



Aircraft Building Engineering Technology



Aircraft Building Engineering Technology is a full time (2 years) diploma/degree program in Applied Aviation Science. ABET is the innovative program that will train our youths to acquire skills on building and maintaining an aircraft and to advance general aviation activities in the country. The graduates will eventually learn the tools to become entrepreneurs after completing building a flyable experimental aircraft.

The core courses are developed to get the students prepared for advancement into specialized discipline in constructing the airframe and systems, Installation and understanding of engines, propellers, avionics and related systems.

The completed aircraft will go through FAA Airworthiness Certification and the student will be issued a Repairman Certificate for Experimental Aircraft. Each Student is required to purchase an Experimental Airplane Kit individually or with a group and the required tools.

The students will go through four semester sessions during which they will take **60 units** of core courses and some electives. Prerequisite: **Basic Aviation Technology**.



ENTRY REQUIREMENT

Students must have a pass in WASC with at least five credits. English and Mathematics plus other subjects in science or technical are advantageous with at least a CGPA of 2.0. Commercial or Art Students are also welcomed. All applicants must take the Pre-Degree Course in Basic Aviation Technology.

ENTRY REQUIREMENT FOR INTERNATIONAL STUDENTS

Students must complete at least 12 years of education and obtained a secondary school certificate or higher. International students should also have TOEFL if their primary language is not English. TOEFL scores 500 (paper-based test), 195 (computer-based test), 70 (internet-based test) and IELTS score of 5.5.

Entrepreneurship Business opportunities:

The same aircraft can be utilized by the graduating students to start ten different businesses in general aviation market as follows:

- 1) Recreational Flying
- 2) Business Flying
- 3) Aircraft Rental
- 4) Emergency Medical Services
- 5) Search and Rescue Services
- 6) Aerial Fire Fighting
- 7) Aerial Photography & Sightseeing
- 8) Sport Air racing & Public Display
- 9) Broadcasting & Traffic Watch
- 10) Agricultural Spraying
- 11) Surveillance and Security Patrol
- 12) Floats as Seaplane.



Course Outline

Semester	Modules	Course Code
Semester (1)	<ul style="list-style-type: none">• Aircraft Drawing and Interpretation• Basic Physics• Fundamental Electrical Theory• Materials and Processes• Technical Mathematics• Production Tooling• Aerodynamics	<ul style="list-style-type: none">• GEN 005• GEN 003• GEN 004• GEN 006• GEN 002• GEN 012• AVI 001
Semester (2)	<ul style="list-style-type: none">• Aircraft Design and Manufacturing• Aircraft Engines and Systems• Aircraft Instruments• Sheetmetal Works with Rudder Kit• Aircraft Horizontal Tail• Aircraft Slats and Flaps• Aircraft Wings	<ul style="list-style-type: none">• AVI 008• AVI 002• AVI 009• ABT 001• ABT 002• ABT 003• ABT 004
Semester (3)	<ul style="list-style-type: none">• Aircraft Fuselage Construction• Fluid and Landing Gear Systems & Assembly• Aircraft Electrical Systems• Aircraft Glass Cockpit• Aircraft Powerplant and Accessories• Propeller, Electrical Wiring & Fire Protection• Airframe and Powerplant Inspection	<ul style="list-style-type: none">• ABT 005• ABT 006• ABT 007• ABT 008• ABT 009• ABT 010• ABT 011
Semester (4)	<ul style="list-style-type: none">• Aircraft Painting• Aircraft finishing• Weight and Balance• Quality Assurance and Certification• Aircraft Ground and Flight Operations• Introduction to Entrepreneurship	<ul style="list-style-type: none">• ABT 012• ABT 013• ABT 014• ABT 015• ABT 016• ENT 001

Duration of Course

Graduate students of Applied Aviation Science with Aircraft Building Engineering Technology Specialty can participate our weekdays program (Monday – Friday 09:00am till 3:00) for twenty-four months or **four semesters**.