BACHELOR OF ENGINEERING IN
AERONAUTIC ENGINEERING

Multi-crew Pilot
Commercial Pilot
Aircraft Maintenance Engineer

www.au.edu
Assumption University of Thailand

Assumption University initially originated from Assumption Commercial College in 1969 as an autonomous higher education institution under the name of Assumption School of Business. In 1972, with the approval of the Ministry of Education, it was officially established as Assumption Business Administration College or ABAC. In May 1975, it was accredited by the Ministry of University Affairs. In 1990, it was granted new status as “Assumption University” by the Ministry of University Affairs.

The University is a non-profit institution administered by the Brothers of St. Gabriel, a worldwide Catholic religious order, founded in France in 1705 by St. Louis Marie De Montfort, devoted to education and philanthropic activities. The congregation has been operating many educational institutions in Thailand since 1901.

The University is an international community of scholars, enlivened by Christian inspiration, engaged in the pursuit of truth and knowledge, serving the human society, especially through the creative use of interdisciplinary approaches and cybertechnology.

- ABAC is the first Thai University to offer all courses in English since 1969.
- ABAC offers the most international curricula taught by over 380 foreign lecturers from over 40 countries (total of more than 1,400 lecturers).
- ABAC is the truly international community of scholars, more than 3,000 international students from as many as 80 countries per year.
- The Most competitive fees per credit beginning with a total of 70,000 bht. for one academic year.
- ABAC has “East meets West” architectural harmonious campuses in Thailand. The beauty of campus is an irresistible attraction to both local and foreign tourists.
- More than 60% of ABAC graduates are the owners of diverse businesses and services.

Thai Flight Training Academy

A vertical extension of the three existing aviation education institutions, the THAI Flight Training Academy was formalized in 2009. Initiated and operated by the national air carrier, Thai Airways International, this international flight training academy provides three advanced professional training programs for commercial airline pilots. Its Airline Transition Training Course, or ATT, provides a solid foundation in aviation knowledge for all captains-to-be, while the Flight Instructor Training Program, or Fit-Pro, emphasizes Competency Development and Teaching Ability Enhancement among budding Instructors.

Most recently, the academy has just introduced the Multi-Crew Pilot License Program or MPL, an innovative teaching approach for professional airline pilots which completely fulfills the requirements of every international airline.
Aeronautical Engineering curriculum's guidelines

1. Those who are interested to study engineering courses and Aeronautical engineering, must pass class 2 medical examinations from the institute of Aviation Medicine, Bhumibol Adulyadej Hospital or Bangkok Hospital, Thailand.
2. First year second semester students will undergo basic pilot training.
3. Second year first semester students are required to take an examination to qualify for Private Pilot License (PPL) at the Department of Civil Aviation, Thailand.
4. Second year second semester students will have to enroll and pass class 1 medical examinations.
5. Third year first semester students may choose the following majors:
   5.1 Multi-Crew Pilot License (MPL) or
   5.2 Commercial Pilot License (CPL)
6. Students who obtain Private Pilot Licenses (PPL) are deemed to have the added potential of flying through the Instrument Rating (IR) and the Department of Civil Aviation Verification
7. Test Multi Engine Rating (MR) after class hours: Training for Multi Engine Operations at the airport by the Civil Aviation Department. Students must hold Private Pilot Licenses (PPL) prior to passing this examination.
8. When a student graduates he/she must have completed Commercial Pilot License (CPL) and (Multi-Crew Pilot License, MPL). In the CPL cases of students who did not hold License PPL, they will need to ensure that they pass (IR), (ME), (CLP) simultaneously.

Graduation Requirements
Assumption University confers the degree of Bachelor of Engineering Program in Aeronautical Engineering upon students who meet all of the following requirements:

1. Complete the total number of credits of the curriculum
2. Obtain a cumulative grade point average of at least 2.00
3. Participate in 16 sessions of the Business Ethics Seminars
4. Have library and financial clearance with the University
5. Have demonstrated good behavior and discipline

Tuition Fees

<table>
<thead>
<tr>
<th>Program</th>
<th>Tuition Fees</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1/1</td>
<td>1/2</td>
<td>Summer</td>
<td>2/1</td>
<td>2/2</td>
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<tr>
<td>Multi-Crew Pilot</td>
<td>85,050</td>
<td>94,150</td>
<td>370,500</td>
<td>277,600</td>
<td>607,950</td>
<td>364,000</td>
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<tr>
<td>Commercial Pilot</td>
<td>83,050</td>
<td>92,150</td>
<td>370,500</td>
<td>275,600</td>
<td>605,950</td>
<td>328,000</td>
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<tr>
<td>Aircraft Maintenance Engineer</td>
<td>106,050</td>
<td>115,000</td>
<td>128,350</td>
<td>187,100</td>
<td>229,050</td>
<td>351,150</td>
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</table>

Remarks:
1. Non Thai students must add 12,500 Baht to Entrance and Intensive Course Fees to make up the difference between Matriculation amounts and are also required to pay an annual Health Insurance fee of 3,000 Baht during first enrollment.
2. Fees are subject to change without prior notice.
**Bangkok Aviation Center (BAC)**

**History**
Bangkok Aviation Center Co., Ltd. (BAC) was established in 2002, located in Bangkok, based at Don Muang International Airport. BAC is known for being the first private flying school in Thailand which provides complete pilot courses ranging from private pilot course, instrument rating course, multi-engine rating course, commercial pilot course and instructor rating course and ATPL knowledge course.

**Credential and Certificates**
The professional pilot program and individual course certifications are approved by Department of Civil Aviation, Thailand.

Bangkok Aviation Center is also accredited by Ministry of Education, Thailand.

The school is approved and designated to accept international students for training by the Department of Immigration, Thailand. International students can request for student visa and student pilot license to take courses at Bangkok Aviation Center.

**Services at Bangkok aviation Center**
- Pilot training programs
- Aircraft rental
- Demo flights
- Aerial Photography
- Commuter/charter flights
- Aircraft maintenance

**Current Airlines Customers**
- Thai Airways International Co. Ltd.
- Thai Air Asia
- Siam General Aviation
- Orient-Thai Airline

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**Introduction to the Aeronautic Engineering Program**

The Bachelor of Engineering Program in Aeronautic Engineering aims to produce graduates who have engineering knowledge in airplanes and skills in controlling airplanes, capable of working in both public and private sectors. The graduates’ morals and ethics will be developed to make them good members of the society. The leadership and teamwork skills are also integral characteristics of the graduates.

**PROGRAM OFFERS:**
- Multi-crew Pilot
- Commercial Pilot
- Aircraft Maintenance Engineer

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**Total Credits**
147 Credits

**Admission Requirements**
- M.6 / high school certificate (grade 12) or its equivalent as issued by the Ministry of Education.
- Medical certificate of at least Class 2 from the Institute of Aviation Medicine Bhumibol Adulyadej Hospital or Bangkok Hospital, Thailand.
- Applicants must be physically and mentally healthy; and
- Applicants must demonstrate good behavior and good attitudes toward their studies and strictly conform to the University’s rules and regulations.
## Study Plan

<table>
<thead>
<tr>
<th>Course</th>
<th>Multi-Crew Pilot</th>
<th>Commercial Pilot</th>
<th>Aircraft Maintenance Engineer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Education Courses</strong></td>
<td>30</td>
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<tr>
<td><strong>Specialized Courses</strong></td>
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<tr>
<td>- Basic Engineering Courses</td>
<td>39</td>
<td>39</td>
<td>39</td>
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<tr>
<td>- Major Required Courses</td>
<td>66</td>
<td>55</td>
<td>63</td>
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<tr>
<td>- Major Elective Courses</td>
<td>6</td>
<td>17</td>
<td>9</td>
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<tr>
<td><strong>Free Electives Courses</strong></td>
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<tr>
<td><strong>Total Credits</strong></td>
<td><strong>147</strong></td>
<td><strong>147</strong></td>
<td><strong>147</strong></td>
</tr>
</tbody>
</table>

### Major Required Courses

Students can select Multi-crew Pilot, or Commercial Pilot, or Aircraft Maintenance Engineer as their major.

#### Multi-crew Pilot (66 credits)

- AE 1100 Core Flying: Single-Engine Flight - Ground 3
- AE 1200 Core Flying: Single-Engine Flight - Flight 2
- AE 2100 Basic Flying: Single/Multi-Engine - Ground 3
- AE 2200 Basic Flying: Single/Multi-Engine - Flight I 1
- AE 2201 Basic Flying: Single/Multi-Engine - Flight II 1
- AE 2202 Basic Flying: Multi-Engine Operations 2
- AE 2203 Basic Flying: Operational Procedures 1
- AE 2300 Basic Flying: Flight Communications 1
- AE 2401 Basic Flying: Air Law 3
- AE 3200 Intermediate Flying: Flight Simulator Training Device I 1
- AE 3201 Intermediate Flying: Flight Simulator Training Device II 1
- AE 3300 Intermediate Flying: Route Manual and Pilot Applications 3
- AE 3301 Intermediate Flying: General Navigation 3
- AE 3302 Intermediate Flying: Flight Performance and Planning I 1
- AE 3304 Intermediate Flying: Meteorology 3
- AE 3400 Intermediate Flying: Advanced Aerodynamics 3
- AE 3500 Intermediate Flying: Airframes and Aircraft Systems 3
- AE 3501 Intermediate Flying: Power Plants and Instrumentations 3
- AE 3600 Advanced Flying: Multi-Engine Turbine - Ground 3
- AE 3601 Advanced Flying: Multi-Engine Turbine - Flight 4
- AE 3602 Advanced Flying: Specific Aircraft Flight - Ground 3
- AE 3603 Advanced Flying: Specific Aircraft Flight – Flight 3
- AE 3900 Seminar in International and Domestic Navigation 3
- AE 4300 Intermediate Flying: Crew Resources Management and Flight Safety 1
- AE 4301 Intermediate Flying: Human Performance and Limitations 3

#### Commercial Pilot (55 credits)

- AE 1100 Core Flying: Single-Engine Flight - Ground 3
- AE 1200 Core Flying: Single-Engine Flight - Flight 2
- AE 2100 Basic Flying: Single/Multi-Engine - Ground 3
- AE 2200 Basic Flying: Single/Multi-Engine - Flight I 1
- AE 2201 Basic Flying: Single/Multi-Engine - Flight II 1
- AE 2202 Basic Flying: Multi-Engine Operations 2
- AE 2203 Basic Flying: Operational Procedures 1
- AE 2300 Basic Flying: Flight Communications 1
- AE 2401 Basic Flying: Air Law 3
- AE 3300 Intermediate Flying: Route Manual and Pilot Applications 3
- AE 3301 Intermediate Flying: General Navigation 3

#### Aircraft Maintenance Engineer (63 credits)

- AE 1910 Problem-based Training in Aircraft Maintenance I 1
- AE 1911 Problem-based Training in Aircraft Maintenance II 1
- AE 1920 Problem-based Training in Aircraft Maintenance III 1
- AE 2501 Maintenance English I 1
- AE 2502 Maintenance English II 1
- AE 2700 Fundamental Aircraft: Propulsion Theory 2
- AE 2701 Fundamental Aircraft: Aircraft Engine 3
- AE 2702 Fundamental Aircraft: Aerodynamics 3
- AE 2703 Fundamental Aircraft: Aircraft Structure 3
- AE 2704 Fundamental Aircraft: Aircraft Material 3
- AE 2705 Fundamental Aircraft: Aircraft Performance 3
- AE 2901 Fundamental Aircraft: Practical Verification 1
- AE 3310 Aircraft Maintenance: Maintenance Human Factor 1
- AE 3312 Aircraft System: Logistics 3
- AE 3411 Aircraft System: Aviation Acts and Airworthiness Regulations 3
- AE 3511 Aircraft System: Aircraft Communications 1
- AE 3512 Aircraft System: Ground Support Equipment 2
- AE 3513 Aircraft System: Non-Destructive Inspection 3
- AE 3710 Aircraft Maintenance: Aircraft Maintenance I 3
- AE 3711 Aircraft Maintenance: Aircraft Maintenance II 3
- AE 3712 Aircraft System: Hydraulic and Pneumatic System 3
- AE 3713 Aircraft System: Landing Gear and Brake System 3
- AE 3714 Aircraft System: Fuel System 3
- AE 3715 Aircraft System: Powerplant 3
- AE 3716 Aircraft System: Stability and Weight & Balance System 3
- AE 3800 Aircraft System: Aircraft Electrical System 3
- AE 3901 Aircraft Maintenance: Practical Verification 1
- AE 4901 Aircraft System: Practical Verification 1

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AE 3304 Intermediate Flying: Meteorology 3
AE 3400 Intermediate Flying: Advanced Aerodynamics 3
AE 3500 Intermediate Flying: Airframes and Aircraft Systems 3
AE 3501 Intermediate Flying: Power Plants and Instrumentations 3
AE 3502 Intermediate Flying: Radio Navigation 3
AE 3700 Commercial Flight I 1
AE 3701 Commercial Flight II 1
AE 3702 Commercial Flight III 1
E 3703 Commercial Flight IV 1
AE 3900 Seminar in International and Domestic Navigation 3
AE 4300 Intermediate Flying: Crew Resources Management and Flight Safety 1
AE 4301 Intermediate Flying: Human Performance and Limitations 3
## Medical Examination Package For Pilot and Air Traffic Controller Initial Licensing 2011

<table>
<thead>
<tr>
<th>Description</th>
<th>Initial Class I,III</th>
<th>Initial Class II</th>
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<tbody>
<tr>
<td>Fasting 6-8 hours before the collection of blood sample</td>
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<tr>
<td>Examination by doctor</td>
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<td>√</td>
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<tr>
<td>Physical Examination</td>
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<td></td>
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<tr>
<td>Psychiatrist Interview</td>
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<tr>
<td>Psychologic Test</td>
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<td></td>
</tr>
<tr>
<td>Dental Exam</td>
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<td></td>
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<tr>
<td>Dental Exam</td>
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<td>√</td>
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<tr>
<td>Eye Exam</td>
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<tr>
<td>Distant Vision (Va Auto-refract)</td>
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<tr>
<td>Refraction</td>
<td>√</td>
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<tr>
<td>Near Vision - 16 Inch</td>
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<tr>
<td>Colour blindness test</td>
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<tr>
<td>Visual Field (confrontation)</td>
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<tr>
<td>Tonometer</td>
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<td>Heterophoria (Eso, Exo, Right Hyper, Left Hyper)</td>
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<td>Lens Prescription</td>
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<tr>
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<tr>
<td>Hearing Screening</td>
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<tr>
<td>Complete blood count</td>
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<tr>
<td>CBC</td>
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<tr>
<td>Fasting blood sugar</td>
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<tr>
<td>Liver function test</td>
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<td>SGPT</td>
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<td>Kidney function test</td>
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<td>Creatinine</td>
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<td>Lipid Profile</td>
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<td>Cholesterol</td>
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<tr>
<td>LDL</td>
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<td>Uric Acid</td>
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<td>VDRL</td>
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<td>Hbs Ag</td>
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<tr>
<td>Urine Examination</td>
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<td>√</td>
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<tr>
<td>Chest x-ray</td>
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</tr>
<tr>
<td>Electrocardiogram</td>
<td>√</td>
<td>√</td>
</tr>
</tbody>
</table>

Class I = Commercial pilot
Class II = Private pilot
Class III = Air Traffic Controller
IMPORTANT

The provisional information statements set forth in this catalog should not be construed as the basis of any contract between a student and this institution. Assumption University reserves the right to change any provision listed in this catalog, including, but not limited to academic requirements for graduation. Every effort through the Office of Graduate Studies, will be made to keep students advised of any such changes.

The University Registrar

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