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| Course Title | Airworthiness and Certification Procedures | | | | |
| Course Code | AVM421 | | | | |
| Course Type | Compulsory | | | | |
| Level | Bachelor (1 st cycle) | | | | |
| Year / Semester | 4 th Year / 2 nd Semester | | | | |
| Instructor's name | TBA | | | | |
| ECTS | 7 | Lectures / week | 6 Hours/ 14 Weeks | Laboratories / week | None |
| Course Purpose and Objectives | <p>The purpose of the Airworthiness and Certification Procedures course is to provide the student with the knowledge required in order to be able to understand the various aspects related to the Certification processes and regulations which must be complied with by Airlines and other Aviation related organizations, like manufacturers and maintenance organizations, before obtaining relevant approvals.</p> <p>The course aims to cover subjects like Type Certification of aircraft, engines and appliances, Supplemental Type Certificates, Design Organisation Approvals, Parts Certification, Maintenance Organisation Approval, Air Operator's Certificate, EASA regulations, Part M (Continuing Airworthiness), Part 145 (Maintenance Organisations), Part 21 (Design Organisations).</p> | | | | |
| Learning Outcomes | <p>Upon successful completion of this course students should be able to:</p> <ul style="list-style-type: none"> • Discuss the functions of ICAO and its role in the shaping of the International Civil Aviation • Describe the concepts of Type Certification process for aircraft and engines • Describe the various Certification requirements for parts • Define the requirements to be complied with and processes to be followed in order to register and obtain necessary approvals and certificates from National Aviation Authorities in order to operate an aircraft • Develop the processes and procedures for achieving Continuing Airworthiness management • Define the regulations which must be complied with for Continuing Airworthiness | | | | |

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| Prerequisites | AVM250 | Co-requisites | None | | | | |
| Course Content | <p>The material included in this course cover the following subjects:</p> <ul style="list-style-type: none"> • Introduction to Airworthiness • The ICAO, EASA and the National Aviation Authorities • Airworthiness Requirements and regulations • Certificate of Airworthiness (CofA) and Air Operator's Certificate (AOC) • Aircraft Maintenance and approved organisations • Type Certificate – State of Design • Production of Aircraft Parts and Appliances • Continuing Airworthiness Management of aircraft (CAMO) and operation | | | | | | |
| Teaching Methodology | Face-to-face | | | | | | |
| Bibliography | <ul style="list-style-type: none"> • De Florio F (2016), Airworthiness: An Introduction to Aircraft Certification, 3rd edition, Butterworth-Heinemann • ICAO (2016), Annex 8 Airworthiness of Aircraft, 11th Edition, ICAO • ICAO (2014), Doc 9760 Airworthiness Manual, Part V. State of Design and State of Manufacture, 3rd Edition, ICAO • EASA (2016), Certification Specifications and Acceptable Means of Compliance for Large Aeroplanes CS-25, Amendment 18. • EC (2012), Commission regulation (EU) No 748/2012, laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organizations. • EC (2014), Commission regulation (EU) No 1321/2014 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organizations and personnel involved in these tasks. | | | | | | |
| Assessment | <p>Examinations</p> <p>Assignment(s)</p> <p>Participation</p> | <table border="1"> <tr> <td>70%</td> </tr> <tr> <td>20%</td> </tr> <tr> <td>10%</td> </tr> <tr> <td>100%</td> </tr> </table> | 70% | 20% | 10% | 100% | |
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| 10% | | | | | | | |
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| Language | English | | | | | | |