Career Cluster: **Manufacturing/STEM**	CTE Program: **9200100 ~ Automation and Production Technology** Postsecondary Program: 1615080101 Manufacturing Technology AS
Career Cluster Pathway: **Manufacturing Production Process**	Secondary Industry Certification(s): 1. Certified Solidworks Associate (CSWA) (May substitute for math or science credit except Algebra 1, Geometry, and Biology) **Postsecondary Industry Certification(s):** 1. Certified Solidworks Professional-Academic (CSWP-Academic)

		17 1/2 REQUIRED CORE CREDITS				8 1/2 ADDITIONAL CREDITS	
	ENGLISH	**MATH**	**SCIENCE**	**SOCIAL STUDIES**	**Additional**	8.5 Electives, Including CTE sequential Program of Study and recommended electives	
					Required Credits	* Signifies CTE course meets Performing Arts graduation credit requirement	
	4 credits	4 credits	3 or 4 credits, 2 w/ lab	3 or 4 credits	HOPE, Performing Arts, and CRDM		

HIGH SCHOOL

• Students are encouraged to begin planning for careers and postsecondary options by exploring resources at mycareershines.org.
• 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.

Grade	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	Additional Required Credits	Electives	Electives
9	English Honors 1	Geometry 1 Honors	Biology 1 Honors or Integrated Science 1 Honors	World History Honors	Career Research & Decision Making (.5cdt)/Elective (Keyboarding & Business Skills .5cdt)	Automation and Production Technology 1	Elective (Foreign Language)
10	English Honors 2	Algebra 2 Honors	Chemistry 1 Honors or Integrated Science 2 Honors	AP United States History or American History Honors	HOPE	Automation and Production Technology 2	Elective (Foreign Language)
11	AP English Language & Comp or English Honors 3	PreCalc or Advance Math Topics	Physics 1 Honors or Integrated Science 3 Honors	American Government Honors/ AP Economics	Elective (Art 3D Comprehensive)	Automation and Production Technology 3	Elective (Computing for College & Careers or DE Microcomputer Applications CGS 2100 / DE Multimedia Presentations CGS 1871)
12	AP English Lit & Comp or English Honors 4 or DE ENC 1101 Comp 1/DE ENC 2210 Technial Writing	Advanced Math Topics or PreCalc or AP Statistics or DE MAC 1105 College Algebra/DE STA 2023 Statistics	AP Science or Integrated Science 4 Honors	Sociology Psychology 1 or AP Psychology	Elective (Speech or DE Speech SPC 2608 / DE Art History ARH 2051)	Elective (DE ETMC 1010 Mechanical Measurement/ ETIC 2851 Applied Mechanics)	Elective (DE Circuit Fundamentals EETC 1025 / DE Instrumental Fundamentals EST 1520)

POSTSECONDARY

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http://www.easternflorida.edu/admissions/registrars-office/credit-evaluation/leap/agreements-chart.cfm		**UNIVERSITY PROGRAM(S)** **Bachelors Degree (four-year)**
Eastern Florida State College		
Applied Tech Specialist CCC	Engineering Technology AS (ETAS)	University of Central Florida:
Engineering Tech Support Specialist CCC	Aerospace Technology AS (ATAS)	Electronics Technology BSET
Composite Fabrication & Testing CCC		Computer Engineering BS
Alternative Energy Systems Specialist CCC	**Associate in Arts (AA) degrees** are offered at all Florida Community Colleges and allow students to move on to complete a four-year degree.	Electrical Engineering BSEEE
CNC Machinist CCC		Mechanical Engineering BS

CAREER

Sample Career Specialties		
Technical Assembler Manufacturing technician Solderer CNC Machine Operator	Advanced Repair Technician Junior Engineer Biomedical Repair Technician Computer-Aided Design Engineer Cellular Telephone Repair Technician First Line Supervisors of Production and Operating Workers (HSHW/TOL)	Electrical engineer Electronics engineer Mechanical engineer Computer Engineer

CREDIT

Articulation and CTE Dual Enrollment Opportunities		
Secondary to Technical Center (PSAV)	**Secondary to College Credit Certificate or Degree** (Minimum # of clock or credit hours awarded) **Articulated credit to which courses and number of credits**	**Industry Certification to PSAV, AAS or AS** **(Statewide or other local agreements may be included here)**
	http://www.easternflorida.edu/admissions/registrars-office/credit-evaluation/leap/agreements-chart.cfm	**Eastern Florida State College:** Florida Gold Standard Articulation Agreement for SOLID003 shall articulate 3 credit hours for the AAS/AS in Manufacturing Technology.

Career and Technical Student Association:

Skills USA
Internship/Work Experience Recommendations: Work-Based Experience (8601800)
Work-Based Experience (8601800) ETD 2941 Internship (3-6 college credits)
Student Progression Plan, on Brevard Public Schools web site, containing graduation requirements:
http://elementarypgms.sp.brevardschools.org/Home/Documents/Student%20Progression%20Plan.pdf

Cell: C6
Comment: Four (4) credits in English, with a major concentration in composition, reading for information, and literature.

Cell: D6
Comment: Four (4) credits in mathematics, one of which must be Algebra1, 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.

Cell: E6
Comment: 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.

Cell: F6
Comment: 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.

Cell: C13
Comment: 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.

Cell: D13
Comment: 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.

Cell: G13
Comment: 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.

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	9	English Honors 1	Algebra 1	Biology 1 Honors or Integrated Science 1 Honors	World History Honors	Career Research & Decision Making (.5cdt)/Elective (Keyboarding & Business Skills .5cdt)	Automation and Production Technology 1 / Elective (Foreign Language)
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	11	AP English Language & Comp or English Honors 3	Algebra 2	Physics 1 Honors or Integrated Science 3 Honors	American Government/ Economics	Elective (Art 3D Comprehensive)	Automation and Production Technology 3 / Elective (Computing for College & Careers or DE Microcomputer Applications CGS 2100 / DE Multimedia Presentations CGS 1871)
	12	AP English Lit & Comp or English Honors 4	Advanced Math Topics, PreCalc, or AP Statistics	Anatomy and Physiology Honors	AP Psychology or Sociology/ Psychology 1 OR Sports Psychology	Elective (Speech)	Elective (DE ETMC 1010 Mechanical Measurement/ ETIC 2851 Applied Mechanics) / Elective (DE Circuit Fundamentals EETC 1025 / DE Instrumental Fundamentals EST 1520)

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SAMPLE CAREER SPECIALTIES

CAREER

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Sample Career Specialties

CREDIT

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	9	English 1	Applied Math 1	Biology 1 or Integrated Science 1	World History	Career Research & Decision Making (.5cdt)/Elective (Keyboarding & Business Skills .5cdt)	Automation and Production Technology 1	Elective (Intensive Reading)
	10	English 2	Applied Math 2	Chemistry 1 or Integrated Science 2	American History	HOPE	Automation and Production Technology 2	Elective (Intensive Reading)
	11	English 3	Informal Geometry or Geometry 1	Physics 1 or Integrated Science 3	American Government/ Economics	Elective (Art 3D Comprehensive)	Automation and Production Technology 3	Elective (Intensive Reading)
	12	English 4	Algebra 2	Anatomy & Physiology	Psychology 1 / Sociology	Elective (Speech)	Elective	Elective (Intensive Reading)

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POS History		
Date	Attendess	Action Taken
Feb, 2015	Dennis Sobeleski and Cindy Ivey	Updated
Apr-16	Erika McLaren and Cathy Beam	Updates to template design and addition of EFSC Articulation for Solidworks
25-Apr-16	Cathy Beam	Added AS Aerospace Tech as relevant postsecondary program for Automation & Production secondary students. Added MSSC-CPT articulated credit agreement information
	http://www.easternflorida.edu/admissions/registrars-office/credit-evaluation/leap/agreements-chart.cfm	
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Eastern Florida State College: Florida Gold