Brevard Public Schools Career & Technical Education (CTE) Program of Study

Career Cluster: Engineering & Technology Education
CTE Program: Aviation Assembly and Fabrication
Postsecondary Program: 1615080100 Aerospace Technology AS

Career Cluster Pathway: Engineering & Technology Education
Secondary Industry Certification(s): FAA Ground School & NCATT-AAA
Postsecondary Industry Certification(s): FAA Aviation Mechanic Technician - Airframe, FAA Aviation Mechanic Technician - Powerplant

17 1/2 REQUIRED CORE CREDITS

<table>
<thead>
<tr>
<th>ENGLISH</th>
<th>MATH</th>
<th>SCIENCE</th>
<th>SOCIAL</th>
<th>STUDIES</th>
<th>Additional</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 credits</td>
<td>4 credits</td>
<td>3 or 4 credits, 2 w/ lab</td>
<td>3 or 4 credits</td>
<td>HOPE, Performing Arts, and CRDM</td>
<td></td>
</tr>
</tbody>
</table>

8 1/2 ADDITIONAL CREDITS

- Students are encouraged to use flchoices.org to explore careers and postsecondary options.
- Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.
- One course within the 26 credit program must be an online course. Cumulative GPA of 2.0 on a 4.0 scale for 26 credit program Students are encouraged to use flchoices.org to explore careers and postsecondary options.

H.S./SCHOOL

1. English Honors 1
2. Geometry Honors
3. Biology 1 Honors or Integrated Science 1 Honors
4. World History Honors
5. Career Research & Decision Making (1/2)(Elective (Keyboarding & Business Skills or Speech Fundamentals)
6. Private Pilot Ground School
7. Elective (Foreign Language)
8. Elective (Foreign Language)

10. English Honors 2
11. Algebra 2 Honors
12. Chemistry 1 Honors or Integrated Science 2 Honors
13. AP United States History or American History Honors
14. HOPE
15. Aviation Assembly and Fabrication 1
16. Aviation Assembly and Fabrication 2
17. Elective (Computer Programming or College & Career or CTE Dual Enrollment Opportunities)

11. AP English Language & Comp or English Honors 3
12. PreCalc or Advance Math Topics
13. Physics 1 Honors or Integrated Science 3 Honors
15. HOPE
16. Aviation Assembly and Fabrication 2
17. Aviation Assembly and Fabrication 3
18. Elective (Speech or DE Speech SPC 2608 / DE Art History ARH 2051)
19. Elective (Digital Media Composition)

12. AP English Lit & Comp or English Honors 4 or DE ENC 1101 Comp 1/DE ENC 2210 Technical Writing
13. Advanced Math Topics or PreCalc or AP Statistics or DE MAC 1105 College Algebra/DE STA 2023 Statistics
14. AP Science or Integrated Science 4 Honors
15. Sociology Psychology 1 or AP Psychology
16. Elective (Digital Media Composition)
17. Elective (Speech or DE Speech SPC 2608 / DE Art History ARH 2051)
18. Elective (Digital Media Composition)

SECONDARY

Secondary career and technical education programs may lead to industry recognized certificates, occupational opportunities or postsecondary education options. Based on the Career Cluster of interest and identified CTE program, the following postsecondary options are available. The official college or university catalog must be used to determine course requirements in the major.

Sample Career Specialties

Solderer
Technical Assembler
Manufacturing Technician

Aircraft Airframe Mechanic PSAV
Aircraft Engine Mechanic PSAV
Aerospace Technician AS
Engineering Technology AS

Associate in Arts (AA) degrees are offered at all Florida Community Colleges and allow students to move on to complete a four-year

Eastern Florida State College: www.easternflorida.edu

Eastern Florida State College: www.easternflorida.edu

UNIVERSITY PROGRAM(S)

Postsecondary Industry Certification(s): FAA Aviation Mechanic Technician - Airframe, FAA Aviation Mechanic Technician - Powerplant

Aircraft Airframe Mechanic PSAV
Aircraft Engine Mechanic PSAV
Aerospace Technician AS
Engineering Technology AS

Aircraft Maintenance Technician
Advanced Repair Technician
Junior Engineer
Computer Aided Design Engineer

University of Central Florida: Electronics Technology BSET
Computer Engineering BS
Electrical Engineering BSEE
Mechanical Engineering BS

This Gold Standard Career Pathways Statewide Articulation Agreement guarantees the minimum award of course credits or a block of credit toward Unmanned Vehicle Systems Operations AAS/AS is _3_ hours of credit. This agreement does not preclude the awarding of additional credits by any college through local agreements.

Career and Technical Student Association

Internship/Work Experience Recommendations: Work-Based Experience (8601800)

ETD 2941 Internship (3 college credits)

Student Progression Plan, on Brevard Public Schools web site, containing graduation requirements:

Last Updated: April 2017

Printed: 5/9/2017

1 of 6
Four (4) credits in English, with a major concentration in composition, reading for information, and literature.

Four (4) credits in mathematics, one of which must be Algebra 1, a series equivalent to Algebra 1, or a high-level mathematics course. School districts are encouraged to set specific goals to increase enrollments in, and successful completion of, geometry and Algebra 2.

Four (4) credits in science to include 3 sequential courses in either Biology, Chemistry, and Physics or Integrated 1, 2 and 3 plus one (1) science additional credit.

Four (4) credits in social studies as follows: one (1) credit in American history; one (1) credit in world history; one-half credit in economics; one-half credit in American Government; and one (1) social studies elective credit.

EFSC: Dual Enrollment ENC 1101 (English Composition 1) (1 HS credit or 3 college credits) and ENC 2210 Technical Writing is a suggested option for qualified students who are seeking an AS, AA, or BS/BA degree.

EFSC: Dual Enrollment MAC 1105, College Algebra and STA 2023 Statistics are suggested but not required for qualified high school students who are AA or BA/BS degree seeking. MAT 1033, Intermediate College Algebra, is suggested but not required for qualified high school students who are seeking an AS degree.

EFSC: Dual Enrollment SPC2608 Speech is a recommended option for qualified students and equals .5 HS credit and 3 required college credits for the AA or AAS programs. ARH 1051 will satisfy both the .5 HS credit for Fine Arts and 3 college credits for Humanities in the AA or AAS programs.
### Brevard Public Schools Career & Technical Education (CTE) Program of Study

**Option 2**

#### Career Cluster: Engineering & Technology Education

**CTE Program:** Aviation Assembly and Fabrication  
**Postsecondary Program:** 1615080100 Aerospace Technology AS

#### Career Cluster Pathway: Engineering & Technology Education

**Secondary Industry Certification(s):**  
- FAA Ground School and NCATT-AAA  
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<td></td>
</tr>
</tbody>
</table>

#### 8 1/2 ADDITIONAL CREDITS

- 8.5 Electives, including CTE sequential Program of Study and recommended electives
- * Signifies CTE course meets Performing Arts graduation credit requirement

### High School

<table>
<thead>
<tr>
<th>Grade</th>
<th>Course 1</th>
<th>Course 2</th>
<th>Course 3</th>
<th>Course 4</th>
<th>Course 5</th>
<th>Course 6</th>
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<tbody>
<tr>
<td>9</td>
<td>English Honors 1</td>
<td>Algebra 1</td>
<td>Biology 1 Honors or Integrated Science 1 Honors</td>
<td>World History Honors</td>
<td>Career Research &amp; Decision Making (.5cdt/Elective (Keyboarding &amp; Business Skills .5cdt)</td>
<td>Private Pilot Ground School</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>Elective (Foreign Language)</td>
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<tr>
<td>10</td>
<td>English Honors 2</td>
<td>Geometry</td>
<td>Chemistry 1 Honors or Integrated Science 2 Honors</td>
<td>American History Honors</td>
<td>HOPE</td>
<td>Aviation Assembly and Fabrication 1</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Elective (Foreign Language)</td>
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<tr>
<td>11</td>
<td>AP English Language &amp; Comp or English Honors 3</td>
<td>Algebra 2</td>
<td>Physics 1 Honors or Integrated Science 3 Honors</td>
<td>American Government/Economics</td>
<td>Elective (Art 3D Comprehensive)</td>
<td>Aviation Assembly and Fabrication 2</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Elective (Computing for College &amp; Careers or DE Microcomputer Applications CGB 2100 / Solidworks ETDC 2364)</td>
</tr>
<tr>
<td>12</td>
<td>AP English Lit &amp; Comp or English Honors 4</td>
<td>Advanced Math Topics, PreCalc; or AP Statistics</td>
<td>Anatomy and Physiology Honors</td>
<td>AP Psychology or Sociology/ Psychology 1 OR Sports Psychology</td>
<td>Elective (Speech or DE Speech SPC 2608 / DE Art History ARH 2051)</td>
<td>Aviation Assembly and Fabrication 3</td>
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<td></td>
<td></td>
<td>Elective (DE Circuit Fundamentals EETC 1025 / DE Instrumental Fundamentals EST 1520)</td>
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### Postsecondary

- Secondary career and technical education programs may lead to industry recognized certificates, occupational opportunities or postsecondary education options. Based on the Career Cluster of interest and identified CTE program, the following postsecondary options are available. The official college or university catalog must be used to determine course requirements in the major.

#### Eastern Florida State College

- Aerospace Technician AS  
- Engineering Technology AS

#### University Program(s)

- University of Central Florida:  
  - Electronics Technology BSET  
  - Computer Engineering BS  
  - Electrical Engineering BSEE  
  - Mechanical Engineering BS

#### Associate in Arts (AA) degrees are offered at all Florida Community Colleges and allow students to move on to complete a four-year

#### SAMPLE CAREER SPECIALTIES

- Quality Inspector  
- Quality Engineer  
- Technical Assembler  
- Manufacturing Technician  
- Solderer

#### Articulation and CTE Dual Enrollment Opportunities

- **Secondary to Technical Center (PSAV)**  
  (Minimum # of clock hours awarded per institution)

- **Secondary to College Credit Certificate or Degree**  
  (Minimum # of clock or credit hours awarded)

- **Industry Certification to PSAV, AAS or AS**  
  (Statewide or other local agreements may be included here)

- **This Gold Standard Career Pathways Statewide Articulation Agreement guarantees the minimum award of course credits or a block of credit toward Unmanned Vehicle Systems Operations AAS/AS is _3_ hours of credit. This agreement does not preclude the awarding of additional credits by any college through local agreements.**

#### Career and Technical Student Association

#### Skills USA

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<th>Internship/Work Experience Recommendations: Work-Based Experience (8601800)</th>
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<td>Student Progression Plan, on Brevard Public Schools web site, containing graduation requirements: <a href="http://elementarypgms.sp.brevardschools.org/Home/Documents/Student%20Progression%20Plan.pdf">http://elementarypgms.sp.brevardschools.org/Home/Documents/Student%20Progression%20Plan.pdf</a></td>
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<td></td>
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<tr>
<td>11</td>
<td>English 3</td>
<td>Informal Geometry or Geometry 1</td>
<td>Physics 1 or Integrated Science 3</td>
<td>American Government/ Economics</td>
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<tr>
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<td></td>
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</tr>
<tr>
<td>12</td>
<td>English 4</td>
<td>Algebra 2</td>
<td>Anatomy &amp; Physiology</td>
<td>Psychology 1 / Sociology</td>
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<td></td>
<td>Elective (Speech or DE Speech SPC 2608 / DE Art History ARH 2601)</td>
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### UNIVERSITY PROGRAM(S)

**Bachors Degree (four-year)**

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- University of Central Florida:
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  - Electrical Engineering BSEE
  - Mechanical Engineering BS

### POSTSECONDARY

- Associate in Arts (AA) degrees are offered at all Florida Community Colleges and other students to move on to complete a four-year program

### CAREER

- Quality Inspector
- Quality Engineer
- Technical Assembler
- Manufacturing Technician
- Solderer
- A & P Aircraft Mechanic
- Aircraft Maintenance Technician
- Advanced Repair Technician
- Junior Engineer
- Computer-Aided Design Engineer
- Electrical engineer
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- Mechanical engineer
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