

Ground School Curriculum for PPL

Section 1 Theory of Flight (6 Hours)

Principles of Flight
Forces Acting On an Aeroplane
Aerofoils
Propellers
Design of the Wing
Stability
Flight Controls

Section 2 Flight Instruments (5 Hours)

Pitot Static System
Airspeed Indicator
Vertical Speed Indicator
Altimeter/Encoding Altimeter
Magnetic Compass
Gyroscope
Heading Indicator
Attitude Indicator
Turn and Bank Indicator/ Turn Co-Ordinator

Section 3 Airframes Engines and Systems (5 Hours)

Airframes
Landing Gear, Brakes and Flaps
Engines
Carburation
Fuel Injection
Electrical System
Lubricating Systems and Oils
Fuel Systems and Fuels

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Section 4 Air Law (8 Hours)

- Part I General Provisions
- Part II Aircraft Identification and Registration
- Part III Aerodromes and Airports
- Part IV Personnel Licensing and Training
- Part VI General Operating and Flight Rules
- Air Traffic Services and Procedures
- Transportation Safety Board of Canada

Meteorology (6 Hours)

- The Earth's Atmosphere
- Atmospheric Pressure
- Meteorological Aspects of Altimetry
- Temperature
- Moisture
- Stability and Instability
- Clouds
- Surface Based Layers
- Turbulence
- Wind
- Air Masses Fronts and Frontal Weather
- Aircraft Icing
- Thunderstorms
- Hurricanes and Tornadoes
- Meteorological Services Available To Pilots
- Weather Maps and Prognostic Charts

Flight Operations (4 Hours)

- General
- Aircraft Performance
- Use of Performance Charts
- Weight and Balance
- Wake Turbulence
- Search and Rescue (Sar)
- Aircraft Critical Surface Contamination

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Navigation (6 Hours)

- Navigation And Radio Aids
- Maps And Charts
- Time And Longitude
- Pilot Navigation
- Triangle Of Velocities
- Navigation Computers
- Pre-Flight Preparation

Radio and Electronic Theory (4 Hours)

- Vhf Omnidirection Range (Vor)
- Automatic Direction Finder
- Radio Magnetic Indicator (Rmi)
- Global Navigation Satellite System (Gnss/Gps)
- Other Radio And Radar Aids – Basic Principles And Use

Human Factors (4 Hours)

- Aviation Physiology
- The Pilot And The Operating Environment
- Aviation Psychology