



**International Air Force Semester**  
 IO: 1 or 2  
 Doc.:  
 Date : January 4, 2021  
 Origin: HAFA

<b>Country</b> <b>GR</b>	<b>Institution</b> <b>Hellenic Air Force Academy</b>	<b>Module Description</b> <b>Space Applications for Security and Defence</b>	<b>ECTS</b> <b>4.0</b>
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<b>Service</b> <b>AF</b>	<p align="center"><b>Minimum Qualification for Lecturers</b></p> <ul style="list-style-type: none"> <li><b>Officers:</b> <ul style="list-style-type: none"> <li>English: Common European Framework of Reference for Languages (CEFR) Level B2 or NATO STANAG Level 3.</li> <li>Thorough knowledge in space issues</li> <li>Thorough knowledge of Common Security and Defence Policy</li> </ul> </li> <li><b>Civilian Lecturers:</b> <ul style="list-style-type: none"> <li>English: Common European Framework of Reference for Languages (CEFR) Level B2 or NATO STANAG Level 3.</li> <li>Thorough knowledge in space issues</li> <li>Thorough knowledge of Common Security and Defence Policy</li> </ul> </li> </ul>
<b>Language</b> <b>English</b>	

<p><b>Prerequisites for international participants:</b></p> <ul style="list-style-type: none"> <li>English: Common European Framework of Reference for Languages (CEFR) Level B1 or NATO STANAG Level 2.</li> </ul>	<p align="center"><b>Goal of the Module</b></p> <ul style="list-style-type: none"> <li>To demonstrate the basic concepts associated with space issues.</li> <li>To introduce students to the main functions of space systems.</li> <li>To present the space programmes needed in EU capabilities to carry out crisis management operations.</li> <li>To provide the CSDP space needs and the shortfalls from lessons learnt in relevant missions and operations</li> </ul>
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<b>Learning outcomes</b>	<b>Know-ledge</b>	<ul style="list-style-type: none"> <li>Knows the basic concepts related to Space activities.</li> <li>Describe the role of space assets in security and defence.</li> </ul>
	<b>Skills</b>	<ul style="list-style-type: none"> <li>Can demonstrate an informed view on space issues.</li> <li>Is capable of analysing central ideas regarding the use of space systems in the CSDP domain.</li> </ul>
	<b>Responsibility &amp; Autonomy</b>	<ul style="list-style-type: none"> <li>Is able to use space based command, control, information, and communication technologies.</li> <li>Is able to deal with different people in promoting the synergies between all actors in order to respond in a comprehensive way in the CSDP domain.</li> <li>Can support the argument that the CSDP needs have to be taken into account on the EU Space Policy and its associated programs.</li> </ul>



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## Verification of Learning Outcomes

<b>Test</b>	<ul style="list-style-type: none"> <li>Written test delivered at the end of the module.</li> </ul>
<b>Case study.</b>	<ul style="list-style-type: none"> <li>The case studies consisting of up to 2000 words demonstrate the importance of space assets in missions and operations. Both successes and failures are analyzed.</li> </ul>

## Module Details

Main Topic	Recom- mended WH	Details
E-learning	7	<ul style="list-style-type: none"> <li>Background material:               <ul style="list-style-type: none"> <li>"European Space Policy: ESDP and Space" COUNCIL OF THE EUROPEAN UNION, Brussels, 16 November 2004, 11616/3/04, REV 3.</li> <li>European Space Policy, COM (2007) Brussels, 26.4.2007, 212.</li> <li>Space Strategy for Europe, Brussels, 26.10.2016 COM (2016) 705.</li> </ul> </li> </ul>
Topic 1	6	<ul style="list-style-type: none"> <li>Historical depth and theoretical background</li> <li>The dawning of Space Era</li> </ul>
Topic 2	6	<ul style="list-style-type: none"> <li>Main segments of space systems</li> <li>Types of orbits and their significance</li> </ul>
Topic 3	6	<ul style="list-style-type: none"> <li>Review of representative classes of satellites</li> <li>Main space military and civilian applications</li> </ul>
Topic 4	6	<ul style="list-style-type: none"> <li>Applications for security and defence.</li> <li>Space in the european framework and its governance.</li> <li>The origins of the EU CSDP and space</li> </ul>
Topic 5	6	<ul style="list-style-type: none"> <li>EU CSDP operational requirements from space systems</li> <li>Lessons learnt from space shortfalls identified in CSDP missions and operations are presented.</li> </ul>
Topic 6	6	<ul style="list-style-type: none"> <li>Strategic dimensions of space in national &amp; international security</li> </ul>
Topic 7	6	<ul style="list-style-type: none"> <li>Space political dimensions</li> </ul>
Topic 8	6	<ul style="list-style-type: none"> <li>Main trends in space</li> </ul>
Topic 9	6	<ul style="list-style-type: none"> <li>National space programmes of major space powers</li> </ul>
Topic 10	6	<ul style="list-style-type: none"> <li>Security in Space. Space forces. Structure, missions and objectives.</li> </ul>
Test	3	<ul style="list-style-type: none"> <li>Module examination</li> </ul>

## Self-Study Hours

Topic	30	<ul style="list-style-type: none"> <li>For all the above mentioned topics Cadets have to prepare themselves for the next day.</li> </ul>
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<b>Total WH</b>	<b>100</b>
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## List of Abbreviations:

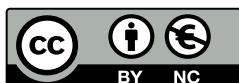
- CEFR ..... Common European Framework of Reference for Languages  
 ECTS ..... European Credit Transfer and Accumulation System  
 STANAG ..... Standardization Agreement  
 WH ..... Working Hour  
 CSDP ..... Common Security and Defence Policy  
 EU ..... European Union

## Acknowledgement

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