



# UNIVERSITY OF DEFENCE FACULTY OF MILITARY LEADERSHIP

# Institutional Data Sheet for the International Winter Semester 2022/2023

# The International Semester is offered in the English language. **Erasmus ID Code:** CZ BRNO10 Website: www.unob.cz Jana Pracná **Erasmus+ Coordinator:** Tel: +420 973 44 37 47 Email: jana.pracna@unob.cz Start: 10 October 2022 Dates: End: 17 February 2023 Requirements for incoming Selected by home Higher Education Institution Cadets/Civilian Students: English language - B1 or NATO STANAG Level 2 Latest day of reporting participants: 30 June 2022 **Documents required for incoming Documents** Cadets/Civilian Students:

Accommodation & Meals:	Each participant has to find accommodation by his own. University of Defence does not have enough accommodation facilities for foreign students. Faculty of Military Leadership will try to arrange accommodation in the University of Defence dormitory or in the town's dormitory but without guarantee. These two mentioned accommodation possibilities will be known at least one month prior to the beginning of the international semester. Commercial accommodation is very expensive in Brno.
	Only lunch can be provided in dining hall during working days (ca. 2,5 EUR/lunch). Official currency in Czech Republic is Czech Crown (CZK; Koruna česká).
Student Responsibilities	The only student responsibility is to attend classes of chosen courses. The students will not be incorporated into a school regiment, so they will not participate in any military musters.
	As COVID-19 is still widespread in the EU, safety procedures and restrictions to international travels are updated on a regular basis.
SARS CoV-2 safety procedures:	Up to date information concerning travel restrictions and the epidemiological situation in Czech Republic can be found using the link below:
	https://covid.gov.cz/en/situations/foreigners/possibilities-and-obligations-foreigners-when-entering-cz
	Please be advised that all COVID-19 measures are tentative and as a such, subject to changes according to the national health regulations in effect.

# COURSE PLAN FOR WINTER SEMESTER OF ACADEMIC YEAR 2022/2023 FACULTY OF MILITARY LEADERSHIP

Course	Lectures	ECTS	Classification
Military Leadership	36	3	Credit
CM Defence and Security Economics	48	4	Credit + Exam
Tactics	36	3	Credit
Military Engineering	36	3	Credit
Selected Economics and Financial Risks	48	4	Credit
Security Aspects of International Relations	36	3	Credit
Terrorism	36	3	Credit
Probability and Statistics	56	4	Credit + Exam
Operational Research	56	4	Credit + Exam
Foreign Language I (English)	28	2	Credit
Foreign Language II (French)	28	2	Credit
Physical Education	26	2	Credit

Country	Institution	Non-common Module	ECTS
CZ	UoD	Military Leadership	3

Service	Minimum Qualification of Instructors
Infantry, Recce	Experience in leadership at Company level of combat branches (e.g.: Infantry, mechanized Infantry, reconnaissance branch) with education and
	with practical experience on company TLP.
Language	At least one mission/operation abroad, preferably on platoon or higher level.
English	English: Common European Framework of Reference for Languages (CEFR) Level B2 or NATO STANAG Level 3.

- English: Common European Framework of Reference for Languages (CEFR) Level B1 or NATO STANAG Level 2.
- Basic managerial and leadership; competences, focused on basic tactical level (light infantry platoon or equivalent).
- Understanding of light infantry platoon level tactics (defence, attack, movement, raid and ambush) and knows national military decision making process.
- Basic decision making techniques in stressful conditions.
- Ability to plan, organise and accept responsibility in stressful conditions.

# **Goal of the Module**

- Improve Leadership Competences.
- Examine different creative military problem solving techniques.
- Practice problem solving with a group and individually.
- Enhance ability to quickly adapt to the changing environment (in stressful conditions, lack of time, discomfort).

		Steps of the TLP and METT-TC analysis.
es	Know-	Sequences of orders.
earning utcomes	ledge	Knowledge about necessary behaviour to improve leadership competences in stressful conditions.
Le	Is capable of various decision making techniques in different tactical situations and changing environments as a leader.	
		Has the necessary organisational skills to organize different and

	various elements within his task organization as a leader.
	<ul> <li>Is able to lead unit's sub-elements in in different situations and environments.</li> </ul>
	Actively manages stress situations during long lasting burdens as a leader.
Compe- tences	<ul> <li>Improvement of leadership profiles (sustainability, adaptability, decision-making ability, communication &amp; organisational skills) in stressful conditions.</li> <li>Is capable of making decision in an unpredictable, potentially life-threatening environment in stressful conditions.</li> <li>Awareness of responsibility of subordinated human beings and their life as a leader.</li> </ul>

# **Verification of learning outcomes:**

Observation and final task results in the overall module grading at the final part. The final part is focused on the practical mastery of planning at the basic tactical level (troop leading procedures - light infantry level) and performing exercises on a virtual simulation. An individual qualified feedback is to be issued to the participants.

Module details				
Main Topic	Recom- mended WH	Details		
Introduction	2	<ul> <li>Introduction to the concept and structure of the module and an introduction to the theory of military leadership.</li> </ul>		
Leader's authority	2	The lecture introduces the issue of the authority of a military leader from the perspective of psychology, sociology and the specifics of the military environment.		
Leader's communication	2	<ul> <li>The lecture introduces the issue of communication of a military leader in a military environment.</li> </ul>		
Leader's authority and unit communication	2	Practical solution of model situations from the military environment - decision problems of a military leader.		
Leadership in stress conditions	6	Theoretical lectures and practical exercises in the field of decision making in lack of time and discomfort environment.		
Leadership combat psychology	2	Practical exercises is focused on moral dilemmas in military conflict.		
Principles of TLP	4	The lecture introduces in detail with the basic steps of TLP and METT-TC analysis on the example of a light infantry unit platoon level. Provides practical instructions for solving individual steps.		
Issue of order and reconnaissance	2	<ul> <li>The lecture introduces the methods and principles of conducting command reconnaissance.</li> <li>The lecture introduces the methods and principles of issuing a combat order. Provides practical instructions for verbal communication with the unit.</li> </ul>		
Commander reconnaissance	4	<ul> <li>Practical training in conducting command reconnaissance in the area of interest of future training.</li> <li>It is a source for understanding the received order and familiarization with the real environment of the area of interest and the task of the unit.</li> </ul>		
Issue of order	4	<ul> <li>Practical execution of the issue of an order.</li> <li>Students perform the tasks of a platoon leader and are evaluated according to predetermined criteria.</li> </ul>		
Final exercise – virtual simulation training	6	<ul> <li>Final exercise based on virtual simulation.</li> <li>Students perform the tasks of a platoon leader and are evaluated according to predetermined criteria.</li> </ul>		
Total lecture WH	36			
Additi	onal hour	s (WH) to increase the learning outcomes		
Self-Studies	0	On request only.		
Total WH	36	The detailed amount of hours for the respective main topic is up to the course director according to national law or home institution's rules.		



# Common Module Defence and Security Economics Description

Implementation Group

Doc.: IG/2013/07 Date: 28-8-2014

Origin: ESDC SECRETARIAT

Country	Institution	Module	ECTS		
		Defence and Security Economics	4.0		
Service		Minimum Qualification for Lecturers			
	Officers or Civilian Lecturers:				
All	_	nmon European Framework of Reference for Language BB2 or NATO STANAG 6001 Level 3.	jes		
		owledge of public economics, defence economics and	t		
Liigiisii	<ul> <li>Adequate kn</li> </ul>	owledge of economics.			

### Goal of the Module

# Prerequisites for international participants

- English: Common European Framework of Reference for Languages (CEFR) Level B1 or NATO STANAG Level 2.
- At least 1 year of national (military) higher education.
- Basic knowledge of economics and public economics or public finance.

- Discover and understand basic principles of functioning, structure and trouble spots of the economy part which creates conditions for basic satisfying societal needs as a protection of territorial integrity, state institutions, citizen and its property.
- Be aware of specification, classification and economic consequences of military expenditures and defence budgeting.
- Introduce to arms production and arms trade points at issue.
- Introduce to defence acquisition system.
- Deepen knowledge of the economic consequences of allied defence and security provision.
- Deepen knowledge of the decision making process within department of defence area.
- Learn about economic aspects of armed conflicts, causes, impacts and economic consequences of armed conflicts.
- Learn about future development of defence and security economy and economics in connection of emerging risks, threats and challenges as well as about defence resources allocation.
- Learn about possibilities of economic analysis usage within military and defence.

# earning outcomes

Know-

ledge

- Knows the crucial economy-security relations and principles of economic provision of defence and security.
- · Knows the basic direction of defence and security economy development.
- · Knows the basics of the economics in relation with defence budgeting.
- Knows basic principles of department of defence functioning in context of public government mission.
- Understands the national, European and international economic actors and their connections with particular reference to crisis/conflict conditions and military operations abroad.
- Demonstrate the necessary terminologies allowing him/her to express opinion, arguments and feedbacks in an appropriate manner in English.



# Common Module Defence and Security Economics Description

### Implementation Group

Doc.: IG/2013/07 Date: 28-8-2014

Origin: ESDC SECRETARIAT

	<ul> <li>Is able to analyse, synthesize, evaluate and make sound judgments with initiative and creativity.</li> </ul>
CI-III-	<ul> <li>Is able to consider the main economic problems related to the security and defence field.</li> </ul>
Skills	<ul> <li>Is able to consider the specific and economic consequences of defence budgeting.</li> </ul>
	<ul> <li>Is able to consider impacts of specific background of the defence acquisition system.</li> </ul>
	<ul> <li>Is able to argue the necessity of the economic burden which is borne by the society on the ground of defence and security provision.</li> </ul>
Compe- tences	<ul> <li>Is able to argue the necessity and suitability of economic analysis methods used in the defence and military decision making process.</li> </ul>
	<ul> <li>Analyse the economic trends and policies and consider possible courses of action.</li> </ul>

- Observation: Throughout the Module students are to discuss the given topics within syndicates and in the plenary and present teamwork results. During these work students are to be evaluated to verify their competences.
- Project: Group project and its defence and final examination. A group project will focus on the
  basic description of a selected part of defence and security economy. Students will have to
  select any country and do a general economic characterization, its defence or security system.
  Students will point out main problems connected to selected parts of defence and security
  economy within the condition of this country. Students can use basic methods of scientific work
  for the design of defence and security problem solutions.
- Test: Written examination at the end of the module. The type of the test is up to the Course Director.

Module Details				
Main Topic	Recomm- ended WH	Details		
Introduction to Defence		<ul> <li>Relations between national economy and defence and security.</li> </ul>		
and Security Economics	4	Development of military-economic thinking.		
		Defence and security as a economic problem.		
Defence spending as		Public and military expenditures.		
main Source of Defence Requirements and	4	Defence spending and cuts.		
financing Needs		Military expenditures classification.		
Military Expenditures	4	Multiplicative effects of military expenditures.		
Impacts on national Economy		Military expenditures and inflation.		
		Determinants of military expenditure level.		
		Defence industry.		
Defence industrial Base and Arm Transfers	4	Arms transfer.		
and Ann Transicis		Drivers of future defence industry development.		
Economics of Military Alliance 2		<ul> <li>Pros and cons of own multilateral defence and security securing.</li> </ul>		



# Common Module Defence and Security Economics Description

Implementation Group

Doc.: IG/2013/07 Date: 28-8-2014 Origin: ESDC SECRETARIAT

SECURITE ET DE DEPENSE.		
		<ul> <li>Financial issues of multilateral defence and security securing.</li> </ul>
		Economics of terrorism.
New Phenomenon in		Economic of armed conflicts.
the national Defence	10	Economics of private military and security companies,
and Security Economy		economics of military robotics.
		Economics of cyber space.
Defence Resources	2	Levels of resource allocation with defence area.
allocation Efficiency		<ul> <li>Expression and evaluation efficiency within defence area.</li> </ul>
Ad	lditional hou	rs to increase the learning outcomes
		Work on a project (budged reduction implementation
		act.).
Syndicate Work	9	<ul> <li>Increase the understanding of the LOAC's principles.</li> </ul>
		<ul> <li>Increase the understanding of the context of definitions in IHL on the basis of specific examples.</li> </ul>
Case Studies and		<ul> <li>Illustrate the basic rules (Geneva Conventions and their Additional Protocols).</li> </ul>
Discussions	8	Each case study comprises a description of a situation
		followed by questions.
		Introduction into defence resources management.
Defence Resources Management	6	<ul> <li>Defence Resources Management Initiatives.</li> </ul>
		<ul> <li>Specification of defence budgeting.</li> </ul>
		Introduction into financial resource management.
Financial Resources Management	6	<ul> <li>Examples of Financial Management Systems.</li> </ul>
Management		Foundations of Budget Design.
		Introduction of defence acquisition system.
Defence Acquisition		Defence market.
System	8	<ul> <li>Defence acquisition management process.</li> </ul>
		Defence acquisition management framework.
		Efficiency, economy and effectiveness problem in defence decision making process.
Introduction to		Mission and function of economic analysis methods.
Economic Analysis within the Condition of	10	Methods of economic analysis suitable for defence conditions.
Defence and of the Military Area		Examples of defence decision-making problems analysis
Willia y Alea		(military training, garrisons' closure, economic impacts, military activity studies).
		Preparation for the upcoming lessons and for exam(s).
Self-Study	23	Reflection of the topics issued.
		If IDL is developed it may be counted to these hours.
TOTAL	100	

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Original: iMAF 2014 participants 27th of June 2014 Revised by Col Dr. Gell 28th of August 2014

Country	Institution	Non-common Module	ECTS
CZ	UoD	Tactics	3

Service	Minimum Qualification of Instructors
All	English: Common European Framework of Reference for Languages (CEFR)     Level B2 or NATO STANAG 6001 Level 3.
Language	Subject matter expert.
English	Operational knowledge and experience.

- English: Common European Framework of Reference for Languages (CEFR) Level B1 or NATO STANAG Level 2.
- At least 1 year of national (military) higher education.
- Basic military training.

# **Goal of the Module**

• To consolidate, extend and deepen knowledge of military tactics within international environment.

sət	Know- ledge	<ul><li>Knows the main aspects of tactics.</li><li>Knows whole spectrum of tactical activities.</li></ul>
Learning outcomes	Skills	<ul> <li>Is able to define goal and basic principles of offensive activities.</li> <li>Is able to define goals and basic principles of defensive activities.</li> <li>Is able to define goal and basic principles of stabilization activities.</li> <li>Is able to define goals and basic principle of enabling activities.</li> </ul>
F	Compe- tences	Ability to assess principles and whole aspects of tactical activities within the historical context.

# **Verification of learning outcomes:**

### Observation:

Throughout the Module students are to fulfil given tasks particularly to write essay to prove understanding of basic principle of tactical activities using historical military operation or mission.

### Test:

Examination at the end of the module. The type of the test is up to the Course Director.

Module details			
Main Topic	Recom- mended WH	Details	
Tactical activities. Frameworks for conducting tactical activities. Elements of combat	4	<ul> <li>Introduction to tactical activities.</li> <li>Types of tactical activities.</li> <li>Tactics and military art.</li> </ul>	
Offensive tactical activities	12	Types of offensive tactical activities.	

Defensive tactical activities  Stabilization activities  Enabling tactical activities	12 4 4	<ul> <li>Attack.</li> <li>Other offensive activities.</li> <li>Types of defensive tactical activities.</li> <li>Defence.</li> <li>Delay operation.</li> <li>Types of stabilization activities.</li> <li>Role of military element within stabilization activities.</li> <li>Types of enabling tactical activities.</li> <li>Principles of enabling tactical activities.</li> </ul>
		Principles of enabling factical activities.
Total lecture WH	36	
		s (WH) to increase the learning outcomes
		s (WH) to increase the learning outcomes  • For reflecting the teaching hours.

Country	Institution	Common Module	ECTS
CZ	UoD	Military Engineering	3

Service	Minimum Qualification of Instructors
All	English: Common European Framework of Reference for Languages (CEFR)     Level B2 or NATO STANAG 6001 Level 3.
Language	Subject matter expert.
English	Operational knowledge and experience.

- English: Common European Framework of Reference for Languages (CEFR) Level B1 or NATO STANAG Level 2.
- At least 1 year of national (military) higher education.
- Basic military training.

# Goal of the Module

- To provide overview of military engineering on tactical and operational level.
- To introduce MILENG doctrinal system
- To make students able to use gained information in the mutual context.
- To enhance ability to understand engineer matters among other types of military forces and services.

Learning outcomes	Know- ledge	<ul> <li>Knows the hierarchy of key engineer policies and doctrines</li> <li>Is equipped with knowledge of military engineering roles, tasks and measures</li> </ul>				
	Skills	<ul> <li>Can use NATO MILENG doctrines for engineer tasks understanding</li> <li>Leads negotiations with military personnel related to military engineering</li> <li>Is able to use knowledge of MILENG to cooperate with military organisations</li> <li>Taking in account MILENG matters during decision making process</li> </ul>				
Fe	Compe- tences	<ul> <li>Is capable to find doctrines and STANAGS in online NATO library</li> <li>Can use mind maps to resolve problems connected to decision making</li> </ul>				

- Observation: During the course students elaborate mind maps to understand context of
  engineer measures and engineer doctrines. It helps them to take in account all aspects of
  military engineering activities including engineer subsystem of command.
- Presentation: All mind maps elaborated by students are presented on the final colloquium.

Module details			
Main Topic	Recom- mended WH	Details	
Military Committee Policy for Military Engineering (ME). Principles and significance.	2	<ul> <li>Introduction to the subject</li> <li>Requirements to the credit specification</li> <li>Main operational and engineer terms and definitions</li> <li>Operational functions and their engineer support</li> <li>Military Committee Policy for Military Engineering</li> </ul>	

		Main rules of military engineering on the strategic level
MC 0560/1 document studying, results creation;	4	<ul> <li>Document studying</li> <li>Elaboration of mind map illustrating context of main document ideas</li> </ul>
STANAG 2238, AJP 3.12 Allied Doctrine for Military Engineering. Principles and fundamentals.	2	<ul> <li>NATO doctrinal system</li> <li>Doctrines related to engineer support</li> <li>Gaining doctrinal resources from NATO sites</li> <li>AJP 3.12 Allied Doctrine for Military Engineering</li> <li>Military engineering measures on the operational level</li> <li>Command and control MILENG sub-system on the operational level</li> </ul>
AJP 3.12 document studying, results creation	6	<ul> <li>Document studying</li> <li>Elaboration of mind map illustrating context of main document ideas</li> <li>Elaborating mind map illustrating context to previous document</li> </ul>
STANAG 2394, ATP-3.12.1 Allied Tactical Doctrine for Military Engineering. Principles and fundamentals.	2	<ul> <li>Main engineer tasks and measures fulfilled on the tactical level</li> <li>Command and control MILENG sub-system on the tactical level</li> <li>ATP-3.12.1 Allied Tactical Doctrine for Military Engineering</li> </ul>
ATP-3.12.1 document studying, results creation	8	<ul> <li>Document studying</li> <li>Elaboration of mind map illustrating context of main document ideas</li> <li>Elaborating mind map illustrating context to previous documents</li> </ul>
Elaboration of the term credit work	8	<ul><li>Finalization of mind maps</li><li>Elaboration of presentations</li></ul>
Elaboration and vindication of the term credit work. Final colloquium and student's presentation.	2	<ul> <li>Presentation of mind maps elaborated during term lessons</li> <li>Topic discussion</li> <li>Conclusion formulation</li> </ul>
Total lecture WH	36	
Additional hours (WH) to increase the learning outcomes		
Self-Studies	30	<ul> <li>Study of related and supporting documents</li> <li>Language skills improvement</li> <li>Preparation for the upcoming lessons</li> </ul>
Total WH	66	

Country	Institution	Non-common Module	ECTS
CZ	UoD	Selected Economics and Financial Risks	3

Minimum Qualification of Instructors
English: Common European Framework of Reference for Languages (CEFR) Level B2 or NATO STANAG 6001 Level 3.
<ul><li>Subject matter expert.</li><li>Operational knowledge and experience.</li></ul>

- English: Common European Framework of Reference for Languages (CEFR) Level B1 or NATO STANAG Level 2.
- At least 1 year of national (military) higher education.
- Basic military training.

# **Goal of the Module**

• To consolidate, extend and deepen knowledge of selected economics and financial risks within international environment.

	Know- ledge	<ul> <li>Knowledge of capital market and currency markets as a prerequisite for managing economic and financial risks.</li> </ul>
		<ul> <li>Knowledge of basic types of economic and financial risks and their classification.</li> </ul>
		<ul> <li>Knowledge of fiscal policy from the point of view of the economic policy of the state and its impacts with regard to the economic risks arising from it.</li> </ul>
		<ul> <li>Knowledge of basic economic fundamentals and the area of financial management, laws, principles, relationships and links between related economic variables.</li> </ul>
mes		<ul> <li>Knowledge of analytical support in the field of financial decision-making and prevention of financial risks.</li> </ul>
Learning outcomes		<ul> <li>Knowledge of the principles of economic, financial and risk management in the organization of the public sector.</li> </ul>
ing c	Skills	<ul> <li>Identify, appropriately classify and prioritize economic and financial risks in the financial management of the organization.</li> </ul>
earr-		<ul> <li>Using the acquired knowledge, the ability to critically evaluate selected economic contexts from the perspective of risk management.</li> </ul>
		<ul> <li>Ability to create analytical, informational and evaluation support to the superior element within the job / job classification in the field of financial management.</li> </ul>
		<ul> <li>Skills necessary for the preparation and implementation of financial decisions and evaluation of their economic impact.</li> </ul>
		<ul> <li>Management on the basis of basic financial and economic indicators and the ability to deduce the nature of their impact on management using appropriate methods and tools.</li> </ul>
	Compe- tences	Respecting basic economic laws and inferring under conditions of real changes in economic conditions.

- **Observation:** Throughout the Module students are to discuss the given topics within syndicates and in the plenary and present teamwork results. During these work students are to be evaluated to verify their competences.
- Attendance: 80% as minimum mandatory attendance at training lessons, activity in training, preparation for training lessons in a range of questions provided to the individual topics
- Project: final project determined by lecturer and its successful presentation during the final seminar.

Module details			
Recom- Main Topic mended WH		Details	
Economic and financial risks and their classification	4	Aim is to clarify the concept of risk and its classification in the financial field. Focus on basic concepts related to financial planning.	
Risk management in public administration	4	Aim is to acquaint students with e-financial management in the public sector and with risks related to public finances.	
Risk prevention	4	The aim of the topic is to acquaint students with the methods of risk prevention, the historical context and development of insurance and the products of insurance institutions.	
Credit risk	4	The aim of the topic is to acquaint students with the products of commercial financial institutions and socio-pathological phenomena that are the result of financial problems in connection with risk.	
Capital risks	4	The aim of the topic is to acquaint students with the management of selected financial and economic risks in the company.	
Investment decision making and tools for its support	4	The aim of the topic is to acquaint students with the tools of investment decision-making and its support.	
Risk assessment	4	The aim of the topic is to acquaint students with specific methods of risk assessment and show their strengths and weaknesses.	
Final seminar	2	Work out a comprehensive example in the specified formal arrangement. At the final seminar, present it in a time allowance of 10 minutes.	
Total lecture WH	30		
Additional hour		s (WH) to increase the learning outcomes	
Self-Studies	36	<ul><li>Work on a project</li><li>Preparation for seminars tasks</li><li>Project consultation</li></ul>	
Total WH	66	The detailed amount of hours for the respective main topic is up to the course director according to national law or home institution's rules.	

Country	Institution	Non-common Module	ECTS
CZ	UoD	Security Aspects of International Relations	3

Service	Minimum Qualification of Instructors
All	English: Common European Framework of Reference for Languages (CEFR)     Level B2 or NATO STANAG 6001 Level 3.
Language	
	Subject matter expert.
English	Operational knowledge and experience.

- English: Common European Framework of Reference for Languages (CEFR) Level B1 or NATO STANAG Level 2.
- At least 1 year of national (military) higher education.
- Basic military training.

### **Goal of the Module**

To consolidate, extend and deepen knowledge of security aspects of international relations within international environment.

outcomes	Know- ledge	<ul> <li>Understands the system of international relations</li> <li>Knows the main international actors and understands their character</li> <li>Understands the international security architecture</li> <li>Understands the characteristics and fundamental principles of international law of armed conflicts</li> <li>Understands the main global security threats</li> <li>Understands the US, Russian and German security policy</li> </ul>
Learning	Skills	<ul> <li>Is able to analyse and evaluate the international system and its processes.</li> <li>Is able to analyse and evaluate the global security threats and their impact</li> <li>Is able to analyse and evaluate the security policies of chosen states</li> </ul>
	Compe- tences	<ul> <li>Multidisciplinary understanding of global processes and relationships</li> <li>Capacity of supporting and presenting orally and in writing personal opinions and conclusions</li> </ul>

- Observation: Throughout the Module students are to discuss the given topics within seminars.
- Presentation: Each student deliver presentation on specific topic.
- **Test:** Written examination at the end of the module. The type of the test is up to the Course Director.

Module details		
Main Topic	Recom- mended	Details

	WH	
Theoretical Framework, Historical Development and Character of the International System	4	<ul> <li>Become familiar with the system of international relations.</li> <li>Introduce the basic characteristics and actors of the IR system.</li> </ul>
Contemporary International Security Architecture	4	<ul> <li>Explain the concept of security architecture.</li> <li>Outline the basic stages of security architecture. development and describe the links of its key elements.</li> <li>Generalize the consequences of the development and current state of the security environment.</li> </ul>
International Law (lus ad bellum)	4	<ul> <li>Introduce the basic principles of the international law of armed conflics.</li> <li>Define the content of the "right to war" (ius ad bellum).</li> </ul>
International Law (lus in bello)	4	Define the content of "law in war" (ius in bellum).
Global Security Threats	8	<ul> <li>Explain basic terminology in the field of security environment assessment and security threats.</li> <li>Introduce global security threats in the security sectors.</li> <li>Discuss the Czech Republic's position on current global security threats.</li> </ul>
Security Policy of the USA	4	<ul> <li>Explain the origins of American strategic thinking.</li> <li>Point out the basic principles of the past and present US security policy.</li> </ul>
Security Policy of the Russian Federation	4	<ul> <li>Explain the origins of Russian strategic thinking.</li> <li>Point out the basic principles of the past and present Russian security policy</li> </ul>
Security policy of Germany	4	<ul> <li>Introduce basic principles and genesis of the German security policy.</li> <li>Define priorities of the German security policy and the forms of their enforcement.</li> <li>Introduce implications for the Czech Republic and the Czech Armed Forces</li> </ul>
Total lecture WH	36	
Additional hours		s (WH) to increase the learning outcomes
Self-Studies	30	Become familiar with the content of the required sources.
Total WH	66	The detailed amount of hours for the respective main topic is up to the course director according to national law or home institution's rules.

Country	Institution	Non-common Module	ECTS
CZ	UoD	Terrorism	3

Service	Minimum Qualification of Instructors
All	English: Common European Framework of Reference for Languages (CEFR)     Level B2 or NATO STANAG 6001 Level 3.
Language <b>English</b>	Subject matter expert.
	Operational knowledge and experience.

- English: Common European Framework of Reference for Languages (CEFR) Level B1 or NATO STANAG Level 2.
- At least 1 year of national (military) higher education.
- Basic military training.

# **Goal of the Module**

• To consolidate, extend and deepen knowledge of terrorism within international environment.

outcomes	Know- ledge	<ul> <li>Familiarity with problematic aspects related to the definition of terrorism.</li> <li>Familiarity with the evolution of terrorism on the background of geopolitical and regional developments.</li> <li>Familiarity with contemporary challenges in terrorism and counterterrorism.</li> </ul>
Learning ou	Skills	<ul> <li>Ability to recognize acts of terrorism from other violent acts.</li> <li>Ability to recognize indicators of radicalization.</li> <li>Ability to identify geographic areas vulnerable to terrorism.</li> <li>Ability to draft a strategy.</li> </ul>
	Compe- tences	Analytical thinking, critical thinking, negotiating.

- **Observation:** active participation in seminars (20% of evaluation)
- Test: written final test (80% of evaluation)

Module details			
Main Topic Recom- mended WH		Details	
Theoretical framework of terrorism	2	<ul> <li>Problematic aspects of defining terrorism</li> <li>Terrorism versus organized crime, guerrilla, and war</li> <li>Typology of terrorism</li> </ul>	
Evolution of terrorism	4	• Waves of terrorism: anarchic, ethno-nationalist, leftist (communist), religious, far right	
Islamist terrorism	4	<ul> <li>Evolution of Islamist terrorism</li> <li>Specific features of Islamist terrorism</li> <li>Contemporary trends and challenges</li> </ul>	

Radicalization	4	<ul> <li>Driving factors of radicalization towards salafi-jihadism</li> <li>"Profile" of different categories: foreign fighters, lone actors, returnees, women and terrorism</li> <li>Challenges in deradicalization</li> </ul>	
Media and terrorism	4	Use of media by terrorists (print media, satellite television, online social media)	
Terrorist safe havens	4	<ul> <li>Case studies: al-Shabab in Somalia, al-Qaeda in Afghanistan, Islamic state in Iraq and Syria</li> <li>Analytical framework for identifying terrorist safe havens</li> </ul>	
Modern aspects of terrorism	4	<ul><li>Financing terrorism</li><li>Terrorism and CBRN</li><li>Cyberterrorism</li></ul>	
Counterterrorism	4	<ul> <li>Law enforcement approach in CT</li> <li>Military approach in CT</li> <li>Negotiating with terrorists</li> </ul>	
Czech Republic and terrorism	4	<ul> <li>Historical perspective: from state sponsoring terrorism to state fighting terrorism</li> <li>Risk factors of domestic and foreign terrorism in the Czech Republic</li> <li>Strategy of the Czech Republic for the fight against terrorism</li> <li>CT legislation</li> </ul>	
Credit seminar	2	Written test	
Total lecture WH	36		
Additional hours		s (WH) to increase the learning outcomes	
Self-Studies	30	Studying required materials and preparation for seminars	
Total WH	66	The detailed amount of hours for the respective main topic is up to the course director according to national law or home institution's rules.	

Country	Institution	Non-common Module	ECTS
CZ	UoD	Probability and Statistics	4

Service	Minimum Qualification of Instructors
All	English: Common European Framework of Reference for Languages (CEFR)     Level B2 or NATO STANAG 6001 Level 3.
Language	Subject matter expert.
English	Operational knowledge and experience.

- English: Common European Framework of Reference for Languages (CEFR) Level B1 or NATO STANAG Level 2.
- Mathematics: Basic knowledge of calculus and computer science fundamentals.

# **Goal of the Module**

The course is focused on the probability including mathematical basis for the description of discrete and continuous probability models. Students will be acquainted with the processing of one-dimensional statistical data, the theory of point and interval estimation and statistical tests that are based on normal probability distribution. The practical implementation of exploratory data analysis, calculation of estimates and statistical characteristics including the statistical hypothesis testing will be done using the software environment STAT1 and R. Statistical data and illustrative examples will be chosen with an emphasis on the field of study.

outcomes	Know- ledge	Student identifies the basic methods of descriptive and inductive statistics, methods of collecting real data and the creation of data files for statistical analysis.
	Skills	<ul> <li>Student applies the basic methods of descriptive and inductive statistics, methods of collecting real data and the creation of data files for statistical analysis.</li> </ul>
Learning	Compe- tences	Student is able to actively utilize and interpret the results of these methods.

- Processing, presentation and defence of a seminar paper.
- Written and oral examination corresponding to the content of the subject.

		Module details
Main Topic	Recom- mended WH	Details
Introduction	4	<ul><li>mathematical foundations</li><li>introduction to the statistics</li></ul>
Descriptive Statistics	4	<ul><li>statistical data</li><li>exploratory analysis and processing of statistical data</li></ul>
Probability	8	<ul><li>probability</li><li>properties and calculation of probability</li></ul>
Random Variable	12	<ul><li>probability distribution</li><li>discrete probability distributions</li><li>continuous distributions</li></ul>
Inductive Statistics	24	law of large numbers and limit theorems

Application of Statistical Methods Total lecture WH	4 56	<ul> <li>random sampling and sample characteristics</li> <li>point and interval estimates</li> <li>the principle of statistical hypothesis testing</li> <li>one-sample test of hypotheses</li> <li>two-sample tests of hypotheses</li> <li>statistical tests on the distribution of the population</li> <li>solving practical problems using the software STAT1 and R</li> </ul>
Total lecture WH	30	
		s (WH) to increase the learning outcomes
		WH) to increase the learning outcomes     Homework, elaboration of a seminar paper.     Preparation for semestral tests and final exam.

Country	Institution	Non-common Module	ECTS
CZ	UoD	Operational Research	4

Service	Minimum Qualification of Instructors
All	English: Common European Framework of Reference for Languages (CEFR)     Level B2 or NATO STANAG 6001 Level 3.
Language	Subject matter expert.
English	Operational knowledge and experience.

- English: Common European Framework of Reference for Languages (CEFR) Level B1 or NATO STANAG Level 2.
- Mathematics: Basic knowledge of calculus and linear algebra.

### **Goal of the Module**

- To consolidate, extend and deepen knowledge of operational research.
- To familiarize students with common types of optimization problems (namely linear programming problems, multi-criteria decision making and matrix games) and basic methods for their solution (especially the simplex method).
- To deepen knowledge of mathematical tools needed to solve selected optimization problems.

Sé	Know- ledge	<ul> <li>Students will:</li> <li>understand the grounds of common types of optimization problems;</li> <li>be able to identify and formulate specific optimization problems;</li> <li>understand the principles and functioning of basic methods for solving optimization problems.</li> </ul>
Learning outcomes	Skills	<ul> <li>Students will master mathematical tools needed for solving common types of optimization problems (namely linear programming problems, multi-criteria decision making and matrix games).</li> <li>Students will be able to</li> <li>choose and apply the appropriate algorithm for solving a given optimization problem;</li> <li>find the optimal solution(s) to a problem;</li> <li>interpret the results.</li> </ul>
	Compe- tences	<ul> <li>Students will be familiarized with common real-life and professional optimization problems and methods for their solving.</li> <li>Students will be able to solve (basic) practical optimization problems using software (MS Excel, LiPS, online calculators).</li> </ul>

- **Observation:** The prerequisites of successful completion of the module are (1) active participation in seminars and (2) passing three written tests given during the semester. Throughout the semester, students will be asked to do homework related to topics explained at lectures and seminars.
- **Test:** The module is concluded by a written final exam which will cover the topics explained throughout the semester.

		Module details
Main Topic	Recom- mended WH	Details
Introduction to Linear Programming (LP)	4	<ul><li>LP formulations, types of LP problems</li><li>Mathematical grounds for solving LP problems</li></ul>
Graphical Method for Solving LP Problems	4	Finding the optimal solution to a LP problem using Graphical Method
Simplex Method and Two- phase Method	8	<ul><li>Simplex algorithm for solving LP problems</li><li>Two-phase Method</li></ul>
Duality in LP Problems	4	<ul><li>Primal and dual LP problems</li><li>Dual simplex algorithm</li></ul>
Transportation Problem	8	<ul> <li>Finding the optimal solution to a balanced transportation problem (Vogel's Approximation Method)</li> <li>Unbalanced transportation problem</li> </ul>
Assignment Problem	4	Finding the optimal solution to an assignment problem (the Hungarian Method)
Multi-criteria Decision Making	4	<ul><li>Decision matrix</li><li>Graphical Method, Weighted Sum Method</li></ul>
Multi-objective Linear Programming (MOLP)	8	<ul> <li>Formulation of a MOLP problem</li> <li>Lexicographic Method, Weighted Aggregation of the Objectives Method</li> <li>Goal Programming</li> </ul>
Introduction to Matrix Games	8	<ul> <li>Solving matrix games with saddle point</li> <li>Finding the optimal solution to matrix games without saddle point</li> <li>Special types of matrix games without saddle point (2 x 2, 2 x n, m x 2)</li> </ul>
Solving Matrix Games as LP Problems	4	Transformation of a matrix game into a LP problem
Total lecture WH	56	
Addition	onal hour	s (WH) to increase the learning outcomes
Self-Studies	56	Homework, preparation for seminars.     Preparation for tests and final exam.
Total WH	112	The detailed amount of hours for the respective main topic is up to the course director according to national law or home institution's rules.

# **List of Abbreviations:**

CEFR Levels	B1, B2
Common European Framework of Reference for Languages	CEFR
European Credit Transfer and Accumulation System	ECTS
European Security and Defence College	ESDC
Implementation Group	IG
North Atlantic Treaty Organization	NATO
Standardization Agreemen	STANAG
Working Hou	WH

# **FOREIGN LANGUAGE I (ENGLISH)**

Course description

Foreign Language I is English.

Students will be put into a language course on the basis of their placement test results.

The objective of the course is to develop general and professional language skills and knowledge. Students will acquire the following:

- the knowledge of terminology of their branch of study, basic military terminology and topics related to their studies;
- the skills to communicate in the field of their branch of study and in the military and everyday situations;
- language competence in professional and academic language at CEFR levels B1-B2.

Entrance requirements

Note

**CEFR level B1 (intermediate level)** 

# **FOREIGN LANGUAGE II (FRENCH)**

Course description

Foreign Language II is French and Russia.

Students will be put into a language course on the basis of their language knowledge. The aim of the course is to develop general and professional language skills. The language education corresponds to the CEFR European standard. The graduate acquires:

- language knowledge necessary for communication
- language communication competence in common occupational and social situations
- language competence in general and partially in professional language at CEFR level A2-B1.

Entrance requirements

**CEFR level A1-A2 (pre-intermediate level)** 

Note

NTA

# PHYSICAL EDUCATION

Course description

This course provides knowledge of basic training methods and techniques, with an emphasis on developing and preserving levels of physical fitness required to carry out physical training activity. The course also provides students with the basic knowledge and tools needed to develop the physical and psychological strength required for stressful military training activity such as survival training for adverse situations. Civil students obtain knowledge of training methods and techniques without military training activities.

Entrance requirements

NTA

Note

NTA

CONTACTS

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# **ABBREVIATIONS**

A1, A2 etc. levels of language skills according to CEFR

CEFR Common European Framework of Reference (for Languages)

European Credit Transfer and Accumulation System

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