COLLEGE OF TECHNOLOGY

M. Wesley Shultz, *Dean*
Gerald W. Coy, *Associate Dean*
Harrigan Hall, Room 200
(616) 471-3413
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cot-info@andrews.edu
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BACCALAUREATE DEGREE CORE REQUIREMENTS

The BSET and BT core requirements are as follows:

BSET—21

ENGR120, ELCT141, 142, MECT121, MECT235, INDT450, AGRI395 or ENGT396 or GTEC395 or INDT315

BT—8

ENGR370, GTEC395, INDT310

General Courses

See inside front cover for symbol code. **(Credits)**

GTEC110 **(2)**
Freshman Seminar
College success and life enrichment skills. Included are an introduction to the resources of the university, principles of critical thinking, and Christian values clarification.

GTEC115 **(2)**
College Seminar
See description under GTEC110. Repeatable.

GTEC298 **(1-32)**
Prior Learning Assessment
Prior Learning Assessment (PLA) is a process which validates learning experiences occurring outside traditional college/university academic programs. A portfolio of evidence for demonstrating experience and competency justifies and determines the amount of credit granted. Repeatable with different topics.

GTEC395 **(1-6)**
Cooperative Work Experience
Supervised (by the dean or his appointee) on-the-job work experience with a cooperating industry. A minimum of 150 hours of work is required per credit. The student must submit a report of the cooperative work experience as specified by the instructor. Repeatable to 6 credits. Graded S/U. Prerequisites: an associate degree in technology or equivalent and permission of the dean. Students must apply and be accepted one semester in advance of their planned Cooperative Education experiences.

GTEC498 **(1-32)**
Prior Learning Assessment
See description under GTEC298. Total prior learning assessment credits (GTEC298 and 498) may not exceed 32 credits.

INDIVIDUALIZED PROGRAMS OF STUDY

For students who have career goals or special interests in areas other than those provided in one of the established majors or minors, a special individualized concentration is available in the following degrees: Bachelor of Science, Bachelor of Science in Engineering Technology, Bachelor of Technology, and Associate of Technology. An individualized concentration may be planned to meet the career goals of a student. Before the beginning of the junior year for baccalaureate-degree students or the beginning of the sophomore year for associate-degree students, the student, with the assistance of his or her adviser, prepares a proposed program of study. The program must be approved by a department faculty and the College of Technology Academic Policies and Curricula Committee.

AERONAUTICAL TECHNOLOGY

Seamount Building (Airpark), Room 203
(616) 471-3548
FAX: (616) 471-6004
airinfo@andrews.edu
http//www.andrews.edu/AVIA/

Faculty
Allen Bernet, *Chair*
Richard L. Kaping
Harry Lloyd
Gary A. Marsh
John Norton
Glen Windler

Academic Programs	Credits
BSET: Aircraft Engineering Technology	155
BT: Aviation Technology	124-128
Avionics/Maintenance (Airframe)	
Flight	
Flight/Business	
Flight/Maintenance	
Maintenance	
Maintenance/ Business	
AT: Aviation Technology	62-74
Flight	
Maintenance (52)	
Minor in Aviation Technology	20
Flight	
Maintenance (32)	
FAA-approved Part 141–Flight Training	
Commercial Pilot	
Flight Instructor	
Instrument Rating	
Multi-Engine Rating	
Private Pilot	
FAA-approved Part 147–Maintenance Technician	
Aircraft Airframe	
Aircraft Powerplant	

Students may choose program emphases (or a combination of them) in such areas as flight, maintenance, business, avionics, and engineering technology.

Programs

If any of the degree programs do not meet the needs of the student, an individualized major is available as described on this page.

BSET: Aircraft Engineering Technology

The BSET degree combines the aviation maintenance program with selected engineering courses and thus prepares the individual for activities between the pure engineer and a skilled craftsman (licensed A & P Technician).

Maintenance area courses (see below)	52
Technical core	20
MECT285, 326, 355, 370, 375	
Degree core	24

General Education requirements	59
Total credits for degree	**155**

BT: Aviation Technology

Students taking the Bachelor of Technology degree may choose to combine two of the specialization options—flight, maintenance, business, and avionics—or they may combine areas (see below) to meet specific career goals or limit their specialization to a single area—flight or maintenance.

Major*	60-78
Degree core	8
General Education requirements	39-42
General electives	17-01
Total credits for degree	**124-128**

***Major Options**

Avionics and Maintenance

Avionics (Electronics)—

governors; the fuel, electrical, hydraulic, pneumatic, and deicing systems, flight controls, weight and balance, and aircraft-instrument systems. *Fall*

AFLT330 (1-3)
(was AVIA330)
Crew Resource Management
Study of the effective use of resources available to the crew to achieve safe and efficient flight operations. Areas include human factors, communication, conflict resolution, leadership, teamwork, and situational awareness as applied to flight operations. Prerequisite: Private Pilot Certificate or permission of the instructor. *Spring*

AFLT455 (2)
(was AVIA455)
Flight Instructor Ground School
Ground training to prepare the student for the FAA flight-instructor airplane knowledge test. Topics include techniques of teaching, analysis of maneuvers, and lesson planning. Prerequisite: Commercial Pilot Certificate with the Instrument Rating or permission of the instructor. *Fall, Spring, Summer*

AFLT456 (2)
(was AVIA456)
Flight Instructor Flight Training
Flight and ground training to prepare the student for the FAA flight-instructor airplane practical test. Topics include the performance, teaching, and analysis of flight maneuvers required for the private and commercial airplane pilot. Prerequisite: Commercial Pilot Certificate with the Instrument Rating. *Fall, Spring, Summer*

AFLT464 (2)
(merges AVIA459, 464)
Basic and Advanced Ground Instructor
Prepares the student for the FAA basic and advanced ground-instructor knowledge test. Topics include techniques of teaching aerodynamics, aircraft performance, aircraft systems, weight and balance, meteorology, navigation, and regulations. Prerequisite: AFLT455 or pass the FAA Fundamentals of Instruction Test. *Fall, Spring, Summer*

AFLT465 (2)
(was AVIA465)
Instrument Flight Instructor Ground School
Prepares the student for the FAA instrument flight-instructor knowledge test. Topics include techniques of teaching instrument flight, analysis of instrument maneuvers, instrument approaches, en route operations, regulations, and

Prerequisite or corequisite: AVMT114 or