

Course Title	Private Pilot Flight Training				
Course Code	AVM116				
Course Type	Major elective				
Level	Bachelor (1 st cycle)				
Year / Semester	1 st Year / 2 nd Semester				
Instructor's name	TBA				
ECTS	6	Lectures / week	Min. 45 Hours of Flight	Laboratories / week	None
Course Purpose and Objectives	<p>The Private Pilot Flight Training course's purpose is to provide the knowledge and skills necessary for the student to be able to act as pilot in command of a SEP (Single Engine Piston) aeroplane and to qualify for the PPL practical examination (flight test) which together with the respective theoretical examination leads to the PPL qualification (awarded by the Department of Civil Aviation). The course trains students on all the necessary aspects of flight including preparation for flight, normal operations during flight, abnormal and emergency operations, navigation use of instruments etc.</p>				
Learning Outcomes	<p>Upon successful completion of this course students should be able to:</p> <ul style="list-style-type: none"> • Demonstrate knowledge and understanding of aeroplane characteristics, systems and flight procedures. • Demonstrate knowledge and understanding of necessary principles of flight. • Demonstrate knowledge and understanding of necessary emergency drills. • Successfully apply aeroplane operation skills and techniques during all stages of taxiing and normal flying. • Successfully apply flying skills and techniques during abnormal flying and emergency situations. • Demonstrate competencies that will enable them to act as pilot-in-command of an aeroplane during solo flying. • Apply navigation knowledge and skills for flight planning and during flight for cross-country flights. • Demonstrate basic knowledge and skill in instrument flying. 				
Prerequisites	None		Co-requisites	AVM111	

Course Content

This course includes practical flight training that is based on the following exercises:

- **Exercise 1a - Familiarisation with the aeroplane:** characteristics of the aeroplane; cockpit layout; systems; checklists, drills and controls.
Exercise 1b - Emergency drills: action if fire on the ground and in the air; escape drills, location and use of emergency equipment and exits.
- **Exercise 2 - Preparation for and action after flight:** preflight paperwork; external and internal checks; power checks; running down checks and switching off the engine; parking; after flight paperwork.
- **Exercise 3 - Air experience:** flight exercise.
- **Exercise 4 - Effects of controls:** control surfaces; effects of air speed; slipstream; power; trimming; flaps; mixture control; carburetor heat; cabin heating or ventilation; other controls as applicable;
- **Exercise 5a - Taxiing:** pre-taxi checks; control of speed and stopping; engine handling; control of direction and turning; parking area procedure and precautions; marshalling signals; instrument checks; air traffic control procedures.
Exercise 5b - Emergencies: brake and steering failure.
- **Exercise 6 - Straight and level flight:** attaining and maintaining straight and level flight; flight at critically high air speeds; stability control; trim; use of instruments for precision.
- **Exercise 7 - Climbing:** entry, maintaining the normal and max rate climb and levelling off; en-route climb; maximum angle of climb; use of instruments for precision.
- **Exercise 8 - Descending:** entry, maintaining and levelling off; glide, powered and cruise descent; side slipping; use of instruments for precision flight.
- **Exercise 9 - Turning:** entry and maintaining medium level turns; resuming straight flight; faults in the turn; climbing turns; descending turns; use of instruments for precision.
- **Exercise 10a - Slow flight:** safety checks; controlled flight down to critically slow air speed; recovery to normal climb speed.
Exercise 10b - Stalling: safety checks; symptoms; recognition; clean stall and recovery; approach to stall in the approach and in the landing configurations; recovery at the incipient stage.
- **Exercise 11 - Spin avoidance:** safety checks; stalling and recovery at the incipient spin stage; instructor induced distractions during the stall.
- **Exercise 12 - Take-off and climb to downwind position:** pre-take-off checks; into wind take-off; crosswind take-off; short

	<p>take-off and soft field techniques including performance calculations; noise abatement procedures.</p> <ul style="list-style-type: none"> • Exercise 13 - Circuit, approach and landing: circuit procedures, downwind and base leg; powered approach and landing; crosswind approach and landing; glide approach and landing; short landing and soft field techniques; flapless approach and landing; missed approach and go-around; noise abatement procedures. Exercise 12/13 - Emergencies: abandoned take-off; engine failure after take-off; mislanding and go-around; missed approach. • Exercise 14 - First solo: instructor's briefing, observation of flight and de-briefing; • Exercise 15 - Advanced turning: steep turns; level and descending; stalling and recovery; recoveries from unusual attitudes, including spiral dives. • Exercise 16 - Forced landing without power: choice of landing area; gliding distance; descent plan; key positions; engine cooling; engine failure checks; use of radio; base leg; final approach; landing; actions after landing. • Exercise 17 - Precautionary landing: procedure; occasions necessitating; landing area selection: normal aerodrome; disused aerodrome; ordinary field; circuit and approach; actions after landing. • Exercise 18a – Navigation (flight planning): weather forecast; maps; choice of route; safety altitudes. Calculations; flight information; radio frequencies; selection of alternate aerodromes; documentation; departure procedures; ATC liaison; use of nav aids; in-flight decisions; diversion procedures; Arrival and aerodrome joining procedure: Exercise 18b - Navigation problems at lower levels and in reduced visibility: hazards; effects of wind and turbulence; vertical situational awareness; bad weather circuit and landing. Exercise 18c - Radio navigation: use of GNSS; Use of VOR; obtaining a fix from two VORs; Use of ADF equipment: NDBs; R/T procedures and ATC liaison; QDM; pilot's responsibilities; secondary surveillance radar: transponders; Use of DME; • Exercise 19 - Basic instrument flight: physiological sensations; instrument appreciation; attitude instrument flight; instrument limitations; basic maneuvers;
Teaching Methodology	Min. 40 Hours of Flight
Bibliography	PPL Flight Training Manual

Assessment	Flight test	100%
Language	English	