Aviation Engineer / Specialist
postgraduate training course

GENERAL

The Aviation Engineer postgraduate specialist training course is a comprehensive university level course for individuals seeking a professional carrier as airline transport pilots. It is a unique, turn-key solution on the European pilot training spectrum providing all elements of a pilot training program in a single package. Unlike other courses our students will finish their studies with everything a European aviation employer may ask for.

The course's objective is to train qualified professionals with comprehensive theoretical and practical knowledge in aviation engineering and piloting, who will fulfill the pre-requisites of a co-pilot / first officer position at European airlines without any major additional training.

The theoretical courses with the support of the professors of the Faculty of Mechanical Engineering and Faculty of Transportation Engineering and Vehicle Engineering will provide a deeper understanding of aviation engineering than the modular ATPL theory courses. The modular ATPL courses usually prepare their students to pass their ATPL theory exams, however, many of them face a huge challenge when passing the theoretical questions of the airline recruiters. Our course has been designed and conducted by teachers and professors who actually teach you about aviation.

The practical training is carried out with an airline oriented perspective by instructors with airline background and active airline pilot instructors, familiar with the standards of modern commercial air transport, organized by our partner ATO. The practical flight training is the most expensive part of the training program, so it is used efficiently. Small planes are flown as big jets, since the standards are the same from pre-flight briefing until the evaluation, as it would be at an airline's training department. ATO, our partner, has all approvals to conduct all courses from the single engine leisure flights until the type rating course of a large commercial twinjet. During the course you will learn to fly:

- Single engine piston powered aircrafts in visual conditions (PPL)
    - Night conditions (NVFR)
    - Instrument conditions (IR)
- Multi engine piston powered aircrafts (ME)
- In a multi crew environment (MCC)
- Jet engine handling (JOC)
- Upset Recovery Training (UPRT)

A type rating course is not included in the current package as it is usually not among the requirements of the airline employers presently. However, such training can also be done at ATO for additional cost.

To conclude the courses - additional to the degree thesis and the final exams - the relevant commercial pilot exams of the National Aviation Authority must be passed as well. The Hungarian National Aviation Authority is a fully recognized member of the EASA. The issued pilot license is accepted in all EU countries and may be accepted by other employers worldwide.

Attaining the qualifications of "Airline Engineer" enables one to:

- Fly as Pilot-in-Command on a Single Engine and Multi Engine Piston class, Single Pilot airplanes
- Fly as Co-pilot / First Officer on Multi Pilot airplanes

BACKGROUND

The Aviation Engineer postgraduate specialist training course is a co-operation of the Faculty of Transportation Engineering and Vehicle Engineering and the Faculty of Mechanical Engineering of the Budapest University of Technology and Economics and the EASA approved CAVOK Aviation Training ATO.

LOCATION

The theoretical courses are held on the University's Campus in Budapest, the practical courses are done at Gödöllő Airfield (LHGD), near Budapest.

Our students will benefit from all infrastructures of the University, including a student card, accommodation, library and IT solutions.

Gödöllő Airfield is a perfect training place for initial trainings and a good starting point for advanced pilot trainees. The grass landing strip with little traffic is a perfect practice ground for the first landings and its close neighbor, the Budapest Liszt Ferenc International Airport (LHBP) can provide the challenges an intermediate pilot trainee might be looking for.

PRE-REQUISITES FOR AVIATION ENGINEER / SPECIALIST

BSc or equivalent diploma in the following faculties:

- engineering technology
- information technology
- agricultural engineering
- public administration
- law enforcement
- military

with engineering specialization for Engineer level, or other BSc or equivalent diploma for Specialist level. *(Conditions may apply for Specialist entry, please contact our service desk for details.)*

Additional requirements:

Language

- Fluent English (state recognized, intermediate level at least)
- or TOEFL IBT min. 80/120 points

Medical

- unrestricted EASA Part-MED Class 1 medical certificate

INTERMEDIATE LEVEL ENTRY

For pilots holding a valid EASA PPL(A) license, having at least 60 hours flight time on an aircraft, and ICAO Level 4 language exam, may request to skip the 1st semester to start directly with ATPL studies. Candidates will undergo an internal aptitude test to evaluate their experience before admitted.

COURSE STRUCTURE

The Aviation Engineer course is a 4 semester long correspondence training. It can be completed in 24-28 months. The length of the practical training may depend on the weather.

The theoretical part consist of contact lessons in total 971 hours. The distribution of the hours are explained on the next chapter.

	4-8 hours per day
1st semester: 143 contact hours	2 days per week
2nd semester: 315 contact hours	3 days per week
3rd semester: 330 contact hours	3 days per week
4th semester: 183 contact hours	2 days per week

Subjects

1st Semester (PPL) – Aviation General	Contact hours / Flight time	Credits
1. Air Law and ATC, Operational procedures, Airport familiarization	19hrs	4
2. Principles of Flight, Flight Performance and Planning	20hrs	4
3. Aircraft General Knowledge	17hrs	3
4. Aircraft Type Specific Knowledge, Aircraft Familiarization	16hrs	3
5. Meteorology and Navigation	26hrs	4
6. Communications, ICAO English	37hrs	4
7. Human Performance	8hrs	2
8. Individual Project on Aviation	self study	6
9. Practical Training 1	45 hrs flying	0
TOTAL	143hrs + 45 hrs flying	30 credits

2nd Semester (ATPL I.)	Contact hours / Flight time	Credits
1. Air Law and ATC procedures	55hrs	6
2. General Navigation	70hrs	6
3. Radio Navigation	40hrs	4
4. Human Performance	40hrs	4
5. Meteorology	70hrs	6
6. Communication	40hrs	4
7. Practical Training 2	50 hrs flying	0
TOTAL	315hrs + 44 hrs flying	30 credits

3rd Semester (ATPL II.)	Contact hours / Flight time	Credits
1. Instrumentation	70hrs	6
2. Flight Planning and Monitoring	40hrs	4
3. Airframes and Systems	55hrs	6
4. Principles of Flight	55hrs	5
5. Powerplant	55hrs	5
6. Electrics and Electronics	40hrs	5
7. Multi Engine	15hrs	2
8. Practical Training 3	61 hrs flying	0
TOTAL	330hrs + 43 hrs flying + 3hrs simulator	33 credits

4th Semester (ATPL III.)	Contact hours / Flight time	Credits
1. Mass and Balance	40hrs	4
2. Flight Performance	40hrs	4
3. Operational Procedures	40hrs	4
4. Multi Crew Cooperation	25hrs	3
5. Jet Orientation	10hrs	2
6. Final Project	28hrs	10
7. Practical Training 4	14 hrs flying + 68 hrs simulator	0
TOTAL	183hrs + 13 hrs flying + 83 hrs simulator	27 credits

TOTAL Theory 971hrs 120 credits
TOTAL Practical (flight) 140 hrs flying 83 hrs simulator

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Sample curriculum

	Subjects	1st year								2nd year								TTL
		1st Semester (PPL)				2nd Semester (ATPL I)				3rd Semester (ATPL II)				4th Semester (ATPL III)				
		Thy	Prtc	Crd	Ex	Thy	Prtc	Crd	Ex	Thy	Prtc	Crd	Ex	Thy	Prtc	Crd	Ex	
1.	Air law and ATC & Operational Procedures, Airport Familiarization	19	0	4	E													19 h
2.	Principles of Flight, Flight Performance and Planning	15	5	4	E													20 h
3.	Aircraft General Knowledge	17	0	3	E													17 h
4.	Aircraft Type Specific Knowledge, Aircraft familiarization	12	4	3	E													16 h
6.	Meteorology and Navigation	20	6	4	E													26 h
7.	Communications, ICAO English	19	18	4	E													37 h
8.	Human Performance	8	0	2	E													8 h
9.	Individual Project on Aviation	ST	0	6	I													ST
1.	Air Law and ATC Procedures					55	0	6	E									55 h
2.	General Navigation					60	10	6	E									70 h
3.	Radio Navigation					30	10	4	E									40 h
4.	Human Performance					40	0	4	E									40 h
5.	Meteorology					60	10	6	E									70 h
6.	Communication					20	20	4	E									40 h
1.	Powerplant									40	15	5	E					55 h
2.	Instrumentation									60	10	6	E					70 h
3.	Flight Planning and Monitoring									30	10	4	E					40 h
4.	Airframes and Systems									40	15	6	E					55 h
5.	Principles of Flight									40	15	5	E					55 h
6.	Electrics and Electronics									40	0	5	E					40 h
7.	Multi Engine									10	5	2	E					15 h
1.	Flight Performance													30	10	4	E	40 h
2.	Operational Procedures													30	10	4	E	40 h
3.	Mass and Balance													40	0	4	E	40 h
4.	Multi Crew Cooperation													20	5	3	E	25 h
5.	Jet Orientation													10	0	2	E	20 h
6.	Final Project													0	28	10	I	28 h
	Lesson hours	110	33			265	50			260	70			130	53			
	Total lesson hours	143 h				315 h				330 h				183 h				971 h
	Exams				7 E 1 I				6 V				7 V				5 E 1 I	25 V 2 I
	Credits			30				30				33				27		120crd

(Legend: Ex – Type of exam, E – exam, I – intermediate performance)

BENEFITS

Upon finishing the course, the graduates will attain the following qualifications / diplomas:

- Hungarian EASA Commercial pilot license (CPL)
    - ATPL Theory
    - 228 hours total time
        - 132 hours on single engine piston aircraft
        - 13 hours on multi engine piston aircraft
        - 83 hours on FNTP II simulator
    - ICAO English proficiency level 4+
    - Multi Crew Co-operation Course Certificate
    - Jet Orientation Course Certificate
    - Upset Recovery Training
- Diploma with „Aviation Engineer" or „Aviation Specialist" degree

The Aviation Engineer and Aviation specialist qualifications do not entitle to perform professional aircraft piloting activities. A Commercial pilot license that entitles to the activity of piloting an aircraft can be obtained by passing a successful theoretical and practical exam in the examination system accredited by the Transport Authority.

PRICES

The Aviation Engineer postgraduate specialist training course is a fee-paying course. The elements of the tuition fees are the following:

	Total per semester
1st semester (PPL)	4 400 000 HUF
2nd semester (ATPL I.)	10 250 000 HUF
3rd semester (ATPL II.)	10 250 000 HUF
4th semester (ATPL III.)	1 000 000 HUF
Total	**25 900 000 HUF**

The tuition fees are to be paid per semester.

This set up of the course and amended part has been formed according to pilot entry demands of two expanding airline company WizzAir and Ryanair.

FINANCING

For Hungarian citizens the Diákhitel 2 may be an appropriate financing solution for the whole course. For further details please contact us directly or visit https://diakhitel.hu/diakhitel2/

CONTACT

For further information please contact us at info@aviation.bme.hu