

COLLEGE OF TECHNOLOGY

Verlyn R. Benson, *Dean*

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Baccalaureate Degree Core Requirements

The BT core requirements are as follows:

BT—6

TECH370, AGRI395 or GTEC395 or TECH395.

Programs Offered

The College of Technology is comprised of four departments with specific majors within each department, as follows:

Department of Aeronautics

BT: Aviation Technology

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

AT: Aviation Technology

Students may earn an Associate of Technology degree by taking courses beyond those required for the certificate in either the flight or maintenance area. The additional courses give students a broader General Education base, prepare them better to perform the activities acquired by the certificate program, and facilitate study for an advanced degree.

Department of Agriculture

BS: Agriculture

The Bachelor of Science degree in Agriculture prepares individuals who intend to pursue advanced degrees leading toward a career in teaching or research.

BT: Agribusiness

The Bachelor of Technology degree in Agriculture is a career specialist's degree preparing individuals for supervisory and management positions in production agriculture.

AT: Agriculture

The Associate of Technology degree in Agriculture is a two-year program designed to provide students with skills and working knowledge to prepare them for entry-level positions in their area of specialization.

BS: Animal Science

Although colleges of veterinary science accept students who have

met the minimum requirements for admission, most successful applicants are those who have completed a bachelor's degree while preparing to apply to the professional program. Entrance requirements vary among the colleges of veterinary medicine. The required prerequisite pre-veterinary courses are usually in general biology, general and organic chemistry, physics, biochemistry, mathematics, courses in animal science, and general education.

BS: Horticulture

The Bachelor of Science degree in Horticulture prepares individuals who intend to pursue advanced degrees leading toward a career in teaching or research.

BT: Horticulture

The Bachelor of Technology degree in Horticulture is a career specialist's degree preparing individuals for supervisory and management positions in horticulture or the ornamental horticulture industry.

AT: Horticulture

The Associate Technology degree in Horticulture is a two-year program designed to provide students with adequate skills and working knowledge to prepare them for entry-level positions in their area of specialization.

Department of Digital Media and Photography

BFA: Multimedia Arts

The multimedia arts degree major prepares students to produce corporate interactive marketing and advertising materials. Students learn to creatively produce and integrate multiple promotion products such as interactive DVDs, and interactive CDs for commercial and corporate applications.

BFA: Photography

Photography fosters creativity in the production of visual images. The emphases encompass elements of digital, commercial, and fine arts imaging, focusing on individual creativity and photo-journalism.

BFA: Video Production

Students learn to design and integrate digital video and 3-D animation to produce creative advertising, documentary, promotional products, and TV graphics.

BFA: Web Design

The web design major focuses on principles of aesthetics, content, delivery, user interface, web animation, screen design, and multimedia for the creation of web pages.

AFA: Digital Media

This two-year program allows students to enter the workforce early, with many foundation courses. The program allows qualified students from continuing with a four-year BFA degree, without a loss of credits.

Department of Engineering & Computer Science

BS: Computing

The Bachelor of Science degree in Computing offers two emphases: Computer Science, and Software Systems. Computer Science goes beyond programming and focuses on theory, processes, models, algorithms, and other aspects of computational systems. Software Systems is an applied study of computing, focusing on development

and maintenance of software application programs, and requires a supporting minor in an application area.

BSE: Engineering

The Bachelor of Science in Engineering degree has emphases in Electrical and Computer Engineering and in Mechanical Engineering. These two emphases build on a strong traditional mathematics, science, and engineering core. The Electrical and Computer Engineering emphasis focuses on the area of digital systems, communication systems, and computer-controlled instrumentation and computer simulation. The Mechanical Engineering emphasis focuses on the elements of mechanical design and the electromechanical elements of smart machines.

General Courses

(Credits)

See inside front cover for symbol code.

GTEC110

(3–4)

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

(3–4)

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

(1–4)

Cooperative Work Experience

Supervised (by the dean or his appointee) on-the-job work experience with a cooperating industry. A minimum of 120 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 program is available in the following degrees: Bachelor of Science, 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 advisor, 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.

AERONAUTICS

Seamount Building (Airpark)

(269) 471-3547

Fax: (269) 471-6004

airinfo@andrews.edu

<http://www.andrews.edu/COT/aviation>

<http://www.andrews.edu/COT/ap>

Faculty

Allan R. Payne, *Chair*

James H. Doran

Duane E. Habenicht

Gary A. Marsh

Dina M. Simmons

Academic Programs	Credits
BT: Aviation Technology Flight Flight/Business Flight/Maintenance Maintenance Maintenance/Business	124–140
AT: Aviation Technology Flight (36) Maintenance (52)	62–74
Minor in Aviation Technology Flight (20) Maintenance (32)	20 or 32
Certificates Private Pilot* Commercial Pilot Instrument Rating Flight Instructor Multi-Engine Rating	
FAA-approved Part 141* FAA-approved Part 147, Maintenance Technician Airframe Powerplant Airframe and Powerplant	

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

Programs

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

Two programs are available. A four-year Bachelor in Aviation Technology, and a two-year Associate in Aviation Technology. Both programs give the student beginning level skills in flight or maintenance. The airpark is located about 1.2 miles from the central campus. Students are expected to provide their own transportation to and from the airpark.