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DESCRIPTION OF THE COURSE

GENERAL INFORMATION		
Course Holder	**Dr.sc. Jelena Uzelac**	
The name of the college	**Legal Tech**	
Study program	**Professional Undergraduate Study – Finance and Business Law**	
Status of the College	**Mandatory**	
Year	**3rd Year**	
Point value and method of teaching	**ECTS coefficient of student workload**	**4**
	Number of hours (P+V+S)	**30+15+0**

DESCRIPTION OF THE COURSE
1.1. *Objectives of the course*
Students are expected to develop: ***And. general competences and to acquire a general level of knowledge related to:*** • ***Basics of technologies and types of artificial intelligence*** • ***Historical development of artificial intelligence*** • ***Benefits and risks of using artificial intelligence*** • ***impact of artificial intelligence on business and on economies*** • ***Artificial intelligence market*** • ***Regulatory framework for AI (comparative national models of AI regulation: USA, China, Canada)*** • ***the basic guidelines and principles and guidelines of the EU AI Act***

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- ***various areas and sectors of application of artificial intelligence (private, public sector, manufacturing, procurement, company operations, human resources, compliance departments, education, medicine, financial sector, transport, environmental protection, agriculture, energy sector...)***
- ***key legal and ethical issues of the use of artificial intelligence, data protection and cyber defence and security***
- ***Chatbots and Prompt Engineering***
- ***Basic Types of Legal Tech Tools and the Impact of Legal Tech Tools on the Legal Profession***
- ***challenges of the legal profession of today and the future with digital business and new AI competencies***
- ***digital eco-system and impact on legal and financial operations (smart contracts, blockchain, Big Data, cloud computing, electronic and digital signatures)***
- ***acquiring new digital competencies of lawyers and financial experts with the aim of greater competitiveness in the labor market***

B. Specific competencies related to:

- ***practical and thoughtful use of basic digital web services and e-justice portals in the Republic of Croatia (search for regulations, case law, land registry...)***
- ***practical and thoughtful use of some basic Legal Tech Tools that are publicly available and free of charge (tools for video communication, sources of EU law, tools for online education, legal databases, legal analytics, contract management, etc.)***
- ***case studies through practical workshops (exercises) where students must make a general business model for the implementation of AI technologies in the company's business and create Corporate Guidelines for the Ethical Use of AI Technologies in the Company***
- ***practical and thoughtful use and prompt engineering for lawyers for the chatbot tool ChatGPT (drafting contracts, modifying contracts, creating summaries of contracts and documents, drafting legal opinions, etc.)***

1.2. *Requirements for enrolment in the course*

There are no conditions

1.3. *Expected learning outcomes for the course*

Students should be able to:

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1. To interpret the concept of artificial intelligence and basic artificial intelligence technologies **2.** Interpret the regulatory framework and scope of AI **3.** To present the ethical and legal issues of the use of artificial intelligence **4.** Analyze cyber defense and security **5.** Explain the impact of artificial intelligence on the legal profession through the application of legal tech tools **6.** To present the advantages and disadvantages of e-Justice in the context of the digital competences of lawyers
1.4. *Course content*
1. INTRODUCTION TO THE COURSE – INTRODUCTION TO ARTIFICIAL INTELLIGENCE, DIGITAL BUSINESS AND LEGAL TECH 2. ARTIFICIAL INTELLIGENCE AND THE BASICS OF ARTIFICIAL INTELLIGENCE TECHNOLOGIES • Definitions of AI • Human Intelligence, AI and Super UI-UI Singularity • Neural networks, intelligent systems and quantum computers • Historical overview of the development of AI • Types of UI • Machine Learning • Computer vision • Natural Language Processing-NLP • Speech recognition • The Needs and Benefits of Using AI • Proponents and opponents of AI • Risks and challenges of using AI

- The future of AI
- The impact of AI on the global economy and markets
- Marketplace AI

3. AI REGULATORY FRAMEWORK AND EU AI LAW
(EU AI ACT)

- AI regulation – YES or NO and the state of global AI regulation?
- How to regulate UI - basic models of regulation?
- Basic principles of AI regulation
- Opponents and supporters of regulation
- Regulation and Digital Legislation in the EU
- Overview of key provisions of the EU AI ACT and implementation timeline
- Regulation in the UN
- Paris EU Summit, February 2025
- Regulation in the U.S.
- Regulation in the UK.
- Spanish Regulatory AI Agency
- Regulation in China
- Regulation in Canada
- Regulation in the Republic of Croatia

4. AREAS OF APPLICATION OF ARTIFICIAL INTELLIGENCE

- AI in everyday life

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- AI in the private sector
- AI in the public sector
- AI in the education system
- AI in the financial sector and financial operations-FinTech
- AI in the legal sector – Legal Tech
- AI in medicine and the healthcare system
- AI and environmental protection
- AI and Industrial Manufacturing
- AI & Agriculture
- AI and space exploration
- AI and impact on the labour market
- AI and autonomous vehicles and the transport industry
- AI and the entertainment industry
- AI & Art
- AI and the Military Industry
- AI and the energy sector
- AI in the company's operations

5. ETHICAL AND LEGAL ISSUES OF USING ARTIFICIAL INTELLIGENCE

- Data and personal data protection
- Transparency
- Non-discrimination
- AI and Intellectual Property, U.S. Case Law
- UI hallucinations, CHt GPT cases, and case law in the U.S.
- AI and liability for damages

- AI and criminal justice systems
- AI and competition
- AI & Compliance/Compliance

6. CYBER DEFENCE AND SECURITY

- Cyber Defense and Security-Definitions
- Hacker Groups and Cyber Threats and Cybercrime
- NIS and NIS2 EU Directive
- Cyber Security Act of the Republic of Croatia
- Digital identification
- Digital Forensics

7. CHATBOTS, CHAT, GPT, AND PROMPT ENGINEERING

- What are chatbots?
- The most famous chatbots
- Chat GPT – basics, development, case study
- Implications of using Chat GPT
- Benefits of using Chat GPT
- Disadvantages and limitations of using Chat GPT
- Guidelines for Using Chat GPT Effectively
- Application of the use of Chat GPT in the legal profession
- Microsoft Copilot and Google Bard chatbots
- Prompt engineering for lawyers for the chatbot tool ChatGPT (drafting contracts, modifying contracts, creating summaries of contracts and documents, creating legal opinions, etc.)
- Examples of prompt engineering on 3 different chatbots (Chat GPT, Copilot, and Bard)

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8. LEGAL TECH BASICS AND IMPACT ON THE LEGAL PROFESSION

- Definition of Legal Tech and Significance
- Why is AI important for the legal profession?
- Development of the legal profession
- Legal technologies and examples of legal technology tools
- Challenges of the Legal Profession of Today and Legal Technology as a Response
- Advantages and disadvantages of using legal technologies

9. TYPES AND EXAMPLES OF LEGAL TECH TOOLS

- Computer databases for searching legal content
- Digital tools for viewing legal documents
- Digital tools for legal analytics and support and management of court proceedings
- Digital tools for data and risk management
- Digital search tools for legal service providers
- Digital tools for education and training of lawyers
- Digital tools for legal and due diligence of companies – due diligence
- Digital tools for recording and billing for attorneys' services
- Digital Tools for Video Communication
- Digital tools for project management
- Virtual Legal Chatbot Assistants
- Diital Tools for Legal Storytelling
- Digital Tools for Design Thinking in Legal Business

10. DIGITAL ECOSYSTEM AND IMPACT ON LEGAL AND FINANCIAL OPERATIONS (SMART CONTRACTS, BLOCKCHAIN, BIG DATA, CLOUD COMPUTING,

ELECTRONIC AND DIGITAL SIGNATURES)

- Smart Contracts-Smart Contracts
- Automation of standard contracts and digital contract management
- Blockchain technology
- Big Data
- Cloud Computing
- Electronic and digital signature

11. E-JUSTICE AND DIGITAL BUSINESS

- E-Justice in China – Case Study
- E-justice in the Republic of Croatia
- Use of basic digital web services and e-justice portals in the Republic of Croatia (search for regulations, case law, land registry...)
- AI and facilitating access to justice
- ODR-online dispute resolution

12. PRACTICAL EXAMPLES OF THE APPLICATION OF LEGAL TECH AND ARTIFICIAL INTELLIGENCE TOOLS

- case studies through practical workshops (exercises) where students must make a general business model for the implementation of AI technologies in the company's business in teamwork, and develop Corporate Guidelines for the Ethical Use of AI Technologies in the Company

13. DIGITAL COMPETENCIES OF LAWYERS AND FINANCIAL EXPERTS AND THE FUTURE OF ARTIFICIAL INTELLIGENCE AND LEGAL TECH DEVELOPMENT

- Digital AI Competencies and New Skills of Future Lawyers and Financial Professionals
- New Jobs and Careers in the Legal Industry with AI
- Adapting traditional law firms to new technologies
- Possible directions for the future development of AI and Legal Tech

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1.5. *Types of teaching (put X)*	☒ lectures ☐ seminars and workshops ☒ exercises ☐ Distance education ☐ Field Teaching	☐ Independent tasks ☐ Multimedia & Network ☐ laboratory ☐ Mentoring work ☐ Other_____

1.6. *Student obligations*

The obligations of students are prescribed in detail by the Statute, Study Regulations, and Student Obligations Guidelines. The key obligations of students are:

ATTENDANCE AT CLASSES: students are obliged to attend classes, actively follow lectures and exercises, and participate constructively in classes, and in order to acquire the right to take the exam, it is necessary to attend classes in the percentages prescribed by the Study Regulations. For each student, their presence in class is recorded through the Infoeduka digital office system. The minimum obligations are;

- *Full-time students must attend at least 70% of the total number of classes to be eligible to sign.*
- *Part-time students need to attend at least 50% of the total number of classes to be eligible to sign.*

PASSING EXAMS: in order to achieve a positive grade in the subject, it is necessary to achieve at least 54 points in the subject, but also at least 50% of points for each learning outcome. The method of taking the exam is described in more detail in the item Assessment and evaluation of students' work during classes and at the final exam.

**FINAL EXAM – a student who has not met the conditions for passing the exam during the continuous examination of knowledge (has achieved a total of at least 54 points in the course and has met the lower point threshold of adoption of each learning outcome, i.e. a minimum of 50% of the points of each learning outcome), may take the learning outcomes of the course at the final exam.*

***WRITTEN EXAM**: the student is obliged to take a written exam that verifies the acquisition of theoretical knowledge related to the course. The questions also test the ability to identify, explain and relate key concepts and to make appropriate arguments. The written exam also includes tasks that check the student's acquisition of the material through analytical frameworks.*

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**CONTINUOUS EXAMINATION: In order to make students progress more efficiently in class, continuous examinations are carried out (2 intermediate exams). In this way, students acquire smaller teaching units and master the subject material more easily.*

1.7. *Student Work Tracking (Add X to the appropriate tracking format)*

Attending classes	x	Teaching activity		Seminar paper		Experimental work	
Written exam	x	Oral exam		Essay		Research	
Project		Continuous Assessment*		Report		Practical work	
Portfolio							

1.8. *Assessment and evaluation of students' work during classes and at the final exam*

Evaluation and evaluation of students' work during classes and at the final exam is carried out on the basis of the Regulations on Studying of the EFFECTUS University of Applied Sciences.

Allocation of points according to the forms of student work monitoring:

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	Attending classes	Written exam	Project	Seminar paper	Practical work	Altogether
I1		16				16
I2		16				16
I3		16				16
I4		16				16
I5		16				16
I6		16				16
OUT OF OUTCOME	4					4
ALTOGETHER	4	96				100

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Linking learning outcomes, teaching methods and knowledge assessment methods:

FORMS OF TRACKING	***NAME OF LEARNING OUTCOMES***	**TEACHING METHOD**	**KNOWLEDGE ASSESSMENT METHOD**	**Maximum number of points**
Written exam	*OUTCOME 1* To interpret the concept of artificial intelligence and basic artificial intelligence technologies	*lecture* *Asking questions discussion*	Simple recall tasks to which an answer is sought, demonstrating the identification and definition of key terms, their connection and appropriate argumentation. They may include problem questions and tasks that need to be argued.	*48*
	OUTCOME 2 Interpret the regulatory framework and scope of AI	*lecture* *Asking questions discussion*	Simple recall tasks to which an answer is sought, demonstrating the identification and definition of key terms, their connection and appropriate argumentation. They may include problem questions and tasks that need to be argued.	
	OUTCOME 3	*lecture*	Simple recall tasks to which an answer	

	To present the ethical and legal issues of the use of artificial intelligence The Digital Competence of Lawyers	*Asking questions discussion*	is sought, demonstrating the identification and definition of key terms, their connection and appropriate argumentation. They may include problem questions and tasks that need to be argued.	
Written exam	*OUTCOME 4* *Analyze cyber defense and security.*	*lecture*	Simple recall tasks to which an answer is sought, demonstrating the identification and definition of key concepts, their connection and corresponding arguments of a higher degree of complexity. They may include problem questions and tasks that need to be argued.	*48*
		Asking questions discussion		
	OUTCOME 5 *Explain the impact of artificial intelligence on the legal profession through the application of legal tech tools*	*lectures*	Simple recall tasks to which an answer is sought, demonstrating the identification and definition of key terms, their connection and appropriate argumentation. They may include problem questions and tasks that need to be argued.	
		Asking questions discussion		
	OUTCOME 6 *To show the advantages and disadvantages of e-justice in the context of*	*lecture*	Essay-problem questions to which an answer is sought, which demonstrates the identification and definition of key terms, their connection and	

		Asking questions discussion	appropriate argumentation of a higher degree of complexity. They may include problem questions and tasks that need to be argued.	
Attending classes	*All outcomes*	*Lectures and exercises*	*Attendance records*	*4*
			TOTAL POINTS	***100***

Type of student workload	**Student Load Hours**	**ECTS credits**
Attending contact classes	45	1,5
Field Trips/Visits Outside the College	15	0,5
Independent study/research	15	0,5
Out-of-classroom preparation and preparation of seminars/presentations		
Work on an out-of-classroom project assignment		
Independent preparation for exams and exam time	**30.0**	**1.0**
Consultation activities	15	0.5
Other		
TOTAL ECTS credits	120	4

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RATING:

In order to achieve a positive grade in the course, the student must cumulatively meet two conditions: achieve a total of at least 54 (fifty-four) points in the course and meet the lower point threshold for the adoption of each individual learning outcome, which is 50% of the total points of the learning outcomes. A student may receive an additional four points if (i) attends classes more than 80% for full-time students and (ii) attends classes more than 55% for part-time students.

Grades are calculated based on the following distribution of points:

SCORE	*RATING*
0,00 – 53,90	*Insufficient (1)*
54,00 – 64,90	*Sufficient (2)*
65,00 – 79,90	*Good (3)*
80,00 – 89,90	*Very good (4)*
90.00 and more	*Excellent (5)*

Grading is carried out in a transparent manner by collecting points. The course is evaluated with 100.00 points (with the possibility of achieving an additional 8 points on the Challenge learning outcome).

CHALLENGE LEARNING OUTCOME - the student has the opportunity to earn an additional maximum of 8 points through the Challenge learning outcome; The student independently chooses one of the activities proposed in the first lesson, and has the opportunity to independently propose an activity with which he wants to increase the number of points and, with the consent of the course holder, achieves them according to the criteria of the course. Points for the Challenge learning outcome are not distributed according to the learning outcomes, but the number achieved makes an additional number of

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points to the total number of points achieved according to the learning outcomes.

Before taking the final written exam, each student must meet the prescribed conditions, which primarily means that they have attended the % of classes determined by the Study Regulations and that they have received an electronically encrypted permission to take the exam.

1.9. *Required reading and number of copies in relation to the number of students currently attending classes in the course*

Title	*Number of copies*	*Number of students*
1. Malenica, V., Artificial Intelligence and Business in the Digital Age, Element, 2024.	*5** **students receive compulsory literature in permanent ownership*	*100*

1.10. Supplementary literature

- 1. Kager, D. 2023. Artificial Intelligence, Development and Application, Školska knjiga, Zagreb
- 2. Russel S., Norvig P., 2024, 4th edition, Artificial Intelligence, Modern Approach, Mate d.o.o., Zagreb
- 3. Đorđe N., 2024. Artificial Intelligence, Redak d.o.o., Split
- 4. Bernard M., Matt W. 2019. Artificial Intelligence in Practice: How 50 Successful Companies Used Artificial Intelligence and Machine Learning to Solve Problems, Mate d.o.o., Zagreb
- 5. Andrew B., 2024. A Manager's Guide to Artificial Intelligence
- 6. Kopal R., Darija K., 2022. Intelligence Analytics, Croatian Association of Security Managers, Zagreb

- 7. Dragičević D., 2004. Computer Crime and Information Systems, Informator's Bureau System, Zagreb
- 8. Dragičević D. 2015. Legal Informatics and Information Technology Law, Official Gazette, Zagreb
- 9. Daniel D. Lee 2023 Law and AI, Shaping the Future of Legal Practice with ChatGPT, Amazon Fullfilment, USA
- 10. Daniel S. 2020. A World Without Work: Technology, Automation, and How We Should Respond, Metropolitan Books, USA
- 11. Dr. Lance E. 2020. Artificial Intelligence and LegalTech Essentials, USA
- 12. Hammond, K. 2015. Practical Artificial Intelligence for Dummies, Narrative Sceience Edition, John Wiley & Sons Inc.
- 13. Henry K, Eric S, Daniel H. 2021, The Age of AI: The Book we all need, John Murray, USA
- 14. Kai-Fu Lee, 2018. AI Superpowers: China, Silicon Valley, and the New World Order, Harper Business, USA
- 15. Kai-Fu Lee, 2021 AI 2041: Ten Visions for Our Future, Crown Currency, USA
- 16. Max T, 2017. Life 3.0: Being Human in the Age of Artificial Intelligence, Knopf, USA
- 17. Mustafa S., Michael B. 2023. The Coming Wave: Technology, Power, and the Twenty-first Century's Greatest Dilemma, Crown, USA
- 18. Newport, K. 2022. Digital minimalism - How to live meaningfully and focused in a world full of distractions? Verbum, Zagreb
- 19. Richard S., 1996. The Future of Law, Facing the challenges of Information Technology, Oxford University Press,
- 20. Sophia Adams B, Susanne C, Akber D. Drago I, 2020. The LegalTech Book – The Legal Technology handbook for investors, entrepreneurs and Fintech visionaries, Fintech Circle Ltd UK

- 21. Tomáš C.P. 2023. I, Human: AI, Automation, and the Quest to Reclaim What Makes Us Unique, Harvard Business Review Press, USA

1.11. Ways of quality monitoring that ensure the acquisition of output knowledge, skills and competencies

- *statistical processing and analysis of exam results (checking the Gaussian curve – normal distribution of success, comparing and monitoring the results of exams of different generations, analysis of understanding of individual modules/questions on the exam, etc.),*
- *conducting a survey among students,*
- *evaluation and self-evaluation of teachers,*
- *achieved results, level of understanding and knowledge during the preparation of the seminar paper,*
- *achieved results and level of knowledge presented during the preparation and defense of the final thesis (students who choose a graduate thesis in this course),*
- *analysis of the report of the Head of the Quality Centre, and*
- *Feedback from students who have already graduated on the usefulness of the content of this course in the performance of the work they do.*