

SCHOOL OF TECHNOLOGY

Carlos R. Schmitt, Dean
C-61J

GENERAL INFORMATION

The primary function of the School of Technology is to provide quality technical programs in the areas of aviation maintenance technology, drafting and design technology, electronics technology, and cooperative programs. Each program is designed to meet the individual needs of the student as well as the manpower needs of business and industry.

The programs are for students who wish to develop a technical skill and enter the world of work upon completion. Business and industry are looking for technicians who have acquired a sound general education and technical skills. Upon completion of a program, a student will receive an Associate in Applied Science Degree or a Certificate.

The School of Technology offers an Associate in Applied Science Degree with the following programs of study:

- Architectural Design Technology
- Aviation Maintenance Technology
- Avionics Technology
- Computer Science Technology
- Electromechanical Technology
- Electronics Technology
- Instrumentation Technology
- Mechanical Drafting Technology
- Pre-Airway Science (Aviation Maintenance Technology)
- Telecommunications Technology

The School offers certificate programs in the following:

- Electrical Power Technology
- Electronics Technology

The School has the responsibility for advising students enrolled in the following associate degree programs:

- Cooperative Program
(with Griffin-Spalding County Area Vocational-Technical School)
- Pre-Engineering Technology (Transfer)

Students may enroll on a full-time or part-time basis, depending on their individual needs. Courses are scheduled for day, evening, and summer based on a sequential format. Due to limited enrollment, some courses may not be offered every quarter or academic year. Students are strongly encouraged to enroll in their major courses the quarter in which they are offered.

Students are cautioned that some of the specialty courses in Area IV and specialized general education courses may not transfer readily to other institutions. Transferability depends upon the requirements of the college or university and the program into which the student desires to transfer. For this and other academic reasons, students are expected to work with their major advisor when planning their quarterly schedule.

Because some students do not have work experience in their area of specialization, the School allows internship experience within some majors. Students are advised to discuss their interest in an internship with their advisor prior to the quarter they plan to enroll. The School does not assume responsibility for locating an employer to serve as an internship experience.

DEPARTMENT OF AVIATION MAINTENANCE TECHNOLOGY

Jack Moore, Head
AV-4, 9013 Tara Boulevard, Jonesboro

Clayton State College offers two distinct types of Aviation Maintenance Technology degree programs for individuals who wish to prepare for the FAA Airframe and/or Powerplant (A & P) rating examinations and pursue degree programs which require that knowledge and skill.

AVIATION MAINTENANCE TECHNOLOGY (Associate In Applied Science Degree)

EMPHASIS: FAA Part 147

This program, which is designed to prepare students for a career in aerospace vehicle maintenance, presents a carefully selected blend of theory and practical applications. A graduate of the Program may make application to take the Federal Aviation Administration's written, oral and practical test battery for certification as an aircraft mechanic. Successful completion of all the required tests results in the issuance of an FAA Mechanic Certificate with the airframe and/or powerplant rating, as appropriate.

The Aviation Maintenance Program consists of seven quarters and begins after completion of all general education Core Curriculum requirements in Areas I, II and III. A candidate for acceptance into the Program should have a strong math/science background, specifically in algebra; academic ability as measured by the Scholastic Aptitude Test (SAT) and American College Test (ACT), if required; and mechanical aptitude.

The Aviation Maintenance Program has a limited enrollment, and students will be selected on the basis of SAT and ACT scores, college course grades, high school course grades, relevant work experience, and other qualifications relating to academic and professional potential. Interviews may be required.

There is no provision for absence in any of the courses in Major Field Requirements. Eligibility for FAA testing is contingent upon completion of the entire 1900 hours of scheduled instruction, and absence for any reason requires the work missed be made up. Make-up work is scheduled at the convenience of the instructor and should be coordinated in advance when an absence is anticipated.

Students may receive advanced-standing credit for previous course work only if they were enrolled at an FAA-approved Aviation Maintenance Technician School that holds regional accreditation status. In addition, this credit is granted only if a transcript is provided at the time of enrollment and only if that credit was earned during Clayton State College's most recent academic year. All other applications for transfer or advanced-standing credit may require a competency test, including practical skill demonstration, and may require a fee.

AVIATION MAINTENANCE TECHNOLOGY
Two-Year Program
 (Associate In Applied Science Degree)

EMPHASIS: FAA Part 147

Course	Number	Title	Quarter Credit Hours
AREA I — HUMANITIES			
• ENGL	111	Communication: The Uses of Language I	5
			5
AREA II — NATURAL SCIENCE AND MATHEMATICS			
* ¹ MATH	107	Applied Trigonometry	5
			5
AREA III — SOCIAL SCIENCES			
A. • POLI	111	American National Government	5
• HIST	252	American Civilization	5
B. Choose one of the following:			5
* ¹ PSYC	210	Industrial Psychology	5
• SOCI	105	Introduction to Sociology	5
			15
AREA IV — MAJOR FIELD REQUIREMENTS			
¹ AVMT	101	Maintenance Regulations	3
¹ AVMT	102	Aircraft Basic Science	4
¹ AVMT	103	Aircraft Applied Science	10
¹ AVMT	104	Basic Electricity and Electronics	10
* ¹ AVMT	105	Air Transportation Maintenance	10
¹ AVMT	201	Sheet Metal	10
¹ AVMT	202	Airframe Structures	10
¹ AVMT	203	Utility Systems	10
¹ AVMT	204	Fluid Power/Landing Gear Systems	10
¹ AVMT	205	Electrical and Navigation Systems	10
* ¹ AVMT	210	Air Carrier Maintenance Operations	5
¹ AVMT	211	Turbine Engines	10
¹ AVMT	212	Reciprocating Engines	10
¹ AVMT	213	Powerplant Accessories	10
¹ AVMT	214	Powerplant Electrical Systems	10
¹ AVMT	215	Engine Fuel and Fuel Metering Systems	10
			137
			162

¹Career courses which may not fulfill requirements for the baccalaureate degree or be transferable to other programs. Students should consult with the institution to which they plan to transfer to determine transferability.

*Note: The following courses are NOT FAA-approved courses and are not required for certification of FAA mechanic testing eligibility: ENGL 111, MATH 107, POLI 111, HIST 252, CITZ 101, PSYC 210, SOCI 105, AVMT 105, AVMT 210.

Note: Students must complete Regents' Testing program requirement. (See pages 38-39 in this catalog.)

PRE-AIRWAY SCIENCES (AVIATION MAINTENANCE)
Two-Year Program
 (Associate In Applied Science Degree)

EMPHASIS: FAA Part 65 Program

This Program offers special Aviation Maintenance courses to students who are experienced but unlicensed aircraft maintenance specialists. These are broad-based courses which deal primarily with the theory and concepts of airframe and powerplant maintenance and the general practices, problems, and special considerations involved in maintaining aircraft in an airworthy condition under the privileges of the FAA Mechanics Certificate.

To be eligible for enrollment in this program, students must meet the eligibility requirements of Federal Aviation Regulation 65, subpart D, paragraphs 65.71 and 65.77. Upon completing the FAA Test Battery and attaining certification, students may apply course work to the Part 65 degree program requirements.

A student convicted of violating any Federal or State statute relating to the growing, processing, manufacture, sale, disposition, possession, transportation, or importation of narcotic drugs, marijuana, depressant or stimulant drugs, or other controlled substances is not eligible for any certificate or rating issued under Federal Aviation Regulation Part 65 for one (1) year after the date of commission of the act or final conviction, whichever is later (Federal Aviation Regulation Part 65, Paragraph 65.12). The commission of any act cited above is also grounds for revoking any certificate held under any FAR.

This program is NOT approved by the FAA nor is it approved by the UAA (University Aviation Association). Students enrolling in this program should check with the institution where they intend to complete their Baccalaureate Degree to verify transferability.

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PRE-AIRWAY SCIENCES (AVIATION MAINTENANCE)

Two-Year Program (Associate In Applied Science Degree)

EMPHASIS: FAA Part 65 Program

Course Number	Title	Quarter Credit Hours
AREA I — HUMANITIES		
Standard Area I Core (see page 36)		
AREA II — NATURAL SCIENCE AND MATHEMATICS		
A. Choose two of the following:		
MATH 111	College Algebra	10
MATH 112	Precalculus	
MATH 151	Calculus and Analytic Geometry I	
MATH 152	Calculus and Analytic Geometry II	
B. Choose one of the following sequences:		
PHYS 151,152	Introductory General Physics I, II	10
PHYS 151,153	Introductory General Physics I, III	
PHYS 251,252	General Physics I and II	
		20
AREA III — SOCIAL SCIENCES		
A. HIST 251 or 252	American Civilization I or II	5
B. POLI 111	American National Government	5
C. ECON 201	Principles of Economics I	5
D. Choose from the following:		
ECON 202	Principles of Economics II	5
COMP 201	Introduction to Computing or	
COMP/COIS 210	Principles of Computer Programming I	
		20
AREA IV — MAJOR FIELD REQUIREMENTS		
¹ AVMT 221	General Maintenance Applications	5
¹ AVMT 223	Airframe Structures Applications	5
¹ AVMT 225	Airframe Systems & Component Applications	5
¹ AVMT 227	A&P Electrical & Electronic Applications	5
¹ AVMT 222	Powerplant Theory Applications	5
¹ AVMT 224	Propulsion Systems & Applications	5
		30
		90

¹Career courses which may not fulfill requirements for the baccalaureate degree or be transferable to other programs. Students should consult with the institution to which they plan to transfer to determine transferability.

Note: Students must complete Regents' Testing program requirement. (See pages 38-39 in this catalog.)

DEPARTMENT OF ELECTRONICS AND DRAFTING

Advisors: Bladine, Clark, Eddins, Hansen, Honeycutt

The Department of Electronics and Drafting offers preparation for persons seeking careers as technicians in selected areas of emphasis in electronics or drafting. Programs lead to an Associate in Applied Science Degree or a Certificate, depending on the number of hours completed.

ASSOCIATE IN APPLIED SCIENCE (DRAFTING AND DESIGN)

Two areas of emphasis in Drafting and Design are available: Architectural Technology and Mechanical Drafting Technology.

ARCHITECTURAL DESIGN TECHNOLOGY

Two-Year Program (Associate In Applied Science Degree)

The Architectural Technology option prepares qualified drafters to develop drawings of residential and commercial buildings which are used in the construction process. Students study such areas as building codes, zoning laws, safety regulations, building materials, surveying procedures, and electrical and mechanical systems.

Course Number	Title	Quarter Credit Hours
AREA I — HUMANITIES		
A. ¹ ENGL 103	Technical Writing	5
B. ENGL 111	Communication: The Uses of Language I	5
		10
AREA II — NATURAL SCIENCES AND MATHEMATICS		
A. MATH 111	College Algebra	5
B. PHYS 151	Introduction to General Physics	5
		10
AREA III — SOCIAL SCIENCES (Select A or B)²		
A. POLI 111	American National Government	5
HIST 251 or 252	American Civilization I or II	5
or		
B. ¹ CITZ 101	Citizenship	2
SOCIAL SCIENCE ELECTIVE (excluding POLI 111)		5
		7-10
AREA IV — MAJOR FIELD REQUIREMENTS		
A. Level 1		
¹ ATDD 101	Engineering Drawing I	5
¹ ATDD 102	Technical Illustrations	5
¹ ATDD 110	Descriptive Geometry	5
¹ ATDD 115	Precision Sheet Metal Drawing	3
¹ ATDD 201	Computer-Aided Drafting	5
¹ ATDP 101	Introduction to Data Processing with BASIC	5
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(continued on next page)

¹Career courses which may not fulfill requirements for the baccalaureate degree or be transferable to other programs. Students should consult with the institution to which they plan to transfer to determine transferability.

²Students planning to transfer to a four-year program will need to complete POLI 111 and HIST 252.