

European Security and Defence College Doc: ESDC/2025/62 Date: 20February 2025 Origin: ESDC Steering Committee

Curriculum

To be reviewed by February 2027	Activity number 52	The implications of climate change, environmental degradation and exploitation on international peace, security, and defence (basic course)		ECTS 2
CORRELATION W	ITH CTG/MTC	TRAs		EQUIVALENCES
Civilian training are training discipline n			gement and climate change; Military isaster response	NA
Target audience Participants should preferably be involved in the planning, implementation or management of CSDP missions and operations or in EU Commission projects. Priority is given to: Personnel from EU MS that are or will be taking part in climate and environment mainstreaming, policy development and implementation at national or EU level (such as EEAS/EUMS, DG ECHO, DG CLIMA, DG ENV, DG NEAR, DG INTPA level (including EU Delegations), EDA). Personnel involved in conflict mediation and prevention, civil protection, disaster relief, and humanitarian assistance. Education and training experts, faculty advisers, professors, consultants, analysts, etc.		Aim The course provides a thorough understanding of Climate Security as a concept, its overarching principles and objectives predominantly within the EU Integrated approach. It aims at enhancing participants' climate literacy and raising their awareness of the impacts of climate change, environmental degradation and exploitation on peace, security, and defence. It highlights the role of climate change, environmental degradation and exploitation as threat multipliers and opportunities for peacebuilding, emphasizing the need for all CFSP/CSDP processes to integrate climate and environmental considerations. It also explains the EU's approach to the climate-security nexus and its coordination with internal and external stakeholders. The course further aims to foster a network of climate-security experts and enables participants to share lessons learnt and good practices on the EU's comprehensive approach to climate- and environment-related security risks.		
Open to participants from: - EU MS - EU candidate countries - EU Institutions, agencies, and bodies - Third countries - Members of International Organisations - Members of Non-governmental Organisations				

		LEARNING OUTCOMES	
	LO.1.	Explain the concept of planetary boundaries, including key climate change trends - causes, risks, hazards, environmental degradation and exploitation, using different	
۵	LO.2.	scenarios and impact analysis. Understand the complex relationship between climate change, environmental degradation and exploitation, and security, including how these factors potentially provide opportunities for strengthening international, regional or local peace and security.	
Knowledge	LO.3.	Explain the relevance of a comprehensive climate and security approach (adaptation and mitigation) for a sustainable European security and defence, including CFSP/CSDP.	
LO.4. Recognise key crosscutting issues in climate and environmental mainstreaming, as human rights, gender responsiveness, protection of civilians, good governance principles, and building integrity.			
	LO.5.	Describe the key international policy frameworks and actors involved in the climate- security nexus, with a special emphasis on the EU and the EU-wide comprehensive framework for addressing climate and environment-related security risks.	
	LO.6.	Use evidence-based analysis and foresight to support climate and environment informed planning, decision-making and implementation (monitoring and evaluation), particularly within the CFSP/CSDP contexts, by taking into account cross-cutting issues like human rights, gender responsiveness, protection of civilians, good governance principles, and building integrity.	
Skills	LO.7.	Apply analytical and problem-solving skills to address climate and environmental challenges and opportunities in a specific context.	
LO.8. Integrate an environmental lens into guidelines, tools, frameworks to en		Integrate an environmental lens into guidelines, tools, frameworks to ensure climate- and environmental-sensitive analysis, planning, decision-making and implementation.	
	LO.9.	Identify potential responses and mechanisms to support climate resilience, emphasizing preventive measures, including within peacebuilding efforts.	
pc	LO.10.	Be able to connect and apply the EU approach to climate security to your own position/role and to the mandate of the institution/mission/operation.	
Responsibility and autonomy	LO.11.	Be able to create awareness about the differentiated impacts of climate change, environmental degradation, and exploitation, in order to comprehensively address climate and environmental issues.	
Respon auto	LO.12.	Be able to address key crosscutting issues in climate and environmental mainstreaming, such as human rights, gender responsiveness, protection of civilians, good governance principles, and building integrity.	

Evaluation and verification of learning outcomes

The course is evaluated according to the Kirkpatrick model: it makes use of *level 1 evaluation* (based on participants' satisfaction with the course).

In order to complete the course, participants have to accomplish all learning objectives, which are evaluated on the basis of: active contribution in the residential module, including the syndicate session and practical activities, and completion of the eLearning phases. Course participants must complete the autonomous knowledge units (AKUs) and pass the test (*mandatory*)), scoring at least 80 % in the incorporated test/quiz. Active observation by the course director/lead instructor is used and participants fill in a feedback questionnaire at the end of the course.

However, no formal verification of learning outcomes is foreseen; the proposed European credit transfer system (ECTS) score is based on participants' workload only.

COURSE STRUCTURE			
Main topic	Recommended Working Hours (of which eLearning)	Contents	
1. Fundamentals of climate and	5(eLearning 2)	 Concept of planetary boundaries 1.1. Foundational concepts and definitions 	

<u> </u>		
environmental science: concepts, characteristics		 1.2. Key climate change trends - causes, risks, hazards, environmental degradation and exploitation, using different scenarios and impact analysis 1.2. Weather climate climate system climate
and trends		 Weather, climate, climate system, climate change, hazards, global warming, greenhouse gases (GHG) and their various warming properties, etc.
		 Main impacts globally – physical, biological, and human systems
		3. Trends and scenarios
		 2.1 Risks and challenges 2.1.1 Climate change, environmental degradation and exploitation as threat multiplier(s): Practical examples of environment- and climate-related security risks (exploitation of natural resources, climate-related displacement, environmental crime)
2. Risks, challenges, and opportunities	6(eLearning 1)	2.1.2 The impact of military operations on the environment, f. e., the deliberate use of the environment for military gain purposes
		 2.2 Opportunities 2.2.1 A holistic approach to the climate security nexus for enhancing international, regional, and local peace and security 2.2.2 Case studies of environmental peacebuilding
3. International and EU policy frameworks, instruments and commitments	3 (eLearning 1)	 3.1 Global level: United Nations Framework Convention on Climate Change (UNFCCC), Kyoto Protocol to the UNFCCC, Copenhagen Accord, Paris Agreement; UN Convention to Combat Desertification; UN Convention on Biological Diversity; Sendai Disaster Risk Reduction Framework; Agenda 2030; International Criminal Court (related to ecocide etc.)
		3.2 Regional level: ¹ EU policy framework on the climate security nexus, including: European Green Deal, Joint Communication on the Climate-Security Nexus, Climate Change and Defence Roadmap, EU Preparedness Strategy, White Paper on the Future of European Defence
		3.3 National level: Practical examples (based on course participants' background)
 Mitigation, adaptation and resilience 	8(eLearning 1)	 4.1 Mitigation 4.1.1 Role and relevance of mitigation efforts for EU external action: reducing climate and environment-related security risks 4.1.2 Commitments and approaches: Climate change mitigation policies, such as Green Diplomacy and Energy Diplomacy as part of the EU integrated approach
		4.2 Adaptation

¹ Be aware of other regional organisations and their respective policy framework (e.g., AU, ASEAN).

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	4.2.1	Role and relevance of adaption efforts for EU external action: capabilities development in response to climate change and environmental degradation
	4.2.2	Define, assess and plan main categories of adaptation options at different levels (local, national, regional, global)
	4.2.3	Equipment and methods for armed, civil and defence forces
		Case studies and lessons learned from specific actions taken by relevant stakeholders (illustrating failures and good practices)
	4.3 Res	ilianca
	4.3.1	Role and relevance: building resilience in
		response to climate change and environmental degradation
	4.3.2	Define, assess and plan main categories of resilience building initiatives at different levels (local, national, regional, global)
	4.3.3	Identify pathways to build climate resilience and sustainability: Climate sensitivity of
		development, humanitarian and peacebuilding policies (including EU interventions)
	4.3.4	Case studies and lessons learned from specific
		actions taken by relevant stakeholders (illustrating failures and good practices): Conflict
		sensitivity of climate policies (especially
		regarding EU/donor funding in third countries
		and particularly fragile situations)
		linkage between natural disasters and crisis nagement
		ponse to natural disasters - the operational
5 Climata		ensions:
5. Climate change,	5.2.1	National responsibilities and actors in support of rescue operations, Humanitarian Assistance and
environment & 5(eLear	ning 1)	Disaster Relief.
crisis management	5.2.2 5.2.3	EU Civil Protection Mechanism UNDAC/OCHA
	5.3 Clin	nate and environmental considerations for
		ctive prevention and preparedness
	5.3.1	Practical examples from the local to the global level
	6.1 lmp 6.1.1	lications for security and defence Impacts of climate change, environmental
		degradation and exploitation on civilian and military mission and operations, particularly
6. Climate		CSDP missions and operations
change,		Commitments and obligations from the Joint
environmental degradation 6(eLear		Communication on the Climate-Security Nexus, the EU Climate Change and Defence Roadmap
and exploitation		et. al.
& military	6.1.3	Military role in preparedness, readiness and
capability		resilience in addressing climate change and security related issues (early warning and
		strategic foresight, environmental advisers, etc.)
	6.2 Civi	I-military coordination

		 6.2.1 Structures and emerging needs in humanitarian assistance and disaster relief (HADR), e.g. PESCO DM DR CP Deployable Military Disaster Relief Capability Package, or deployment of technical assistance and support teams 6.2.2 Interoperability between civilian and military capabilities (personnel and equipment) 6.3 Key stakeholders and innovative approaches 6.3.1 European Defence Agency (EDA), Joint Research Center (JRC), Climate and Defence Network 	
7. Crosscutting issues	3(eLearning 1)	Integrating human rights, gender responsiveness, protection of civilians, good governance principles, and building integrity in climate and environmental mainstreaming for sustaining peace and reducing conflict.	
8. Toolbox	4	Tools for unpacking and addressing the impact of climate change, environmental degradation, and exploitation on international peace, security, and defence (e.g., climate fragility mapping exercise; Global Conflict Risk Index etc.).	
9. Simulation exercise	4	Scenario-based simulation. Syndicate session: identifying climate- and environmental security risks and developing resilience action plans. Decision-making exercises with stakeholder coordination.	
TOTAL	44 (eLearning 8)		

Materials	Methodology
Required eLearning: AKU 9: The Security Implications of Climate Change, Environmental Degradation and Exploitation	The course is based on the following methodology: lectures, panels, group work, and interactive exercises, using case studies, tools and scenario-based simulations.
Recommended eLearning AKU 4: CSDP crisis management structures and chain of command AKU 6: CSDP decision shaping/making AKU 25: EU Mutual Assistance Clause AKU11a: Gender and the UNSCR 1325	Additional information A pre-course questionnaire on learning expectations and reading materials may be sent to participants before the beginning of the course.
 <u>Reading materials:</u> Joint Communication on the Climate and Security Nexus (JOIN(2023) 19 final) Council Conclusions on Climate and Energy Diplomacy (2023) Council Conclusions on Green Diplomacy 	All course participants must prepare for the residential module completing the relevant e- Learning preparatory phase, which is mandatory. The course should create space for participants to share experiences and draw on personal lessons learnt and good practices in an inclusive
(2024) Adelphi, Navigating Peace in a Changing Climate: Climate and Security Trend Analysis (2025) Adelphi, 10 Insights on Climate Impacts and Peace (2020) Climate Change and Security – The Handbook (2020)	way. In order to facilitate discussion between course participants and trainers/experts/guest speakers, the Chatham House Rule is used during the residential module: 'participants in the course are free to use the information received, but neither the identity nor the affiliation of the speaker(s),
 SIPRI, Pathways of Climate Insecurity: Guidance for Policymakers (2016) Further reading 	nor that of any other participant, may be revealed'.

 New EU Adaptation to Climate Change strategy (2021) 	
- European Council Conclusions on Climate Diplomacy (2021)	
- EU Climate Change and Defence Roadmap (2020)	
 Communication on the European Green Deal (2019) 	
- EU Concept on Effective CIVMIL Coordination in Support of Humanitarian	
Assistance and Disaster Relief (2019)	
 Climate Change 2018 - Fifth Synthesis Report, IPCC (2018) 	
Sendai Framework for DRR (2015)Paris Agreement (2015)	
 United Nations Framework Convention on Climate Change (1992) 	
The materials proposed will reflect current developments in the field of the climate-security	
nexus in general and EU policies in particular. Mandates of CSDP missions and operations and/or EU Commission programmes should be	
included where relevant, as well as other	
documents from the EEAS, the EU Council Secretariat and the EU Commission.	