

Course Title	<b>Airport Security</b>				
Course Code	AVM350				
Course Type	Major elective				
Level	Bachelor (1 <sup>st</sup> cycle)				
Year / Semester	4 <sup>th</sup> Year / 1 <sup>st</sup> Semester				
Instructor's name	TBA				
ECTS	5	Lectures / week	3 Hours / 14 Weeks	Laboratories / week	None
Course Purpose and Objectives	The purpose of the Airport Security course is to provide the students with the knowledge required in order to be able to successfully devise, implement and revise airport security programmes. The course aims in supplying the student with knowledge regarding airport organization, security threats and the processes and equipment that can be applied in order to safeguard against those threats, while satisfying the national, European and International legislations and standards.				
Learning Outcomes	<p>Upon successful completion of this course students should be able to:</p> <ul style="list-style-type: none"> <li>• Describe the organization and main parts of an airport</li> <li>• Discuss the main aspects relating to airport security and the relevant legislations and processes</li> <li>• Analyse and devise an airport security programme</li> <li>• Define the main threats in an airport and the processes and equipment used to safeguard against those threats</li> <li>• Explain how cybersecurity can be implemented to assist against international security threats at airports</li> <li>• Devise risk assessment and contingency plans to safeguard against unlawful interference acts</li> <li>• Suggest a number of ways in which airport security may be improved</li> </ul>				
Prerequisites	AVM251	Co-requisites	None		
Course Content	<ul style="list-style-type: none"> <li>• <b>Airport Organization:</b> Ownership and operation, organization, management, parts of an airport: airside, landside, restricted areas, demarcated areas, airfield, terminal.</li> <li>• <b>Global civil aviation security structure:</b> Security related international legal instruments. Threats and risks to civil aviation,</li> </ul>				

history of major events that led to implementation of security measures in aviation.

- **Introduction to airport security and legislation:** objective, airport security programme/manual, enforcement authority, security areas, regulations (ICAO Annex 17, EU provisions), hazardous items, security management systems, security culture.
- **Security Management Systems:** Implementation of SeMS as a tool for systematically integrating security risk management into an entity's day-to-day operation in close alignment with other risk management systems.
- **Security at commercial airports:** assessing threats, risks and vulnerabilities, security process and equipment, airport security (check-in, access control to the entrance to the airport restricted area, screening checkpoints, identification at the departure gate), aircraft security, passenger and cabin baggage screening, hold baggage screening, managing passenger flows, cargo and mail, in-flight supplies. Employee identification, controlling access (people and vehicles), biometrics, protecting landside and airside, surveillance, perimeter security, patrolling.
- **Security at general aviation airports.**
- **Protection against terrorism:** review of attacks on civil aviation, international response to terrorism, intelligence, security technologies: imaging technologies, explosive trace detection systems, explosive detection systems (EDSs), metal Detectors etc.
- **Computer assisted security:** Cybersecurity Risk & Threats Information Sharing Platforms, Computer Assisted Passenger Pre-screening System (CAPPS II).
- **Contingency planning and response to security emergencies:** Vulnerability assessments, response to acts of unlawful interference. Developing related management measures and procedures, aimed in identifying a crisis, planning appropriate responses, confronting and resolving. Airport operational considerations regarding undisturbed flow of flights not affected.
- **Risk/Threat management, information channels:** Identification of threats, lines of communication, formal and informal, between States. Local information flow. Additional threat levels. Background checks, inside threats, balance between people, process and technology, concerns about increased costs and reduced employee efficiency.
- **Improving security:** Security vs customer service, human factors, training, quality control measures, screening points evaluation. Smart security. Emerging processes, technologies and equipment.
- **Standards and recommended practices:**
  - ICAO Annex 17
  - EASA: Easy Access Rules for Aerodromes (Regulation (EU) No 139/2014)

	<ul style="list-style-type: none"> <li>○ Regulation (EC) No 300/2008 – Civil Aviation Security</li> <li>○ ACI Policies and Recommended Practices - Security at Airports</li> <li>○ Aviation Security Manuals</li> </ul>
Teaching Methodology	Face-to-face
Bibliography	<ul style="list-style-type: none"> <li>• <b>Jeffrey Price, Jeffrey Forrest.</b> <i>Practical Airport Operations, Safety, and Emergency Management: Protocols for Today and the Future.</i> Butterworth-Heinemann; 1<sup>st</sup> edition (2016). ISBN 978-0128005156.</li> <li>• <b>Seth B. Young, Alexander T. Wells.</b> <i>Airport Planning and Management.</i> 6<sup>th</sup> Edition. 2011. ISBN 978-0-07-175024-0.</li> <li>• <b>Michael Ferguson, Sean Nelson.</b> <i>Aviation Safety: A Balanced Industry Approach .</i> International Edition. Delmar Cengage Learning. 2014. ISBN 978-1-133-28432-1</li> <li>• <b>Stephen K. Cusick, Antonio I. Cortes, Clarence C. Rodrigues.</b> <i>Commercial Aviation Safety.</i> 6th Edition. McGraw Hill. 2017. ISBN 978-1-259-64182-4</li> <li>• <b>Alan J. Stolzer, Carl D. Halford, John J. Goglia.</b> <i>Implementing Safety Management Systems in Aviation.</i> Routledge. 2013. ISBN 978-1472412799</li> <li>• <b>Norman J Ashford, Pierre Coutu, John R. Beasley.</b> <i>Airport Operations,</i> McGraw-Hill Education; 3<sup>rd</sup> edition (2012). ISBN 978-0071775847.</li> <li>• <b>Jeffrey Price.</b> <i>Practical Aviation Security,</i> Second Edition: Predicting and Preventing Future Threats. Butterworth-Heinemann Homeland Security. 2nd Edition (2013). ISBN 978-0123914194</li> <li>• <b>Ian J. Stolzer, John J. Goglia.</b> <i>Safety Management Systems in Aviation.</i> Routledge, 2<sup>nd</sup> edition, (2015). ISBN 978-1472431783.</li> <li>• <a href="http://www.mcw.gov.cy/mcw/dca/dca.nsf/DMLaviation_en/DMLaviation_en?OpenDocument">http://www.mcw.gov.cy/mcw/dca/dca.nsf/DMLaviation_en/DMLaviation_en?OpenDocument</a></li> </ul>

	<ul style="list-style-type: none"> <li>• <a href="https://www.icao.int/Security">https://www.icao.int/Security</a></li> <li>• <a href="http://www.aci.aero/">http://www.aci.aero/</a></li> </ul>								
Assessment	<table border="1"> <tr> <td>Examinations</td> <td>70%</td> </tr> <tr> <td>Assignments / Report</td> <td>20%</td> </tr> <tr> <td>Participation</td> <td>10%</td> </tr> <tr> <td></td> <td>100%</td> </tr> </table>	Examinations	70%	Assignments / Report	20%	Participation	10%		100%
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Language	English								