



68th Implementation Group Meeting (25th-26th Nov 25, Thessaloniki)

LoD - 01 / 02 / 08

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CM's revised/checked

- New CM on Military History of the 20th Century (POC: Olga DUARTE and Tom SIMOENS)
- Revised CM's of the Logistics Semester (POC: Malgorzata GRZELAK)
 - CM Relief Logistics
 - CM Databases
 - CM Basics of Military Logistics Information Systems
 - CM Multinational Operations Logistics
- New CM on Space-Based ISR, Operations and Situational Awareness

➔ SILENCE PROCEDURE ➔ official approval by the IG-members according to the procedure agreed upon in Brussels (67th IG)



Revision results

Country BE / PT	Institution Royal Military Academy of Belgium / Portuguese Military Academy	Common Module Military History of the 20th century	ECTS 2.0
Service(s) ALL	Minimum Qualification of Instructors		
Language English	- Common European Framework of Reference for Languages (CEFR) Level B2 or NATO STANAG Level 3. - Knowledge of History, International Relations, or Military Studies. - Teaching experience related to the topic.		
SQF MILOF	Competence area – Combat-Ready Role Model Learning area – Military history: Traditions Organisational level – all levels		
Prerequisites for international participants		Contents of the Module:	
- English: Common European Framework of Reference for Languages (CEFR) Level B1 or NATO STANAG Level 2. - Minimum of 1 year national (military) higher education. - Basic knowledge of national and international military structures. - Good presentation skills. - Ability to work in a team.		- Origins and evolution of warfare in the 20th century (land, sea, air). - History of military technology, military culture, tactics and strategy in the 20th century.	
Learning outcomes	Knowledge	- List analytical approaches to understand and to analyse the conduct of 20th-century warfare. - Explain how wars were fought in the 20th century (land, sea, air).	
	Skills	- Analyse historical battles and military campaigns of the 20th century by applying analytical approaches introduced earlier, considering their objectives, weapon systems, force structures, military cultures, planning processes, and outcomes, in order to identify key successes and failures. - Advise how elements such as resources, geography, morale, timing, meteorological circumstances, friction, the population etc. determine strategic and tactical outcomes.	
	Responsibility & Autonomy	- Take responsibility for producing informed and evidence-based analyses of military events and developments. - Demonstrate autonomy in researching and reflecting on warfare in the 20th century.	
Verification of learning outcomes:			
Observation: Throughout the Module students are to discuss given topics within syndicates and in the plenary. During these moments of discussion students are to be evaluated to verify their competences regarding the learning outcomes.		Evaluation: Test: Written examination at the end of the module, primarily aimed at evaluating the knowledge of the cadets. Group assignment: The group assignment will centre on the presentation and discussion of a significant European battle of the 20th century. This battle should be linked to the key concepts explored throughout the course. Project evaluation will be based on criteria that assess each cadet's ability to identify, analyse, compare, and explain core concepts in Military History. Additionally, the evaluation will consider individual contributions, responsibility, and autonomy, particularly during the Q&A session. Although this is a group assignment, all cadets are expected to actively participate in the presentation and speak for an approximately equal amount of time.	

Module details		
Main Topic	Recommended WH	Details
Introduction to Military History	4	- What is Military History - approaches and methodologies. - Theory of war: Clausewitz, Sun Tzu. - Key concepts and analytical tools regarding to strategy, tactics, doctrine, such as the principles of war, fog of war, friction, deception etc.
World War I - the war of industrial masses	4	- Trench warfare, gas, tanks, air power begins. - Naval blockade and submarine warfare. - Multinational coalitions and coordination challenges.
World War II - the war of industrial annihilation	4	- Blitzkrieg. - Strategic bombing. - Maritime operations (e.g. island hopping in the Pacific, convoys, submarine warfare). - Coordination of land-sea-air forces, e.g. D-Day.
Cold War	4	- EU military developments: post-WWII integration efforts, NATO and WEU. - Nuclear deterrence, containment, forward deployment, and force projection. - Decolonisation. - Case studies (e.g. Korean War, Vietnam War, Afghan War (USSR), Desert Storm...).
Post Cold War Conflicts	4	- Manoeuvre warfare. - Peacekeeping and Humanitarian operations conducted by the European Union (CSDP), NATO, and the United Nations (e.g. Former Yugoslavia). - Insurgency, Counterinsurgency and Asymmetric Wars. - Great Power Competition (China, Russia). - Hybrid warfare, Information Ops, and drones.
Tutorials	5	Syndicate work or tutorials on the above-mentioned topics, where cadets prepare answers to questions about the course material that was already discussed or will be discussed (individually or in small groups).
Total lecture and tutorials WH	20+5	
Additional hours (WH) to attain the learning outcomes		
Self-Studies	23	- Reflection on the topics discussed. - Preparation for the group assignments and written test.
Evaluation	1	Group assignment: presentation of a case (battle, campaign) of the 20th century of interest to the cadet's nation.
Test	1	Written test.
Total WH	50	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.



Revision results

Country GR	Institution Hellenic Army Academy	Common Module Relief Logistics	ECTS 2.0
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Service ALL	Minimum Qualification of Instructors - English: Common European Framework of Reference for Languages (CEFR) Level B2 or NATO STANAG 6001 Level 3. - Teaching experience in the field of Logistics /Supply chain.
Language English	
SQF MILOF	Competence area - Military technician. Learning area – Sustaining the forces. Organisation level - Single service.

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.	Contents of the Module - The combat service supports capabilities of units and formations specific to the service during humanitarian operations. - The logistics requirements during the planning of humanitarian operations.
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Learning outcomes	Knowledge	- Explain how humanitarian relief is provided. - Define the principles of humanitarian contexts and the structure of response systems.
	Skills	- Apply the characteristics of the relief Logistics. - Manage resources to apply logistical principles and concepts to the humanitarian context.
	Responsibility and autonomy	Take responsibility to manage scarce organisational resources in unforeseen and changing situations of the operating environment, prioritising and allocating appropriate resources to subordinate units to accomplish specific objectives in a humanitarian relief context.

Verification of learning outcomes: - Observation: Throughout the Module students/cadets are to discuss given topics within syndicates and in light of a respective case study and in the plenary. During these <u>works</u> students/cadets, are to be evaluated, based also on their argumentation, in order to verify their competences. - Test: Written examination at the end of the Module. The type of the test is up to the Course Director and the topics discussed, during the sessions. If needed, more tests may be conducted during the Module, for students/cadets to emphasise and to develop their argumentation.
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Main Topic	Recommended WH	Details
Humanitarian Logistics and Supply Chains	4	- Principles of Logistics. - Introduction to humanitarian/relief logistics. - Characteristics of humanitarian/relief logistics. - Characteristics of effective response operations.
Supply Chains in Relief Logistics	8	- Services in humanitarian logistics. - Managing humanitarian supply chains. - Emerging Trends. - Supply Chain Coordination.
Trends in humanitarian supply chains I	6	- Disease Outbreaks. - Security. - Migration and shelter. - Location Models (facilities and infrastructures).
Trends in humanitarian supply chains II	6	- Storage, Warehousing and Stock Control. - Transport, Fleet Management. - Air Ops and Maritime. - Introduction to Medical and Cold Chain. - Humanitarian Coordination Mechanisms (procurement, pre-positioning-warehousing-transportation).
Total lecture	24	
Self-Studies	26	For reflecting the teaching hours.
Total	50	The detailed <u>amount</u> of hours for the respective main topic is up to the course director according to national law or home institution's rules.



Revision results



Common Module
Databases
Module Description

Implementation Group
Doe.: IGI/XXXX
Date: DD MM YYYY
Origin: Hellenic Army Academy

Country GR	Institution Hellenic Army Academy	Common Module Databases	ECTS 2.0 (+ 1.0 e-learning)
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Service ALL	Minimum Qualification for Lecturers		
Language English	- Fully qualified IT or Computer Science officer. - Outstanding knowledge of Relational Databases and Structured Query Language (SQL) and national/international experience in IT. - Teaching experience in the field of Relational Databases and IT technology. - English: Common European Framework of Reference for Languages (CEFR) Level B2 or NATO STANAG Level 3.		
SQF MILOF	Competence area – Military technician. Learning area – C4ISR systems & cyber defence. Organisation level – Single service.		

Prerequisites for international participants		Contents of the Module
- English: Common European Framework of Reference for Languages (CEFR) Level B1 or NATO STANAG Level 2. - Basic knowledge of IT (ECDL) or similar knowledge⁶.		- Relational database and database management systems. - Design and implementation of relational databases. - Identification and normalisation of existing relational DB. - Database development using commercial and open-source software applications (MS Access, Libre Office Base or relevant)

Learning outcomes	Knowledge	- Define the basics of a relational database and formulate the conceptual, logical, and physical database design methodology, including the normalisation process (1NF-3NF) to eliminate redundancy and ensure data integrity. - Understand the syntax and functions of SQL for querying and manipulating relational databases.
	Skills	- Design and implement a relational database schema based on user requirements. - Identify and normalise an existing relational database.
	Responsibility & Autonomy	- Design, create, develop, and query a database using MS Access, LibreOffice Base, or relevant (Queries, Forms, Reports, etc). - Identify and normalise an unnormalized database up to 3rd Normal Form (NF).

Verification of learning outcomes:	
Observation: Throughout the module, students will discuss topics within syndicates and in the plenary. During this work, students are evaluated to verify their performance. Evaluation: Group presentations of given topics. Test: Written exam (multiple choice) at the end of the Module.	



Common Module
Databases
Module Description

Implementation Group
Doe.: IGI/XXXX
Date: DD MM YYYY
Origin: Hellenic Army Academy

Module details			
Main Topic	Residential WH	E-learning	Details
Introduction to DBs	2	1	- Data vs Information. - Traditional File-Based Systems and Limitations. - What is? Why do we need them? - DB and DBMS Environment, Pros & Cons.
DB Environment	2	1	- DB Three Level Architecture. - View Level, Conceptual Level, Physical Level. - Data Independence. - DB Languages. - DBMS Functions.
Entity-Relationship Model	2	2	- Entities, Attributes, Primary Keys, Relationships. - Cardinality Ratio (1-1, 1-M, M-N). - Participation/Mapping Constraints (total/partial). - E-R Diagram. - Constraints & Assumptions, etc.
Design and Implementation of a DB	4 (incl. 2 SW)	2	- Examples / Tutorial: - How to design a DB (Conceptual & Logical Design). - Apply any constraints & assumptions, etc. - How to implement it (Physical Design).
Normalisation	4 (incl. 1 SW)	2	- Introduction to Normalisation. - Normal Forms (What is it? Why do we need it? How does it work?). - Examples / Tutorial.
Case study: working with MS Access / Libre Office Base Environment	4 (incl. 2 SW)	1	- Examples / Tutorial / Case Study. - Intro to Microsoft Access / Libre Office Base Environment (Depending on which is installed in the labs). - Tables, Attributes, Primary Keys, Relationships (Cardinality Ratio, Mapping Constraints, Referential Constraints, etc.).
Case study: working with MS Access / Libre Office Base Environment	4 (incl. 2 SW)	2	- Queries By Example (QBE) using Microsoft Access or Libre Office Base Environment (Simple, Complex, Aggregate functions, etc.). - Forms, Reports, etc.
Total lectures	22 15 + 7 (SW)	12	
Self-Studies	26	13	- Self-studies, pre-readings & self-evaluation tests. - E-learning may also be counted as self-studies.
Exams	2	1	- Final Exam. - Self-evaluation tests.
Total	50	25	The detailed amount of hours for the respective main topic is up to the course director according to national law or the home institution's rules.



Revision results

Country	Institution	Common Module	ECTS
BG	G. S. Rakovski National Defence College	Basics of Military Logistics Information Systems	2.0

Service(s)	Minimum Qualification of Instructors
Logistics	- English: Common European Framework of Reference for Languages (CEFR) Level B2 or minimum NATO STANAG 6001 Level 3. - Relevant academic publications and international experience.
Language	- Subject Matter Experts (SMEs) in specific module topics. - Instructors should be proficiently using military logistics information systems (MLIS) software applications.
English	
SQF	Competence area – Military Technician. Learning area – Sustaining the Force. Organisational level – Single Arm/Branch.
MILOF	

Prerequisites for international participants	Contents of the Module
- English: Common European Framework of Reference for Languages (CEFR) Level B1 or minimum NATO STANAG 6001 Level 2. - Minimum of 2 year of national (military) higher education. - Basic knowledge of EU (NATO) logistics documents.	- Implementation of Military Logistics Information Systems during full spectrum operations. - Role of military logistics information systems (full spectrum operations of the subunits).

Learning outcomes	Knowledge	- Understand the purpose and functionality of the military logistics information system in military logistics. - Understand the functions performed by each component (module), including data collection, storage, processing, and dissemination.
	Skills	- Identify key components and modules of the military logistics information system (MLIS) and their functions, options, and critical requirements. - Analyse MLIS data and generate reports to support the logistic decision-making process.
	Responsibility & Autonomy	- Develop MLIS databases, ensuring accuracy and security of data. - Work with subject matter experts (SMEs) to understand requirements.

Verification of learning outcomes:
Observation: - During practical sessions, cadets/midshipmen should be observed and assessed to ensure they understand the material, allowing for remedial action if necessary. - Case studies or scenarios where students must demonstrate their understanding of real-world applications of MLIS principles. - Practical exercises or simulations where students apply their technical, analytical, communication, and problem-solving skills to support logistic decision-making. Test: - A written test will be administered at the end of the module.

Module details		
Main Topic	Residential WH	Details
Military Logistics Information Systems	2	- Introduction to the military logistics information systems. - Functional service applications. - Multinational information systems.
Logistics Databases Management	3	- Logistic infrastructures. - Logistic networks. - Logistic units.
Movement and Transportation Planning	3	- Strategic movement planning. - Operational movement planning. - Tactical movement planning.
Sustainment Planning	3	- Sustainment planning. - Supply chain management. - Sustainment and supply analysis.
Host Nation Support Planning	3	- Host Nation Support requirements. - Identifying Host Nation capabilities. - Warehousing management.
Logistics Execution Tools	3	- Simulation of logistics flow. - Monitoring of movement and transportation. - Supply chain visibility.
Logistic Reporting	3	- Manage logistics information. - Logistics environment analysis. - Logistics assessment.
Total Lecture WH	20	
Additional hours (WH) to increase the learning outcomes		
Self-Studies: Create and manage Logistics Databases	10	- Create and manage logistic infrastructures, networks and units. - Exchange logistics databases.
Self-Studies: Movement and Sustainment Practical Training	14	- Create transportation holdings. - Create lines of communication. - De-confliction of movement timing. - Packaging and distribution analysis. - Identification of operational and logistics factors.
Self-Studies: Create Logistics Reports	6	- Create a report on the current logistics situation. - Create a Movement and Transportation Report. - Create a Sustainment Report. - Overall logistics situation.
Total Self Studies	30	
Total WH	50	The course director determines the exact number of hours dedicated to each main topic in accordance with national law or the regulations of the home institution.



Revision results



Common Module
Multinational Operations Logistics
Module Description

Implementation Group
Doc.: IG/XXXX
Date: DD MM YYYY
Origin: "Carol I" NDU

Country RO	Institution "Carol I" National Defence University	Common Module Multinational Operations Logistics	ECTS 2.0 (+ 1.0 e-learning)
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Service All	Minimum Qualification of Instructors
Language English	- Level B2 of the Common European Framework of Reference for Languages (CEFR) or NATO STANAG Level 3. - Experience in conducting academic lectures. - Knowledge of the EU and NATO operations and the multinational logistic solutions.
SQF MILOF	Competence area - Military technician. Learning area – Sustaining the forces. Organisation level - Single service.

Prerequisites for international participants	Contents of the Module
- English: Common European Framework of Reference for Languages (CEFR) level B1 or NATO STANAG level 2. - Knowledge of basic military operations & logistics concepts. - At least 2 years of national (military) education.	- The combat service support capabilities of units and formations specific to the service during multinational operations - The logistics requirements during the planning of multinational operations.

Learning outcomes	Know- ledge	- Perform review of the concepts related to multinational operations logistics. - Formulate the multinational operations logistic solutions and their importance.
	Skills	- Analyse the different types of multinational logistic solutions. - Develop creative solutions in multinational logistic planning employing the EU and NATO structures that can provide logistic support.
	Respon- sibility and autonomy	- Chooses the optimal multinational logistics options in different scenario exercises. - Solves problems related to establishing connections with different multinational logistics providers in different scenario exercises.

Verification of learning outcomes:
Observation: trainees are evaluated during each session, in order to document the understanding of the individual topics of the module. Test: At the end of the course an integrated theoretical test is conducted.



Common Module
Multinational Operations Logistics
Module Description

Implementation Group
Doc.: IG/XXXX
Date: DD MM YYYY
Origin: "Carol I" NDU



Module details			
Main Topic	Resi- dential WH	E- learning WH	Details
General aspects about EU and NATO multinational operations	5	3	- Introduction to multinational operations (types of multinational operations, levels of multinational operations)/e-learning. - Operational capability concept/ e-learning. - Command and control architecture in multinational operations (FULLCOM, OPCOM, OPCON, TACOM, TACON)/ e-learning. - Recent EU multinational operations (examples with short descriptions/residential; syndicate case studies/residential). - Recent NATO multinational operations (examples with short descriptions/residential; syndicate case studies/residential).
Principles of the multinational operations logistics	1	1	- The concept of multinational operations logistics. - Review of the principles of the multinational operations logistics.
Factors influencing the logistics in multinational operations	5	2	- Factors influencing logistics in multinational operations (demand, destination, distance, duration, risk assessment)/residential. - Logistic success criteria of multinational operations (interoperability, visibility, mobility)/residential. - Logistic command and control architecture in multinational operations (ADMINCON and LOGCON and their influence on multinational operations logistics)/e-learning.
Multinational logistic solutions	4	2	- Multinational logistic functional and related areas/e-learning. - The importance of multinational logistic solutions. - Types of multinational logistic solutions (LLN, LRSN, MILUS, MIMUS, MCPU, OLSP)/e-learning; syndicate case studies/residential. - Benefits and limitations of multinational logistics/e-learning.
Logistic system of the multinational operations	2	1	- Levels of multinational operations logistics/e-learning. - Lines of logistic support/e-learning. - Multinational logistics coordination structures (MLCC, EDA)/residential; case studies on different structures.
Supply and re-supply in multinational operations	2	1	- Classes of supply suitable for multinational logistic support/e-learning. - Re-supply methods in multinational operations (push, pull, combined)/e-learning. - Exercise related to different needs that have to be covered through multinational logistic solutions/residential.
Movement and transportation in multinational operations	2	1	- The importance of M&T in multinational operations/e-learning. - Multinational movement and transportation structures (EU and NATO) and the relations between them (MCCE, AMCC, MSSC, AMSCC, EATC, SAC/HAW, SALIS, MTH)/e-learning; syndicate case studies/residential. - EU Diplomatic Clearances by EDA/e-learning.
Medical support in multinational operations	2	1	- The importance of medical support in multinational operations/e-learning. - Multinational medical support structures/e-learning; syndicate case studies/residential.
Total Lecture WH	23	12	
Final test	1		
Self-Studies	26	13	- Self-studies, pre-readings & self-evaluation tests. - E-learning may also be counted as self-studies.
Total WH	50		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
**Space-based ISR &
Situational Awareness**
(SB ISR & SA)
Module Description

Implementation Group
Doc.: IGI/XXXXX
Date.: DD MM/YYYY
Origin.: XXXXXX

Country GR	Institution Hellenic Army Academy	Common Module Space-based ISR, Operations & Situational Awareness (SB ISR & SA)	ECTS 2.0 (+ 1.0 e-learning)
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Service ALL	Minimum Qualifications for Lecturers
Language English	- Fully qualified Geospatial Engineer Officer. - Outstanding knowledge of Earth Observation and Remote Sensing Science, Space Meteorology, and/or Space Operations. - Phd Engineering, Mathematics, and/or Physics applied to Space Operations. - Advanced experience in Geo-Intelligence - Specialists/Teaching experience in the field of Geospatial Engineering, Earth Observation, or Geospatial Support. - English: Common European Framework of Reference for Languages (CEFR) Level B2 or NATO STANAG Level 3.
SQF MILOF	Competence area - Military technician Learning area – C4ISR systems & Space Organisation level - Single service

Prerequisites for international participants	Contents of the Module
- English: Common European Framework of Reference for Languages (CEFR) Level B2 or NATO STANAG Level 3. - Basic knowledge of IT (ECDL) or similar knowledge.	- Familiarize with the capabilities provided by the Copernicus Earth Observation SESA (Support to EU External and Security Actions) component - Exploit the SESA capabilities for ISR - Exploit the SESA capabilities for Situational Awareness - Acquire basic knowledge in space operations, orbital mechanics, space meteorology, and space debris.

Learning outcomes	Knowledge	- Master remote sensing and data processing by learning remote sensing principles and data processing techniques for ISR and SA. - Understand space-based systems and operations by gaining knowledge of satellite types, orbits, payloads, and space operations.
	Skills	- Apply satellite and ISR data for intelligence and operational decision-making by analysing imagery, interpreting multi-source data, and using satellite information in operational scenarios. - Develop technical skills in geospatial analysis and orbital mechanics by applying image processing, using GEOINT tools, and orbital elements.
	R & A	- Develop analytical and operational decision-making skills by critically analysing ISR and SA data, recognizing threats, and understanding space-based intelligence and operational capabilities. - Collaborate effectively in intelligence analysis by working in teams to evaluate ISR intelligence, space operations, and formulate responses.

Verification of learning outcomes:
Observation: Throughout the module, students will discuss topics within syndicates and in the plenary. During this work, students are evaluated to verify their performance. Evaluation: Group presentations of given topics. Test: Written exam (multiple choice) at the end of the Module.

Revision results



Common Module
**Space-based ISR &
Situational Awareness**
(SB ISR & SA)
Module Description

Implementation Group
Doc.: IGI/XXXXX
Date.: DD MM/YYYY
Origin.: XXXXXX

Module details			
Main Topic	Residential (WH)	E-learning (WH)	Details
Introduction to Space-Based ISR & SA	2	2	- Overview of ISR (Intelligence, Surveillance, and Reconnaissance) and SA (Situational Awareness) - History and evolution of space-based ISR & SA - Key advantages and challenges - Types of satellites used for ISR (e.g., optical, radar, signals intelligence) and SA - Satellite sensors and payloads - Space Operations Basic Parameters
Fundamentals of Remote Sensing	2	1	- Basics of optical, radar, and hyperspectral imaging - Resolution (spatial, temporal, spectral) - Image acquisition and pre-processing
Image Processing for ISR	3 (incl. 1 SW)	1	- Image processing techniques - Practical session on image processing techniques
Image Analysis for ISR	4 (incl. 1 SW)	2	- Operational requirements for ISR and SA addressed by space-based assets - Practical session on image interpretation and analysis
Space-Based Communications, Navigation, Positioning	1	2	- Role of satellites in military communications - Secure data transmission and encryption - Satellite-ground station interaction - GNSS systems in ISR - Role in precision targeting and navigation - Jamming and spoofing threats
Threats to Space-Based Assets	1	2	- Space Surveillance and Tracking / Space Situational Awareness (SST/SSA) - Anti-satellite (ASAT) weapons and electronic warfare - Space debris - Cyber-threats to space assets
Applications of ISR and Situational Awareness in Military Operations	4 (incl. 1 SW)		- ISR in border security, battlefield awareness, and maritime surveillance - Tactical and operational applications of ISR data - Integration of ISR data with command and control (C2) systems
Demonstration and Scenario-Based Training	4 (incl. 3 SW)	1	Group exercises using open-source satellite imagery
Total lectures and e-learning lessons	21 (incl. 6 SW)	11	A minimum of AKUs is part of the regular CM and is required to have a minimum of common knowledge before the residential phase. In addition, in the case of a 3 ECTS SB-ISR-SA CM Version, it is required that 1/3 of lectures are via e-learning. In both cases, the selection of e-learning topics is up to the Course Director, mainly by using the e-learning materials available on the ESDC platform or provided by the institute.
Exams	1	1	- Final Exam - Self-evaluation tests
Self-Studies	28	13	- Self-studies, pre-readings & self-evaluation tests. - E-learning may also be counted as self-studies
Total	50 (2 ECTS)	25 (1 ECTS)	The detailed amount of hours for the respective main topic is up to the course director according to national law or the home institution's rules



WAY AHEAD (revision modules)

- INS modules → pending
- IAFS modules → pending



About the calculation of the WH's...

ECTS (“credit”) = European Credit Transfer and Accumulation System, developed since 1989

Goals

- 1) Making studies and courses more transparent
 - 2) Helping to enhance the quality of higher education
- ➔ Facilitates exchanges between institutions (“we are all speaking the same language”) through allocation and accumulation of ECTS

One ECTS corresponds to **25 – 30 hours of work for a student** (on average).

However, your national legislation may be more precise or slightly differ from this...

Other principles of the ECTS system

- One academic year counts 60 ECTS ➔ a bachelor's degree counts 180 ECTS and a master's degree 60 or 120
- When developing a program or a course (common module), one should avoid decimals, although half credits theoretically are allowed
- ECTS are awarded when appropriate assessment shows that the defined learning outcomes have been achieved at the relevant level
- Credit allocation, defined learning outcomes and the estimated workload should be monitored (e.g. through a survey among students) ➔ don't ask “is this worth 2 ECTS?” but ask: “How many hours did you study for this module?”
- During student exchanges, partnering institutions recognize each other's ECTS without further due. However, a grade conversion is recommended (e.g. IAFS)

The total number of residential hours per ECTS (= “lecture hours”) is limited, because the total workload of a student should always be lower than 30 hours per ECTS

When there are no tutorials (or syndicate works), the tutorial hours should move to the self-studies section

Evaluation hours should be counted as self-study hours (not as residential hours)

1 ECTS	Residential (incl. e-learning in advance)	Tutorials 	Self-studies
Percentage	30 - 40%	10 - 20%	40 - 60%
Working Hours (WHs)	7.5 - 12	2.5 - 6	10 - 18
Lecture Units (45 min)	10 - 16	3.3 - 8	13.3 - 24

It’s perfectly normal that there are more tutorials + study hours than lecture hours... Because a student should indeed spend 1,5 to 2 hours study time per lecture of one hour

The more residential hours you have, the less tutorials you can have → you can’t have both maximised
 E.g. 12 hours of lectures and 6 hours of tutorials is too much (for 1 ECTS)!

Lower and upper limit come from 25 to 30 hours workload per ECTS
 E.g. 30% of 25WH = 7,5 Hrs
 E.g. 40% of 30WH = 12 Hrs

What is “workload”?

- Lecture hours (“Residential”)
- Tutorials (exercices, refining course content that was learned to lecture hours)
- Self-study and evaluation (test, exams, presentations)



LoD 01 / 02 / 08



Thank you!
Any questions??