The University	10	
Admissions and Academics	26	
Financial Information	56	
Inter-School Program	80	
John Nevins Andrews Honors Program	84	
College of Arts and Sciences	88	
College of Technology	198	
<b>College of Technology</b> Division of Architecture		
	222	
Division of Architecture	222 228	
Division of Architecture School of Business	222 228 244	



s \* spiritus • spiritu 

# **COLLEGE OF TECHNOLOGY**

Verlyn R. Benson, Dean

Harrigan Hall, Room 200 (269) 471-3413 FAX: (269) 471-6292 cot-info@andrews.edu http://www.andrews.edu/COT/

#### BACCALAUREATE DEGREE CORE REQUIREMENTS

The BT core requirements are as follows: **BT**—6

TECH370, AGRI395 or GTEC395 or AVIA395.

## **Programs Offered**

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

## Department of Aeronautical & Automotive Technology

#### **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.

#### **BT: Automotive Management**

The Bachelor of Technology degree in Automotive Management offers options in the automotive field. Auto Mechanics provides the training needed to maintain and repair automobiles.

#### **AT: Automotive Management**

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

### **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 twoyear 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 & 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**

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

**Prior Learning Assessment** 

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)

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.

# AERONAUTICAL AND AUTOMOTIVE TECHNOLOGY

Seamount Building (Airpark) (269) 471-3547 Fax: (269) 471-6004 airinfo@andrews.edu http://www.andrews.edu/COT/avi

Automotive Technology Center (US 31) (269) 471-6642 Fax: (269) 471-6645 coyg@andrews.edu http://www.andrews.edu/COT

#### Faculty

Gerald W. Coy, *Chair* James H. Doran Duane E. Habenicht Gary A. Marsh

· .

Academic Programs	Credits
BT: Automotive Management	124
BT: Aviation Technology	124-129
Flight	
Flight/Business	
Flight/Maintenance	
Maintenance	
Maintenance/Business	
AT: Automotive Technology	62
AT: Aviation Technology	62-74
Flight	
Maintenance (52)	
Minor in Automotive Technology	20
Minor in Aviation Technology	25
Flight	
Maintenance (32)	
FAA-approved Part 141*	
Private Pilot*	
Commercial Pilot	
Instrument Rating	
Flight Instructor	
Multi-Engine Rating	
FAA-approved Part 147, Maintenance Technician	
Airframe	
Powerplant	
Airframe and Powerplant	

....

~

(Credits)