD in machine learning from the Jožef Stefan International Postgraduate School in 2010. From 2005 to 2022, she was a researcher at the Department of Knowledge Technologies at the Jožef Stefan Institute. Her fields of expertise include artificial intelligence, machine learning, data analytics, and decision-support systems. Since November 2022, she has been Director of Artificial Intelligence at MarineXchange, where she works on AI strategy, AI solution portfolio development, business implementation, and AI governance. At UNG, she is a course principal or lecturer for Artificial Intelligence for Data Analysis, Business Information Systems, and Project 1.