**Career Cluster:** Agriculture, Food, & Natural Resources (STEM)

**CTE Program:** Secondary: Academy of Engineering and Environmental Sciences - Natural Resources (8006200)
Creekside High School, St. Johns County School District
Postsecondary: FL State College at Jacksonville: Environmental Science

**Career Cluster Pathway:** Natural Resource System

**Industry Certification:** Secondary: ArcGIS Desktop Entry (ESRIC001), LEED Green Associate (GRBCI002), Natural Resource Specialist (FLFR010)

### 16 CORE CURRICULUM CREDITS

<table>
<thead>
<tr>
<th>ENGLISH</th>
<th>MATH</th>
<th>SCIENCE</th>
<th>SOCIAL STUDIES</th>
<th>OTHER REQUIRED COURSES</th>
<th>PHYSICAL EDUCATION</th>
<th>CARRIER AND TECHNICAL EDUCATION COURSES</th>
<th>RECOMMENDED ELECTIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 credits</td>
<td>4 credits</td>
<td>3 credits, 2 with lab</td>
<td>3 credits</td>
<td>FINE ARTS (1 credit)</td>
<td>(1 credit)</td>
<td></td>
<td>(ALIGNED WITH COMMUNITY COLLEGE &amp; STATE UNIVERSITY SYSTEM PROGRAMS)</td>
</tr>
</tbody>
</table>

### 8 ADDITIONAL CREDITS

- Students are encouraged to use mycareershines.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 24 credit program must be an online course. Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program

#### HIGH SCHOOL

- **9th**
  - English 1 (H)
  - Algebra 1 or Geometry (H)
  - Physical Science/Biology Honors
  - World Geography/AP Human Geography
  - Introduction to Natural Resources 2 (8006220)
- **10th**
  - English 2 (H)
  - Geometry (H) or Algebra 2 (H)
  - Biology/Chemistry (H)
  - World History (H/ AP)
  - Fine or Practical Arts
  - Natural Resources Tech 3 (8006230)
- **11th**
  - English 3 (H, DE, AP)
  - Algebra 2 or Pre-Calculus (H)
  - Chemistry (H) or Physics (H)
  - US History (AP)
  - Elective
  - Natural Resources Management 4 (8006240)
- **12th**
  - English 4 (H, DE, AP)
  - Math for College Readiness or AP DE Mathematics
  - AP/DE Course Offerings
  - Economical US Government (H/AP/DE)
  - Elective
  - Advanced Natural Resources 5 (80062250)
  - AP Environmental Sciences 2001380 or Elective or Foreign Language

#### POSTSECONDARY

Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.

<table>
<thead>
<tr>
<th>TECHNICAL CENTER PROGRAM(S)</th>
<th>COMMUNITY COLLEGE PROGRAM(S)</th>
<th>UNIVERSITY PROGRAM(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of West Florida: GIS, one year certificate program</td>
<td>Florida State College at Jacksonville: Environmental Science, A.S.</td>
<td>Jacksonville University: Biology, BS; Marine Science, BS, MS</td>
</tr>
<tr>
<td>UCF: Environmental Engineering, BS</td>
<td>UF: Civil, Coastal &amp; Oceanographic Engineering, Environmental Engineering Sciences Electrical, Computer, Materials Science, Mechanical, Aerospace, Biomedical Engineering, BS &amp; MA</td>
<td></td>
</tr>
</tbody>
</table>

#### CAREER SAMPLE CAREER SPECIALTIES

- **GIS Technician**
- **GPS Data technician; Environmental technician; GIS Analyst; LEED certified technician; water quality technician**
- **Hydrogeologist; Environmental Engineer, Coastal Engineer, or Marine Biologist**

#### ARTICULATION AND CTE DUAL ENROLLMENT OPPORTUNITIES

<table>
<thead>
<tr>
<th>Secondary to Technical Center (PSAV)</th>
<th>Secondary to College Credit Certificate or Degree</th>
<th>PSAV/PSV to AAS or AS/BS/BAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Minimum # of clock hours awarded)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Career and Technical Student Association**
School Environmental Club

**Internship/Work Experience Recommendations**

Career Academy students may apply for summer internships after their junior year. Sample internships job titles include: Marine Biologist Assistant

**Program of Study Graduation Requirements:** [http://www.fldoe.org/academics/graduation-requirements](http://www.fldoe.org/academics/graduation-requirements)