



COURSE UNIT (MODULE) DESCRIPTION

Course unit (module) title	Code
OPEN SOURCES INTELLIGENCE	

Academic staff	Core academic unit(s)
Coordinating: assoc. prof. Vytautas Rudžionis	Institute of Languages, Literature, and Translation Studies <input type="checkbox"/>
Other:	Institute of Social Sciences and Applied Informatics <input checked="" type="checkbox"/>

Study cycle	Type of the course unit
First <input checked="" type="checkbox"/> Second <input type="checkbox"/>	Mandatory course <input checked="" type="checkbox"/> Elective course <input checked="" type="checkbox"/> University-wide course <input type="checkbox"/> Individualized course <input type="checkbox"/> Interdisciplinary course <input type="checkbox"/>

Mode of delivery	Semester or period when it is delivered	Language of instruction
In class	5 semester	English

Requisites	
Prerequisites: The student must have mastered the subjects of Legal Regulation of Cybersecurity and Computer Networks	Co-requisites (if relevant): knowledge of programming fundamentals

Number of ECTS credits allocated	Student's workload (total)	Contact hours	Individual work
5	133	48	85

Purpose of the course unit		
<p>To familiarize students with the methods and tools used to collect, analyze, and evaluate publicly available information sources. The course aims to foster critical thinking and the ability to navigate large data streams, distinguishing reliable and relevant information from noise. Students acquire the practical skills necessary for analytical work in the public, private, or security sectors, where decisions are made based on carefully collected and verified information.</p>		
Learning outcomes of the course unit	Teaching and learning methods	Assessment methods
will be able to independently identify, collect, and critically evaluate information from open sources, using modern intelligence methodologies and specialized digital tools.	Lectures, exercises, independent study. Active teaching and learning methods (case studies, role-playing, group research). Individual practical assignments (searching for and evaluating sources, preparing analytical reports, applying OSINT tools).	Practical assignments, presentations of practical assignments, independent research of sources, preparation of analytical reports, midterm exam, final exam
will be able to systematically analyze and interpret collected data, draw well-	Lectures, exercises, independent study.	Practical assignments, presentations of practical

reasoned analytical conclusions, and present them in a clear and structured manner.	Active teaching and learning methods (case studies, role-playing, group research). Individual practical assignments (searching for and evaluating sources, preparing analytical reports, applying OSINT tools).	assignments, independent research of sources, preparation of analytical reports, midterm exam, final exam
understand the ethical and legal boundaries of open-source intelligence and be able to apply the acquired skills responsibly, adhering to professional standards and respecting privacy principles.	Lectures, exercises, independent study. Active teaching and learning methods (case studies, role-playing, group research). Individual practical assignments (searching for and evaluating sources, preparing analytical reports, applying OSINT tools).	Practical assignments, presentations of practical assignments, independent research of sources, preparation of analytical reports, midterm exam, final exam

Content	Contact hours							Individual work: time and assignments	
	Lectures	Tutorials	Seminars	Workshops	Laboratory work	Internship	Contact hours, total	Individual work	Tasks for individual work
1. Introduction to OSINT – Definition, scope, key concepts, and real-world applications.	2			4			6	12	Algorithm analysis, problem solving, tools analysis
2. Physical intelligence: scope, methods, sources of information, tools	2			4			6	14	Algorithm analysis, problem solving, tools analysis
3. Online Search Techniques – Advanced search operators, engines, and query optimization strategies	2			4			6	15	Algorithm analysis, problem solving, tools analysis
4. Social Media Intelligence (SOCMINT) – Collecting and analyzing data from social platforms	4			8			12	16	Algorithm analysis, problem solving, tools analysis
5 Geospatial Intelligence (GEOINT) – Using maps, satellite imagery, and location-based data	2			4			6	12	Algorithm analysis, problem solving, tools analysis
6. Mobile footprint. Tracking. Dar web.	4			8			12	16	
Total	16			32			48	85	

Assessment strategy	Weight %	Deadline	Assessment criteria
	30	On a	Students are required to select a real, legally operating

I part of the report and presentation		predefined date	<p>organization and conduct a comprehensive Open Source Intelligence (OSINT) analysis using publicly available information. The objective is to collect, evaluate, and synthesize data to build a structured intelligence profile of the chosen organization.</p> <p>The analysis should cover key aspects such as the organization's background, structure, activities, online presence, reputation, and any relevant risks or insights identified through open sources. Students must critically assess the reliability of sources and clearly document their methodology.</p> <p>The final deliverables include:</p> <ul style="list-style-type: none"> • a written report presenting findings in a clear, analytical, and well-structured format; • an oral presentation summarizing key insights, methods used, and conclusions. <p>The assignment emphasizes analytical thinking, source verification, ethical considerations, and the ability to communicate intelligence findings effectively.</p>
II part of the report and presentation	30	On a predefined date	<p>Students are required to select a real, legally operating organization and conduct a comprehensive Open Source Intelligence (OSINT) analysis using publicly available information. The objective is to collect, evaluate, and synthesize data to build a structured intelligence profile of the chosen organization.</p> <p>The analysis should cover key aspects such as the organization's background, structure, activities, online presence, reputation, and any relevant risks or insights identified through open sources. Students must critically assess the reliability of sources and clearly document their methodology.</p> <p>The final deliverables include:</p> <ul style="list-style-type: none"> • a written report presenting findings in a clear, analytical, and well-structured format; • an oral presentation summarizing key insights, methods used, and conclusions. <p>The assignment emphasizes analytical thinking, source verification, ethical considerations, and the ability to communicate intelligence findings effectively.</p>
Tool analysis report	20	On a predefined date	<p>cStudents are required to select one Open Source Intelligence (OSINT) tool and conduct a detailed analytical evaluation of its capabilities, applications, and limitations. The goal is to develop a clear understanding of how the tool supports intelligence gathering and analysis using publicly available data.</p> <p>The analysis should include an overview of the tool's purpose and core functionalities, practical use cases, types of data it can access or process, and its strengths and weaknesses. Students are expected to demonstrate the tool in practice by performing a small-scale investigation or example task, documenting the workflow and results obtained.</p> <p>Additionally, students should assess the tool from legal, ethical, and usability perspectives, including any potential risks, biases, or constraints associated with its use.</p>

			<p>The final deliverables include:</p> <ul style="list-style-type: none"> • a written report presenting the evaluation in a structured and critical manner; • an oral presentation demonstrating the tool, key findings, and practical insights. <p>This assignment aims to strengthen students' practical OSINT skills, critical evaluation abilities, and competence in presenting technical tools effectively.</p>
Exam	20	On a predefined date	<p>The test consists of 10 closed-ended questions (of varying difficulty, ranging from understanding algorithms to knowledge of theoretical foundations), each worth one point.</p> <p>The scoring is as follows: each question is worth one point. Exam scores are weighted with a coefficient of 0.5 in the final grade.</p>
<p>Final mark: $0.3*R1+0.3*R2+0.20*T+0.2*E$ Extern exam assessment strategy: Not applicable Using of AI tools not permitted if not stated otherwise by lecturer</p>			

REGARDING TAKING THE COURSE AS AN EXTERNAL STUDENT

Check <input checked="" type="checkbox"/>				If permitted, specify the conditions
Not permitted	<input type="checkbox"/>	Permitted	<input checked="" type="checkbox"/>	After completing all the work independently and submitting it to the instructor no later than 5 business days before the scheduled exam date

REGARDING THE USE OF GENERATIVE ARTIFICIAL INTELLIGENCE (GAI) TOOLS (SUCH AS "CHATGPT" OR OTHERS) WHILE STUDYING THE COURSE:

Check <input checked="" type="checkbox"/>				If permitted, specify the conditions
Not permitted	<input checked="" type="checkbox"/>	Permitted	<input type="checkbox"/>	

Check <input checked="" type="checkbox"/>				If permitted, specify the conditions
Not permitted	<input checked="" type="checkbox"/>	Permitted	<input type="checkbox"/>	

REGARDING PROGRESS IN ACHIEVING LEARNING OUTCOMES

A student who (1) consistently fails to demonstrate, throughout the semester during practical sessions (seminars, exercises, etc.) and (2) who has not fulfilled all interim assessment requirements and assignments within the timeframe specified in the course description, shall not be permitted to participate in the examination session.

Author (-s)	Publishing year	Title	Issue of a periodical or volume of a publication	Publishing house or web link
Required reading				
Baker, R.	2021	Deep Dive		https://www.raebaker.net/deep-dive
	2020	OSINT Tools and Resources Handbook 2020		https://i-intelligence.eu/uploads/public-documents/OSINT_Handbook_2020.pdf
Suksit Kwanoran, Varin Khera, Anand Prasa	2024	Open Source Intelligence (OSINT) – A Practical Introduction: A Field Manual		https://dokumen.pub/open-source-intelligence-osint-a-practical-introduction-a-field-manual-1nbsped-87700471

				97-8770047189-8770047170-1040301541-9781040301548-9788770047173-9788770047197-9788770047180.html
Recommended reading				
Bazzell, M.	2024	Open Source Intelligence Techniques		https://inteltechniques.com/book1.html
Ng A.	2023	Fundamentals of Open-Source Intelligence		https://alison.com/course/fundamentals-of-open-source-intelligence-osint

NOTE: Including Open Educational Resources in the reading list is recommended