AVIATION DIVISION:
AIRWAY SCIENCES TECHNOLOGY FLIGHT EMPHASIS
INFORMATION AND APPLICATION GUIDE 2017-2018 ACADEMIC YEAR

In partnership with University of North Dakota Aerospace Foundation
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Dear Prospective Student:

Thank you for your interest in the Flight Emphasis Program at Chandler-Gilbert Community College. This program is the only FAA approved Part 141 flight school offered in the Maricopa County College District. CGCC is also pleased to have partnership with the University of North Dakota Aerospace which is one of the premiere aviation colleges in the nation.

Please review the enclosed Information and Application Packet. If you decide to apply for admission in the program, complete all the required steps noted. Please be aware of deadlines for each semester. Applications and approval to register for Aviation classes will also include the attendance of an Aviation Information Session prior to each new semester. Please refer to the Information and Application Packet for additional resources or the program website if you have additional questions about the program.

Website
http://www.cgc.maricopa.edu/Academics/aviation/Pages/Home.aspx

Aviation Information Sessions
https://remedy.cgc.maricopa.edu/aviation/index.jsp

Email Questions
askapilot@cgc.edu

CGCC Aviation
Bluford Hall-Williams Campus

Aviation Advisement
Bluford Hall-Williams Campus

Please note that the curriculum and prerequisites for the program will be revised periodically. It is the applicant’s responsibility to remain aware of changes that can occur. Please also be aware that current FAA and TSA requirements are being followed by the college.

I wish you success in your educational and career pursuits.

Sincerely,

CGCC-Aviation Department

Enclosure
This information is for applicants to the Chandler-Gilbert Community College Aviation Division, Airway Sciences Technology, Flight Emphasis located at the Phoenix-Mesa Gateway Center in Mesa, Arizona. All inquiries for information and enrollment procedures should be directed to the Aviation Division, Airway Sciences Technology Program at Chandler-Gilbert Community College 480.988.8000, 7360 East Tahoe Avenue, Mesa, Arizona 85212.

The deadline for submitting the application and all supporting documents including general education and prerequisite transcripts for the fall semester program start is **August 5 for spring semester January 5**.

**A minimum GPA of 2.00** on a 4.00 scale is required for all general education and prerequisite courses that apply to the Associate of Applied Science degree in Airway Sciences Technology.

**Equal-access Opportunity**
The Maricopa County Community College District does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, handicap/disability, age, or Vietnam era/disabled Veteran status in employment or in the application, admission, participation, access and treatment of persons in instructional programs and activities.

**English as a Second Language**
The Maricopa County Community College will take steps to ensure the lack of English language skills will not be a barrier to admission and participation in vocational education programs.

**Questions or Concerns**
If you have any questions about the enclosed program material, please feel free to contact any of the following program contacts:

**Bashir Khalil**
Faculty Advisor
Phone: 480.988.8112
Email: bashir.khalil@cgc.edu

**Rex Ginder**
Faculty Advisor
Site Manager UND Aerospace
Phone: 480.988.8759
Email: rex.ginder@und.areo.edu

Disclaimer: This document is for informational purposes only. The official programs descriptions can be found here: http://www.maricopa.edu/academic/ccta/
College Contact Information

Aviation Department
480.988.8103

Aviation Department Chair
480.988.8127

UND Site Manager
480.988.8117

FAA-FSDO
480.419.0330

Academic Advisement
480.988-8180 or 480.732.7317

Admission and Records
480.988.8134

Financial Aid
855.622.2332

Veterans Resources
480.726-4094 or Fax: 602.396.5057

Placement Testing
480.988-8163 or 480.732.7159

Cashier/Fiscal
480.732.7312

Bookstore (Williams Campus)
480.988.8106

College Safety
480.988-8888
Get Admitted maricopa.edu/admissions

• Create MEID account
• Apply for Admissions at my.maricopa.edu
• Submit proof of identification to the college at which you applied

Take the Placement Test maricopa.edu/testing

• Prepare by reviewing the sample questions at: maricopa.edu/testing
• Placement test will ensure appropriate level of classes for enrollment
• The Placement Test is not a pass/fail exam
• The Placement Test is untimed and FREE
• Bring your government issued photo ID on the day of testing
• Bring results to the Aviation Information Session for additional help
  * First time college students are required to test

Register for Aviation Information Session https://remedy.cgc.maricopa.edu/aviation/index.jsp

• Bring documents with you
• Get the latest advisement updates prior to enrolling into the classes
• All Aviation related classes can only be registered in person and are not permitted to enroll online per the Aviation Department Policy

Apply for Financial Aid and Scholarships https://fasa.ed.gov/

• Based on the application date it can take 4-8 weeks for completion of all steps

Apply for Veterans Benefits cgc.maricopa.edu/Students/Veterans/Pages/Appy.aspx

Send Official Transcripts cgc.maricopa.edu/Students/Veterans/Pages/Appy.aspx

• Do you have previous college credit or military schooling? Send transcripts to the following address:
  Chandler-Gilbert Community College
  Attn: Admissions and Records
  7360 E. Tahoe Ave
  Mesa, AZ 85212

Pay Tuition and Fees

• Payment plans are available and do not require any credit

Purchase Books

• Visit the Williams Campus bookstore or contact the UND flight office for the current approved booklist

Obtain Student ID and Parking Decal

• Visit the college Public Safety office at the Williams Campus prior to the start of the new term to secure these items
Airway Science Technology, Flight Emphasis: 3707

The Associate in Applied Science (AAS) in Airway Science Technology, Flight Emphasis program is designed to prepare students to apply technical knowledge and skills to the flying of commercial, agricultural, public service, corporate, or private aircraft, and to prepare students to sit for the Federal Aviation Administration (FAA) written and practical examinations.

Track I

Track II
Commercial Pilot Certificate with Helicopter Rating; Instrument Rating as well as the Flight Instructor Certificate with the Helicopter Rating.

Track III
Commercial Pilot Certificate with Single Engine Airplane Land Rating; Instrument Rating; and the Multi-Engine Rating as well as the Flight Instructor Certificate with the Single Engine Airplane Land Rating. Students will also have experience in the actual or simulated operations of a small Unmanned Aircraft Systems (UAS) as permitted by Federal Regulations.

Job Description
The Associate in Applied Science in Airway Science Technology, Flight Emphasis program is designed to prepare students with the required Federal Aviation Administration certificates for initial employment as aircraft pilots in a wide variety of entry-level, flight-related occupations. Depending on which track students select, such occupations may include flight instructor, banner tow pilot, jump plane pilot, corporate transportation, mineral exploration and production, public service, etc. In some instances, additional specialized training will be required. Students aspiring to employment with airlines can elect to use their Flight Instructor Certificate to help build flight time in an economical manner.

Flight Technology: 5707

The Certificate of Completion in Flight Technology curriculum is designed to prepare students to apply technical knowledge and skills to aircraft flying and to prepare them to sit for the Federal Aviation Administration (FAA) written and practical examinations for Commercial Pilot Certificate with Single Engine Airplane, Land Rating, Instrument Rating and Multiengine Rating. Instruction includes aircraft design, systems, flight operations and procedures, radio communication and navigation, and governmental rules and regulations pertaining to aircraft operations.

Job Description
This program is designed to prepare students with the required Federal Aviation Administration certificates for initial employment as airplane pilots in a wide variety of entry-level, flight-related occupations such as flight instructor, banner tow pilots, jump plane pilots, etc. In some instances, additional specialized training will be required.

Transfer of Pilot Ratings
Students with a Private Pilot Certificate obtained without college credit must demonstrate proficiency and knowledge before enrolling in any 200-level ground or flight courses. Students holding Commercial Pilot or Flight Instructor Certificates obtained without college credit are required to take the appropriate ground school courses, and complete the flight lessons contained in the Federal Aviation Regulations Part 141 Commercial Pilot Test Course.

Aviation and related courses from other colleges and universities will not automatically transfer to CGCC. All aviation transfer courses, flight or non-flight, are reviewed by the Aviation Division for transferability. Students with pilot certificates obtained with college credit at other institution must demonstrate proficiency of each certificate and associated ratings before credit will be accepted to satisfy CGCC curriculum requirements. In all cases it is the responsibility of the student to initiate the process.

Certified Flight Instructor Instrument Airplane Rating: 5825

The Certificate of Completion (CCL) in Certified Flight Instructor Instrument Airplane Rating program in Airway Science Technology, Flight Emphasis is designed to prepare students to apply technical knowledge and skills to the flying of airplanes as a Certified Flight Instructor-Instrument Rated, and to prepare students to sit for the Federal Aviation Administration (FAA) written and practical examinations.
**Additional Information**

Students must earn a grade of “C” or better for all courses within the program. + indicates any module/suffixed courses.

**Flight Policies**

Flight and simulator training costs are the responsibility of the student. They are determined on an hourly basis for aircraft and flight instruction, and are in addition to tuition fees, and other registration expenses. Once students have been accepted into the CGCC Airway Science Technology, Flight Emphasis Program, they will not receive college credit for flight instruction received at flight schools other than the school or schools with which Maricopa County Community College District has currently contracted for such instruction.

Ground school course must be taken concurrently with the appropriate flight courses. Attendance is mandatory in the aviation ground school courses in accordance with Federal Aviation Regulation Part 141, Appendices A and D. Failure to meet these attendance requirements will disqualify the student for FAA pilot certification.

**Transfer of Pilot Ratings**

Students with a Private Pilot Certificate obtained without college credit must complete the flight lessons contained in the Federal Aviation Regulations Part 141 Private Pilot Test Course before enrolling in any 200-level ground or flight courses.

Students holding Commercial Pilot or Flight Instructor Certificates obtained without college credit are required to take the appropriate ground school courses, and complete the flight lessons contained in the Federal Aviation Regulations Part 141 Commercial Pilot Test Course.

Aviation and related courses from other colleges and universities will not automatically transfer to CGCC. All aviation transfer courses, flight or non-flight, are reviewed by the Aviation Division for transferability. Students with pilot certification obtained with college credit at other institutions must demonstrate proficiency of each certificate and associated ratings before credit will be accepted to satisfy CGCC curriculum requirements. In all cases, it is the responsibility of the student to initiate the process.

**Medical Certificates**

A current medical certificate is required for all students planning to begin flight training. The physical examination must be performed by a medical doctor who is a designated FAA Medical Examiner. Students are advised to obtain their medical certificates well in advance of beginning the flight program. This will ensure that medical problems or physical limitations that may alter career plans can be addressed before entering flight courses.

There are three types of medical certificates--Class III, Class II, and Class I. Students are advised to obtain a Class I certificate if they are planning a career in professional flight. Students must have at least a Class II medical before beginning 200-level flight courses.

Overall program minimum G.P.A. = 2.50

**Admission Criteria**

Students must apply for acceptance into the Associate in Applied Science in Airway Science Technology, Flight Emphasis program before enrolling in any 200-level courses by completing an application available from the Aviation Division.

Due to the International Traffic in Arms Regulations requirements surrounding UAS Operations, certain courses, materials, and instruction may be restricted to United States Citizens only.
Aviation Orientation
AET100 / 1 Credit / 1 Period
Exploration of career options and employment practices in the aviation industry, including topics such as academic requirements, employment requirements, regulatory issues, and airport procedures.
Prerequisites: None.

Private Pilot Ground School
AET107 / 5 Credits / 5 Periods
Ground school in preparation for the Federal Aviation Administration (FAA) Private Pilot Certificate written examination. Includes aerodynamics, airplane systems, airports, airspace, communications, Federal Air Regulations, navigation, airplane performance, flight planning, and flight physiology. Requires passing a written exam similar to the FAA Private Pilot written exam.
Prerequisites: None. Corequisite: AET110.

Private Pilot Ground School: Helicopter
AET107HH / 5 Credits / 5 Periods
Ground school in preparation for the Federal Aviation Administration (FAA) Private Pilot Certificate written examination. Includes aerodynamics, helicopter systems, airports, airspace, communications, Federal Air Regulations, navigation, helicopter performance, flight planning, and flight physiology. Requires passing a written exam similar to the FAA Private Pilot written exam.
Prerequisites: None. Corequisites: AET110HH.

Private Pilot Flight
AET110 / 2 Credits / 5 Periods
Flight course in preparation for the Federal Aviation Administration (FAA) Private Pilot Certificate practical examination. Includes preflight preparation and planning, ground operations, airport operations, departures, navigation, basic instrument flight, night flight, slow flight, ground reference maneuvers, emergency operations, and arrivals. Approximately 50 hours airplane flight experience at student's expense required. Requires passing check ride similar to the FAA Private Pilot check ride.
Prerequisites: None. Corequisites: AET107.

Private Pilot Flight: Helicopter
AET110HH / 2 Credits / 5 Periods
Flight course in preparation for the Federal Aviation Administration (FAA) Private Pilot Certificate practical examination. Includes preflight preparation, preflight procedures, airport and heliport operations, hovering maneuvers, takeoffs, landings, and go-rounds, performance maneuvers, navigation, emergency operations, night operations, and post-flight procedures. Approximately 75-85 hours helicopter flight experience at student's expense required. Requires passing check ride similar to the FAA Private Pilot check ride.
Prerequisites: None. Corequisites: AET107HH.

Aviation Meterology
AET115 / 3 Credits / 3 Periods
Meteorology for professional pilots. Includes atmosphere, air mass circulation, cloud type identification, weather hazards, and high altitude, Arctic, and tropical weather systems. Basic forecasting, use of Direct User Access Terminal (DUAT) systems and reading and interpreting weather charts.
Prerequisites: None.

Attitude Instruments and Navigation
AET207 / 2 Credits / 2 Periods
Beginning instrument pilot ground course in preparation for the Federal Aviation Administration (FAA) Instrument Pilot Rating and Instrument rating written examinations. Includes preflight preparation, flight instruments, basic attitude instrument flying, radio navigation systems, and technically advanced aircraft systems.
Prerequisites: AET110 or permission of Instructor. Corequisites: AET217 and AET210.
Attitude Instruments and Navigation: Helicopter
AET207HH / 2 Credits / 2 Periods
Beginning instrument pilot ground course in preparation for the Federal Aviation Administration (FAA) Instrument Pilot Rating and Instrument rating written examinations. Includes preflight preparation, flight instruments, basic attitude instrument flying, radio navigation systems, and technically advanced helicopter systems.
Prerequisites: AET110HH, or permission of Instructor. Corequisites: AET210HH and AET217HH.

Aviation Safety
AET208 / 3 Credits / 3 Periods
Introduction to aviation safety, including aviation safety programs, risk management, pilot psychology, physiology, human factors, and accident review and investigation.
Prerequisites: AET100.

Instrument Commercial Flight I
AET210 / 2 Credits / 5 Periods
Initial flight course in preparation for the Federal Aviation Administration (FAA) Instrument rating practical examination. Emphasis on night and instrument operations. Student must fly approximately 60 hours at own expense. Requires passing operational phase checks.
Prerequisites: AET110 or permission of Instructor. Corequisites: AET217 and AET207.

Instrument Flight: Helicopter
AET210HH / 2 Credits / 5 Periods
Initial helicopter flight course in preparation for the Federal Aviation Administration (FAA) Instrument rating practical examination. Emphasis on helicopter instrument operations. Student must fly approximately 75 hours at own expense. Requires passing operational phase checks.
Prerequisites: AET110HH or permission of Instructor. Corequisites: AET207HH and AET217HH.

Aerodynamics and Performance
AET213 / 2 Credits / 2 Periods
Advanced instrument and commercial pilot ground course in preparation for the Federal Aviation Administration (FAA) Commercial Pilot Certificate and Commercial written examinations. Includes discussion of aerodynamic factors including lift, weight, drag, and thrust. Discussions will include, but are not limited to aerodynamics, performance, safe and efficient airplane operations, airplane stability and controls, stalls and spins.
Prerequisites: AET207, AET217, and AET210. Corequisites: AET203 and AET220.

Aerodynamics and Performance: Helicopter
AET213HH / 2 Credits / 2 Periods
Advance commercial pilot ground course in preparation for the Federal Aviation Administration (FAA) Commercial Pilot Certificate and Commercial written examinations. Includes discussion of aerodynamic factors including lift, weight, drag, and thrust. Discussions will include, but are not limited to aerodynamics, performance, and safe and efficient helicopter operations.
Prerequisites: AET207HH, AET217HH, and AET210HH. Corequisites: AET220HH and AET203HH.

Aircraft Structures, Systems and Maintenance
AET205 / 4 Credits / 4 Periods
Survey of airframe structures, systems, and maintenance regulations for pilots. Includes aircraft and airfoil design and construction, and electrical, instrumentation, and automatic flight control systems. Maintenance privileges and limitations, and forms and records.
Prerequisites: Private Pilot Certificate or permission of Instructor.
**Instrument Procedures**
AET217 / 2 Credits / 2 Periods
Advance instrument pilot ground school course in preparation for the Federal Aviation Administration (FAA) Instrument pilot rating and Instrument rating written examinations. Include Federal Aviation Regulations, instrument approach procedures, and instrument enroute considerations. Requires passing written exam similar to the Instrument Pilot rating and Instrument rating written exams.

*Prerequisites: AET110 or permission of instructor. Corequisites: AET210 and AET207.*

**Instrument Procedures: Helicopter**
AET217HH / 2 Credits / 2 Periods
Advance helicopter instrument pilot ground school course in preparation for the Federal Aviation Administration (FAA) Instrument pilot rating and Instrument rating written examinations. Includes Federal Aviation Regulations, instrument approach procedures, and instrument enroute considerations. Requires passing written exams similar to the Instrument pilot rating and Instrument rating written exams.

*Prerequisites: AET110HH or permission of Instructor. Corequisites: AET210HH and AET207HH.*

**Instrument Commercial Flight II**
AET220 / 2 Credits / 5 Periods
Advanced flight course in preparation for the Federal Aviation Administration (FAA) Commercial Pilot practical examinations. Emphasis on commercial and high performance operations. Students must fly approximately 60 hours at own expense. Requires passing instrument rating and commercial pilot stage checks similar to the FAA check rides.

*Prerequisites: AET210, AET207 and AET217. Corequisites: AET203 and AET213.*

**Commercial Flight: Helicopter**
AET220HH / 2 Credits / 5 Periods
Advanced flight course in preparation for the Federal Aviation Administration (FAA) Commercial Pilot practical examination. Emphasis on commercial and high performance helicopter operations. Student must fly approximately 60 hours at own expense. Requires passing instrument rating and commercial pilot stage checks similar to the FAA check rides.

*Prerequisites: AET210HH, AET207HH and AET217HH. Corequisites: AET203HH and AET213HH.*

**Advanced Aircraft Systems**
AET225 / 4 Credits / 4 Periods
Advanced aircraft systems for pilots. Pressurization, cabin atmosphere, ice control, rain control, fire detection, and extinguishing, hydraulic, landing gear, anti-skid systems, and weight and balance for transport category airplanes.

*Prerequisites: AET215 or permission of Instructor.*

**Introduction to Unmanned Aircraft Systems Operation**
AET226 / 2 Credits / 2 Periods
Overview of the history of Unmanned Aircraft Systems (UAS), as well as regulatory issues and both current and future applications.

*Prerequisites: AET100. Proof of U.S. Citizenship required per U.S. State Department International Traffic in Arms Regulations (ITAR) regulations. (SEE COURSE NOTES)*
**Certified Flight Instructor: Airplane, Single Engine Land Ground School**  
*Course Code: AET227 / 4 Credits / 4 Periods*  
*Prerequisites*: AET240 or FAA commercial Pilot Certificate with instrument rating. *Corequisite*: AET230

**Certified Flight Instructor: Helicopter Ground School**  
*Course Code: AET227HH / 4 Credits / 4 Periods*  
*Prerequisites*: FAA Commercial Pilot Certificate. *Corequisites*: AET230HH.

**Public Safety Aviation**  
*Course Code: AET228 / 3 Credits / 3 Periods*  
Organization, operations, tactics, and techniques related to air support operations with law enforcement, fire protection and resource protection agencies. Includes Use of Unmanned Aircraft System (UAS) within the United States, Airborne law enforcement patrol, surveillance, special operations and Special Weapons and Tactics (SWAT); fire operations including fire chemistry and behavior, fire department organization and tactics, airborne firefighting equipment, fire extinguishment tactics and air ambulance operations; resource protection air operations including wildlife surveys, hunting and fishing enforcement patrols, search and rescue, and operations from unimproved landing sites and seaplane operations.  
*Prerequisites*: AET107 and AET110. *Corequisites*: AET260.

**Crew Resource Management**  
*Course Code: AET229 / 3 Credits / 3 Periods*  
Crew communications, teamwork, leadership, “followership,” decision-making, and situational awareness; also the benefits of diversity, and the role diversity plays in the modern aerospace industry. Emphasis on utilization of all available resources in order to conduct a safe and efficient flight.  
*Prerequisites*: AET217.

**Certified Flight Instructor: Airplane, Single Engine Land**  
*Course Code: AET230 / 1 Credit / 3 Periods*  
Flight course in preparation for the Federal Aviation Administration (FAA) Certified Flight Instructor: Airplane practical examination. Emphasis on demonstration and analysis of flight maneuvers. Includes preflight, ground operations, airport operations, takeoffs, climbs, flight fundamentals, stalls, spins, slow flight, basic instrument operations, performance maneuvers, ground reference maneuvers, emergency operations, approaches, landings, and postflight procedures. Requires approximately 25 hours of flight that includes high performance operations at student’s expense. Also requires passing check ride similar to the FAA Certified Flight Instructor check ride.  
*Prerequisites*: AET240 or FAA Commercial Pilot Certificate with instrument rating. *Corequisite*: AET227.

**Certified Flight Instructor: Helicopter**  
*Course Code: AET230HH / 1 Credit / 3 Periods*  
Flight course in preparation for the Federal Aviation Administration (FAA) Certified Flight Instructor: Helicopter practical examination. Emphasis on demonstration and analysis of flight maneuvers. Includes preflight procedures, airport and heliport operations, hovering maneuvers, takeoffs, landings, and go-arounds, fundamentals of flight, performance maneuvers, emergency operations, special operations, and postflight procedures. Requires approximately 60 hours of flight at student’s expense. Also requires passing check ride similar to the FAA Certified Flight Instructor check ride.  
*Prerequisites*: FAA Commercial Pilot Certificate with instrument rating. *Corequisites*: AET227HH.
Multi-Engine Airplane Pilot Ground School or: Hel
AET237 / 2 Credits / 2 Periods
Aeronautical knowledge necessary to meet requirements for a multiengine airplane rating including orientation, aerodynamics, airplane systems, airplane performance, flight planning, and emergency procedures.
Prerequisites: AET220 or FAA Commercial Pilot Certificate with instrument rating. Corequisites: AET240.

Multi-Engine Airplane Pilot Flight
AET240 / .5 Credit / 1.5 Periods
Flight course in preparation for the Federal Aviation Administration (FAA) Multiengine Airplane practical examination. Approximately 15 hours of flight experience at the student’s expense and passing check ride similar to the FAA Multiengine check ride are required.
Prerequisites: AET220 or FAA Commercial Pilot Certificate with instrument rating. Corequisites: AET237.

Certified Flight Instructor: Instrument Airplane Ground School
AET258 / 3 Credits / 3 Periods
Aeronautical knowledge and practical teaching ability necessary to obtain an Instrument Flight Instructor Certificate with an Airplane-Single-Engine rating and necessary to satisfactorily pass the Flight Instructor Instrument knowledge test.
Prerequisites: Valid FAA Commercial Pilot Certificate, or Airline Transport Pilot Certificate with instrument rating and the appropriate category and class of airplane used in the course; and Flight Instructor Certificate-Airplane. Corequisites: AET270.

Readings in Aviation
AET257 / 3 Credits / 4 Periods
Critical inquiry of a particular aviation theme from a wide variety of sources. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. International data communication facilities and equipment made available for student use.
Prerequisites: ENG102 or ENG111, and permission of Instructor.

Public Safety Aviation Applications in Unmanned Aircraft Systems Flight Lab
AET260 / 1 Credit / 3 Periods
Knowledge and skills needed to safely employ small unmanned aircraft systems. Includes aircraft operating software, launch and recovery operations, payload operations, normal and emergency procedures, and mission planning and execution. Emphasis on use of small Unmanned Aircraft Systems (UAS) operations conducted by non-military governmental organizations, such as law enforcement and resource protection agencies. Students must complete the appropriate flight lessons to satisfactorily complete the course.
Prerequisites: AET226. Corequisites: AET228. (SEE COURSE NOTES)

Certified Flight Instructor: Instrument Airplane Flight Lab
AET270 / 1 Credit / 3 Periods
Flight experience in an airplane to meet flight proficiency and aeronautical experience requirements necessary to add an Instrument Airplane Rating to an existing Flight Instructor-Airplane certificate.
Prerequisites: Valid FAA Commercial Pilot Certificate, or Airline Transport Pilot Certificate with instrument rating and the appropriate category and class of airplane used in the course; and Flight Instructor Certificate-Airplane. Corequisites: AET258.
Certified Flight Instructor: Instrument Helicopter Lab
AET270HH / 1 Credit / 3 Periods
Flight experience in a helicopter designed to provide flight proficiency and aeronautical experience requirements necessary to pursue adding an Instrument Helicopter Rating to an existing Flight Instructor-Helicopter certificate.
Prerequisites: Valid FAA Commercial Pilot Certificate, or Airline Transport Pilot Certificate with instrument rating and the appropriate category and class of helicopter used in the course; and Flight Instructor Certificate-Helicopter. Corequisites: AET258HH.

Multi-Engine Flight Instructor: Airplane-Ground School
AET273 / 2 Credits / 2 Periods

Multi-Engine Flight Instructor: Airplane-Flight Lab
AET280 / 1 Credit / 3 Periods
Flight experience in an airplane to meet flight proficiency and aeronautical experience requirements necessary to add a multi-engine rating to an existing Flight Instructor-Airplane certificate. Prerequisites: Valid FAA Commercial Pilot Certificate, or Airline Transport Pilot Certificate with instrument rating and the appropriate category and class of airplane used in the course; and Flight Instructor Certificate-Airplane. Corequisites: AET273.

*Course Notes:

International Traffic in Arms Regulations (ITAR) Defined: U.S. State Department regulations that govern the export of restricted technology to foreign states. United States Munitions List (USML) of restricted articles and services. ITAR Compliance: Due to the ITAR requirements, surrounding the UAS Operations, only United States citizens will have access to the operating system, simulators, related documentation, and Learning Management System (LMS)

Students/Instructors must not disclose ITAR sensitive information or materials to any foreign person at any time whether in the U.S. or abroad. A foreign person is defined by ITAR as any natural person who is not a lawful permanent resident as defined by 8 U.S.C. 1101 (a) (20) or who is not a protected individual as defined by 8 U.S.C. 1324b (a) (3). It also means any foreign corporation, business association, partnership, trust, society or any other entity or group that is not incorporated or organized to do business in the United States, as well as international organizations, foreign governments and any agency subdivision or foreign governments (e.g. diplomatic missions). Export control violations can result in civil and criminal personal liability of up to $100,000 per violation, imprisonment, or fines and imprisonment. If the violation is determined to be knowingly or willfully committed the personal liability is up to $250,000 per violation, imprisonment, or fines and imprisonment.
Airway Science Technology  
Flight Emphasis:  
Associate in Applied Science

Academic Plan Code: 3707  
CIPS Code: 49.01.02  
Program Credits: 61-67.5

The following is a suggested course sequence by semester for this program at Chandler-Gilbert Community College.

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<td>AET107</td>
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<td>PP</td>
<td>AET110</td>
<td>Private Pilot Flight</td>
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<td>RC</td>
<td>AET115</td>
<td>Aviation Meteorology</td>
<td>3</td>
<td>None</td>
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<td>RC</td>
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<td>Attitude Instruments and Navigation</td>
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<td>AET110 permission of instructor</td>
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<tr>
<td>RC</td>
<td>AET217</td>
<td>Instrument Procedures</td>
<td>2</td>
<td>AET1107 permission of instructor</td>
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<tr>
<td>RC</td>
<td>AET210</td>
<td>Commercial Pilot Flight I Lab</td>
<td>2</td>
<td>AET110 permission of instructor</td>
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<tr>
<td>RC</td>
<td>AET205</td>
<td>Aircraft Structures, Systems, and Maintenance</td>
<td>4</td>
<td>Private Pilot Certificate or permission of instructor</td>
</tr>
</tbody>
</table>

Program Area Key:  
PP = Program Prerequisites  
RC = Required Course  
RE = Restricted Electives  
FYC = First-Year Composition  
OC = Oral Communication  
CR = Critical Reading  
MA = Mathematics  
HUM = Humanities and Fine Arts  
SBS = Social and Behavioral Sciences  
NS = Natural Sciences
### Semester 3

**Credits 10**

<table>
<thead>
<tr>
<th>Program Area</th>
<th>Course Number</th>
<th>Course Name</th>
<th>Credits</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>RC</td>
<td>AET203</td>
<td>Basic Airplane Systems</td>
<td>2</td>
<td>AET210 permission of instructor</td>
</tr>
<tr>
<td>RC</td>
<td>AET213</td>
<td>Aerodynamics and Performance</td>
<td>2</td>
<td>AET207 AET210 AET217</td>
</tr>
<tr>
<td>RC</td>
<td>AET220</td>
<td>Instrument Commercial Flight II</td>
<td>2</td>
<td>AET207 AET210 AET217</td>
</tr>
<tr>
<td>RC</td>
<td>AET215</td>
<td>Aircraft Powerplants</td>
<td>4</td>
<td>AET205 permission of instructor</td>
</tr>
</tbody>
</table>

### Semester 4

**Credits 6.5**

<table>
<thead>
<tr>
<th>Program Area</th>
<th>Course Number</th>
<th>Course Name</th>
<th>Credits</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>RC</td>
<td>AET237</td>
<td>Multiengine Airplane Pilot Ground School</td>
<td>2</td>
<td>AET-220 or FAA Commercial Pilot</td>
</tr>
<tr>
<td>RC</td>
<td>AET240</td>
<td>Multiengine Airplane Pilot Flight</td>
<td>.5</td>
<td>AET-220 or FAA Commercial Pilot</td>
</tr>
<tr>
<td>RC</td>
<td>AET225</td>
<td>Advanced Aircraft Systems</td>
<td>4</td>
<td>AET215 or permission of instructor</td>
</tr>
</tbody>
</table>
### Semester 5

<table>
<thead>
<tr>
<th>Program Area</th>
<th>Course Number</th>
<th>Course Name</th>
<th>Credits</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>RC</td>
<td>AET227</td>
<td>Certified Flight Instructor: Airplane Single Engine Land Ground School</td>
<td>4</td>
<td>AET-237 EAA Commercial Pilot certificate with instrument rating</td>
</tr>
<tr>
<td>RC</td>
<td>AET230</td>
<td>Certified Flight Instructor: Airplane Single</td>
<td>1</td>
<td>AET240 FAA Commercial Pilot certificate</td>
</tr>
<tr>
<td>BC</td>
<td>AET257</td>
<td>Readings in Aviation</td>
<td>3</td>
<td>ENG102 or ENG111 permission of instructor</td>
</tr>
</tbody>
</table>

*Course Notes:

The following General Educational Requirements must be completed (grade “C” or higher) for completion of the Airway Science Technology (AAS) Flight Emphasis degree:

**First-Year Composition**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG101</td>
<td>3 CR</td>
<td>First-Year Composition (3) or ENG107 First-Year Composition for ESL (3) and ENG102 First-Year Composition (3) or ENG108 First-Year Composition for ESL (3) or ENG111 Technical Professional Writing (3)</td>
</tr>
</tbody>
</table>

**Oral Communication**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM225</td>
<td>3 CR</td>
<td>Public Speaking (3)</td>
</tr>
</tbody>
</table>

**Critical Reading**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRE101</td>
<td>0-3 CR</td>
<td>Test Exempt or any approved course</td>
</tr>
</tbody>
</table>

**Mathematics**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT187</td>
<td>5 CR</td>
<td>Precalculus (5) or higher equivalent math class</td>
</tr>
</tbody>
</table>

**Humanities and Fine Arts**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 CR</td>
<td>Any approved course (3)</td>
</tr>
</tbody>
</table>

**Social and Behavioral Sciences**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECN212</td>
<td>3 CR</td>
<td>Microeconomic Principles (3)</td>
</tr>
</tbody>
</table>

**Natural Science**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY111</td>
<td>4 CR</td>
<td>General Physics (4)</td>
</tr>
</tbody>
</table>
Flight Technology:  
Certificate of Completion  

**Academic Plan Code:** 5707  
**CIPS Code:** 49.01.02  
**Program Credits:** 29.5  

The following is a suggested course sequence by semester for this program at Chandler-Gilbert Community College.

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Credits 7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program Area</strong></td>
<td><strong>Course Number</strong></td>
</tr>
<tr>
<td>PP</td>
<td>AET107</td>
</tr>
<tr>
<td>PP</td>
<td>AET110</td>
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</table>

<table>
<thead>
<tr>
<th>Semester 2</th>
<th>Credits 6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program Area</strong></td>
<td><strong>Course Number</strong></td>
</tr>
<tr>
<td>RC</td>
<td>AET207</td>
</tr>
<tr>
<td>RC</td>
<td>AET217</td>
</tr>
<tr>
<td>RC</td>
<td>AET210</td>
</tr>
</tbody>
</table>

**Program Area Key:**  
PP = Program Prerequisites  
RC = Required Course  
RE = Restricted Electives  
FYC = First-Year Composition  
OC = Oral Communication  
CR = Critical Reading  
MA = Mathematics  
HUM = Humanities and Fine Arts  
SB = Social and Behavioral Sciences  
NS = Natural Sciences
<table>
<thead>
<tr>
<th>Semester 3</th>
<th>Credits 14</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program Area</strong></td>
<td><strong>Course Number</strong></td>
</tr>
<tr>
<td>RC</td>
<td>AET203</td>
</tr>
<tr>
<td>RC</td>
<td>AET213</td>
</tr>
<tr>
<td>RC</td>
<td>AET220</td>
</tr>
<tr>
<td>RC</td>
<td>AET205</td>
</tr>
<tr>
<td>RC</td>
<td>AET215</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 4</th>
<th>Credits 6.5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program Area</strong></td>
<td><strong>Course Number</strong></td>
</tr>
<tr>
<td>RC</td>
<td>AET237</td>
</tr>
<tr>
<td>RC</td>
<td>AET240</td>
</tr>
<tr>
<td>RC</td>
<td>AET225</td>
</tr>
</tbody>
</table>
Certified Flight Instructor
Instrument Airplane Rating:
Certificate of Completion

Academic Plan Code: 5825
CIPS Code: 49.01.08
Program Credits: 4

The following is a suggested course sequence by semester for this program at Chandler-Gilbert Community College.

<table>
<thead>
<tr>
<th>Semester I</th>
<th>Credits 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Area</td>
<td>Course Number</td>
</tr>
<tr>
<td>RC</td>
<td>AET258</td>
</tr>
<tr>
<td>RC</td>
<td>AET270</td>
</tr>
</tbody>
</table>

Program Area Key:
PP= Program Prerequisites
RC= Required Course
RE= Restricted Electives
FYC= First-Year Composition
OC= Oral Communication
CR= Critical Reading
MA= Mathematics
HUM= Humanities and Fine Arts
SB= Social and Behavioral Sciences
NS= Natural Sciences
### Projected Individual Flight Training Costs 2017-2018

These are the projected costs for flight courses for the 2016-2017 school year based on anticipated rates(*). Course costs are based on the average number of hours it takes a student to complete the course, and may vary from student to student according to their capability and motivation. Financial aid may be available to assist with these costs, but applying for aid must be done well in advance. Flight costs are in addition to tuition.

#### Private Pilot

**AET 110**

*Private Pilot Certification*

- Instructor Time: 83 hrs.
- S. E. Simulator: 3 hrs.
- Cessna 172: 52 hrs.
- FAA Written**: $12,497.00

#### Instrument, Commercial and Multi-Engine

**AET 210**

*Instructor Commercial Flight I (Lessons 1-35)*

- Instructor Time: 70 hrs.
- S. E. Simulator: 15 hrs.
- Cessna 172: 44 hrs.
- FAA Written**: $11,356.00

**AET 220**

*Instructor Commercial Flight II (Lessons 36-69)*

- Instructor Time: 82 hrs.
- S. E. Simulator: 8 hrs.
- Cessna 172: 56 hrs.
- FAA Written**: (2) $13,514.00

**AET 240**

*Multi-Engine System and Procedures*

- Instructor Time: 65 hrs.
- M.E. Simulator: 10 hrs.
- Seminole: 25 hrs.
- FAA Written**: $11,550.00

#### Flight Instructor

**AET 230**

*Certified Flight Instructor Certification*

- Instructor Time: 65 hrs.
- Cessna 172: 24 hrs.
- Piper Arrow: 3 hrs.
- FAA Written**: (2) $8,011.00

**AET 270**

*Certified Flight Instructor Instrument*

- Instructor Time: 50 hrs.
- Cessna 172: 21 hrs.
- FAA Written**: (1) $6,019.00

**Associate degree program total flight cost**

(Does not include AET 270 CP II) $56,928.00
Enrollment Information

Applications must be received by **August 5 for fall semester and January 5 for spring semester.**

Chandler-Gilbert Community College Aviation Division
Attn: Mo Hernandez
7360 East Tahoe Avenue
Mesa, AZ 85212
Phone (480) 988-8000
askapilot@cgc.edu
cgc.edu/aviation
 Semester Entering  

☐ Fall 2017  
☐ Spring 2018  

Last Name               First           Middle             Date  
Address                                           City        State            Zip  
Student ID # (Maricopa Issued)                  Home Phone            Work Phone/Cell Phone                Email address  

THERE ARE TWO CURRICULUM OPTIONS: A CERTIFICATE PROGRAM AND A ASSOCIATE DEGREE PROGRAM.  
You will need to choose one (check box below), and enter its four digit code in Box 13b on the Student Information Form.  

☐ 5825 Certificate of Completion-CFI  
☐ 5705 Certificate of Completion in Flight Technology  
☐ 3707 Associate of Applied Science Degree in Airway Science Technology  

What class of FAA Medical Certificate do you have? (circle one)  Class I  Class II  Class III  
Date of issue (please attach a photocopy) ____________________________________  

APPLICATION CHECKLIST  
It is the applicant’s responsibility to ensure the application packet is complete. Your packet should include all of the following: (please check boxes)  

☐ Get admitted. Create MEID account and apply for admissions at my.maricopa.edu  
☐ Take placement test  
☐ Register for upcoming Aviation information sessions  
☐ Register for classes  
☐ Apply for financial aid or veterans benefits  
☐ Pay tuition and fees  

APPLICANT’S CERTIFICATION  
Date              Signature  

FOR OFFICE USE ONLY  
Student ID # (Maricopa Issued)  
Tuition Status  
Fee Payment  
☐ Rec’d  
☐ By  

PLEASE TYPE OR PRINT CLEARLY IN INK. COMPLETE FORM AND SUBMIT TO CAMPUS ADMISSIONS OFFICE.  
APPLICATION DEADLINE: AUGUST 5 AND JANUARY 5 EACH ACADEMIC YEAR.