

Course Title	Flight Planning and Monitoring				
Course Code	AVM220				
Course Type	Compulsory				
Level	Bachelor (1 st cycle)				
Year / Semester	2 nd Year / 2 nd Semester				
Instructor's name	TBA				
ECTS	5	Lectures / week	3 Hours /14 Weeks	Laboratories / week	None
Course Purpose and Objectives	<p>The purpose of the Flight Planning and Monitoring course is to provide the student with knowledge regarding the procedures followed when planning a commercial flight. It also provides knowledge regarding the aspects of the flight plan that should be monitored during flight and the procedures for re-planning if and when needed. The course aims in covering subjects that include VFR and IFR Navigation planning, fuel planning, pre-flight briefings and plan updates, flight plan preparation and submission, flight monitoring and re-planning.</p>				
Learning Outcomes	<p>Upon successful completion of this course students should be able to:</p> <ul style="list-style-type: none"> • Prepare a VFR flight plan. • Prepare an IFR flight plan. • Demonstrate competencies in planning fuel requirements for commercial flights. • Analyse, understand and appropriately use NOTAMs and Meteorological briefings. • Demonstrate competencies in calculating and updating planning documentation. • Prepare and submit ICAO flight plans • Demonstrate knowledge of flight monitoring procedures and competencies of in-flight re-planning in case of deviation from planned data. 				
Prerequisites	AVM111	Co-requisites	None		
Course Content	<p>The material included in this course cover the following subjects:</p> <ul style="list-style-type: none"> • Flight planning for VFR flights: VFR Navigation Plan (Routes, airfields, heights and altitudes from VFR charts, Courses and distances from VFR charts, Aerodrome Charts and Aerodrome 				

	<p>Directory, Communications and Radio Navigation planning data, Completion of navigation plan).</p> <ul style="list-style-type: none"> • Flight Planning For IFR Flights: IFR Navigation plan (Airways and routes, Courses and distances from en-route charts, Minimum Altitudes, Standard Instrument Departures (SIDs) and Standard Arrival Routes (STARs), Instrument Approach Charts, Communications and Radio Navigation planning data, Completion of navigation plan). • Fuel planning: General, Pre-flight fuel planning for commercial flights (Taxi fuel, Trip fuel, Reserve fuel and its components (Contingency fuel, Alternate fuel, Final reserve fuel, Additional fuel), Extra fuel, Calculation of total fuel and completion of the fuel section of the navigation plan (fuel log)), Specific fuel calculation procedures (Decision point procedure, Isolated aerodrome procedure, Pre-determined point procedure, Fuel tankering). • Pre-flight preparation: NOTAM briefing (Ground facilities and services, Departure, destination and alternate aerodromes, Airway routings and airspace structure), Meteorological briefing (Extraction and analysis of relevant data from meteorological documents, Update of navigation plan using the latest meteorological information, Update of Mass and Balance, Update of Performance data, Update of fuel log), Point of Equal Time (PET) and Point of Safe Return (PSR). • ICAO Flight Plan (ATS Flight Plan): Individual Flight Plan (Format of Flight Plan), Repetitive Flight Plan, Submission of an ATS Flight Plan (FPL). • Flight monitoring and in-flight re-planning: Flight monitoring (Monitoring of track and time, In-flight fuel management), In-flight re-planning in case of deviation from planned data. 						
Teaching Methodology	Face-to-face						
Bibliography	<ul style="list-style-type: none"> • Bristol ATPL (A) Groundschool Manual & CBT Software 						
Assessment	<table border="0"> <tr> <td data-bbox="472 1493 1011 1570">Examinations</td> <td data-bbox="1011 1493 1487 1570" style="border: 1px solid black; text-align: center;">90%</td> </tr> <tr> <td data-bbox="472 1570 1011 1612">Participation</td> <td data-bbox="1011 1570 1487 1612" style="border: 1px solid black; text-align: center;">10%</td> </tr> <tr> <td></td> <td data-bbox="1011 1612 1487 1682" style="border: 1px solid black; text-align: center;">100%</td> </tr> </table>	Examinations	90%	Participation	10%		100%
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	100%						
Language	English						