Career Cluster: Engineering & Technology Education (STEM)	CTE Program: Secondary: **Academy of Engineering and Environmental Sciences -** Applied Engineering Technology (8401100) **Creekside High School, St. Johns County School District** **Postsecondary: St. Johns River State College,** Orange Park: **St. Johns River State College,** Orange Park & Palatka: Engineering Technology (A.S. 1615000001), Engineering Technology Support Specialist (CCC – 0615000007), Robotics and Simulations Technician (CCC-0615040514), Mechatronics (CCC-0615000013)
Career Cluster Pathway: Engineering and Technology	**Industry Certification: Secondary:** *AutoCAD User (Adesk002), Revit (Adesk008), Inventor (Adesk011), Autodesk Certified Professional (ADESK021), Solidworks (SOLID003), MSSC CPT (MSSCN001), OSHA** **Postsecondary:** MSSC CPT (MSSCN001)

		16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS	
		ENGLISH 4 credits	**MATH** 4 credits	**SCIENCE** 3 credits, 2 with lab	**SOCIAL STUDIES** 3 credits	**OTHER REQUIRED COURSES** **FINE ARTS** (1 credit) **PHYSICAL EDUCATION** (1 credit)	**CAREER AND TECHNICAL EDUCATION COURSES**	**RECOMMENDED ELECTIVES** (ALIGNED WITH COMMUNITY COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)
HIGH SCHOOL	• 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							
	9th	English 1 (H)	Algebra 1 or Geometry (H)	Physical Science/Biology Honors	World Geography/AP Human Geography	HOPE – Health Opportunities through Physical Education	Applied Engineering Technology1 8401110	Elective or Foreign Language
	10th	English 2 (H)	Geometry (H) or Algebra 2 (H)	Biology/Chemistry (H)	World History (H/ AP)	Fine or Practical Arts	Applied Engineering Technology 2 8401120	Elective or Foreign Language
	11th	English 3 (H, DE, AP)	Algebra 2 or Pre-Calculus (H)	Chemistry (H) or Physics (H)	US History (AP)	Elective	Applied Engineering Technology 3 8401130	Elective or Foreign Language
	12th	English 4 (H, DE, AP)	Math for College Readiness or AP/ DE Mathematics	AP/ DE Course Offerings	Economics/ US Government (H/AP/DE)	Elective	Advanced Technology Applications 8601900	AP Computer Science Principles 0200335 or Foreign Language

	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
POSTSECONDARY	TECHNICAL CENTER PROGRAM(S)	COMMUNITY COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	NA	**St. Johns River State College, Orange Park & Palatka**: Engineering Technology (A.S) Florida State College at Jacksonville: Architectural Design and Construction Technology, AS-Drafting and Design, Architectural, Civil, GIS	UNF: Civil, Electrical, Mechanical Engineering, BS & AS UCF: Civil, Environmental, Mechanical, Aerospace, and Construction Engineering, BS & MS UF: Civil, Coastal, Electrical, Computer, Materials Science, Mechanical, Aerospace, Biomedical Engineering, BS & MA St. Johns River State College, on-line: Organizational Management, B.A.S. Daytona State College, on-line: Engineering Technology, B.S.A. T.

	Sample Career Specialties		
CAREER	NA	Draftsman, Civil Engineering Technician, Surveyor	**Civil Engineer**, **Mechanical Engineer**, Electrical Engineer, Aerospace Engineer, Environmental Engineer, Construction Engineer, Coastal Engineer, **Aircraft Mechanics**

	Articulation and CTE Dual Enrollment Opportunities		
CREDIT	Secondary to Technical Center (PSAV)	Secondary to College Credit Certificate or Degree	PSAV/PSV to AAS or AS/BS/BAS

	N/A	AutoCAD Civil 3D earns 3 credits in Civil Engineering Technology; AutoCAD Revit earns 3 credits in Architecture Design and Construction: AutoCAD User earns 3 credits in Drafting and Design Technology; AutoCAD Inventor earns 3 credits in Engineering Technology	N/A

Career and Technical Student Association

Florida Technology Student Association (FL-TSA)

Internship/Work Experience Recommendations

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

Program of Study Graduation Requirements: http://www.fldoe.org/academics/graduation-requirements