

# Course Content

The course content comprises six separate parts:

**(1) Knowledge:** There are 4 theoretical knowledge examinations which must be undertaken in Dublin, consisting of the 7 subjects below:

*(a) Air Law:* rules and regulations relevant to the holder of a private pilot licence (helicopter); rules of the air; appropriate air traffic services practices and procedures;

*(b) Helicopters - General Knowledge:* (i) principles of operation of helicopter powerplants, transmissions (power-trains), systems and instruments; (ii) operating limitations of helicopters and powerplants; relevant operational information from the flight manual or other appropriate document;

*(c) Flight Performance and Planning:* (i) effects of loading and mass distribution on flight characteristics; mass and balance calculations; (ii) use and practical application of take-off, landing and other performance data; (iii) pre-flight and en-route flight planning appropriate to private operations under VFR; preparation and filing of air traffic services flight plans; appropriate air traffic services procedures; position reporting procedures; altimeter setting procedures; operations in areas of high density traffic;

*(d) Human Performance and Limitations:* human performance and limitations relevant to the private pilot (helicopter);

*(e) Meteorology:* application of elementary aeronautical meteorology; use of and procedures for obtaining, meteorological information; altimetry; (f) Navigation: practical aspects of air navigation and dead-reckoning techniques; use of aeronautical charts;

*(g) Operational Procedures:* (i) use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations; 69 (ii) appropriate precautionary and emergency procedures including action to be taken to avoid hazardous weather and wake turbulence; settling with power, ground resonance, roll-over and other operational hazards;

*(h) Principles of Flight:* principles of flight relating to helicopters; and (i) Radiotelephony: radiotelephony procedures and phraseology as applied to VFR Operations; action to be taken in the event of communication failure;

**(2) Examinations - Helicopters:** The examination shall be based on a syllabus determined by the Irish Aviation Authority and shall include an examination on the types of helicopters for which the licence is sought.

**(3) Experience - Helicopter:** (a) The applicant shall have satisfactorily completed as a pilot of helicopters *not less* than 45 hours of flight time, which shall include not less than:-

(i) 10 hours of solo flight time, supervised by a duly authorised flight instructor, including at least 5 hours of solo cross-country flight time with at least one solo cross-country flight totalling not less than 100 NM in the course of which landings at two different points shall be made;

(ii) 5 hours of instrument instruction time of which not more than 2 hours may be instrument ground time;

(iii) 5 hours as pilot-in-command or dual instruction flight time during the 90 day period immediately preceding the date of application.

(b) If the privileges of the licence are to be exercised at night, the applicant shall have completed on additional 5 hours of flight time at night in a helicopter, including 3 hours of dual instruction with navigational instruction and 5 solo take-offs, circuits and full-stop landings. The Authority shall determine whether experience as a pilot under instruction in an approved synthetic flight trainer is acceptable as part of the total flight time of 45 hours. Credit for such experience shall be limited to a maximum of 5 hours.

(c) When the applicant has flight time as a pilot of aircraft in other categories, the Authority shall determine whether such experience is acceptable and, if so, the applicant may be credited with not more than 6 hours of such flight time and flight time requirements may be reduced accordingly.

**(4) Flight Instruction - Helicopters:** The applicant, who shall hold a student pilot licence (helicopter), shall have received dual instruction in a helicopter from a duly authorised flight instructor. The instructor shall ensure that the applicant has operational experience in at least the following areas to the level of performance required for the private pilot:- (i) pre-flight operations, including mass and balance determination, helicopter inspection and servicing; (ii) aerodrome and traffic pattern operations, collision avoidance precautions and procedures; (iii) control of the helicopter by external visual reference; (iv) recovery at the incipient stage from settling with power; recovery techniques with low-rotor RPM; (v) ground manoeuvring and run-ups; hovering; take-offs and landings - normal, out of wind and sloping ground; (vi) take-offs and landings with minimum necessary power; maximum performance takeoff and landing techniques; restricted site operations; quick stops; (vii) cross-country flying using visual reference, dead-reckoning and, where available, radio navigation aids; (viii) emergency operations, including simulated helicopter equipment malfunctions; autorotative approach and landing; (ix) operations to, from and transiting controlled aerodromes, compliance with air traffic services procedures, radiotelephony procedures and phraseology; and (x) operational experience in flight by sole reference to instruments including the safe completion of a level 180 degree turn, in a suitably instrumented helicopter.

**(5) Skill - Helicopters:** The applicant shall have demonstrated to the satisfaction of the Authority the ability to perform as pilot-in-command of a helicopter the procedures and manoeuvres with a degree of competency appropriate to the privileges issued to the holder of a private pilot licence (helicopter); and to:- (i) operate the helicopter within its limitations; (ii) complete all manoeuvres with smoothness and accuracy; (iii) exercise good judgement and airmanship; (iv) apply aeronautical knowledge; and (v) maintain control of the helicopter at all times such that the successful outcome of a procedure or manoeuvre is never seriously in doubt.

**(6) Medical Fitness:** Class 2 medical certificate required for issue of Student Pilot's Licence. Age Limits are 15 years to begin training and 16 years for issue of Student Pilot's Licence and to fly solo.