


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

Option 1

Career Cluster: Science, Technology, Engineering & Mathematics					Major area of Interest: Pre-Engineering			
Career Cluster Pathway: Engineering and Technology					CTE Program: da Vinci Academy of Aerospace Technology			
	16 REQUIRED CORE CREDITS				10 ADDITIONAL CREDITS			
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 4 credits, 2 w/ lab	SOCIAL STUDIES 4 credits	1/2 credit Career Research & Decision Making 1 HOPE (Health Opportunities through Physical Education) 1 Performing Fine Arts (*Signifies CTE course that meet graduation requirements) 7.5 Electives, Including CTE sequential Program of Study and recommended electives			
Approved Dual Enrollment (DE) courses for qualified students may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.								
HIGH SCHOOL	9	English Honors 1	Geometry Honors or Algebra 2 Honors	Biology 1 Honors	World History Honors or Advanced Placement World History	Career Research & Decision Making (.5cdt)/Elective (Aerospace Applications in Math &	Intro to Engineering Design	Elective or World Language
	10	English Honors 2	Algebra 2 Honors or Pre-Calc	Chemistry 1 Honors	American History Honors or Advanced Placement American Government	HOPE	Principles of Engineering	Elective or World Language
	11	English Honors 3 or AP English Language & Composition	PreCalc or Analysis of Functions	Physics 1 Honors	American Government Honors/Economics Honors or DE American Government POS 2041/ DE Macroeconomics ECO 2013	Elective (Any Performing Fine Art)	Aerospace Engineering	Elective (Computing for College and Careers or DE Microcomputer Applications CGS 2100 / DE Intro to Electronics EET 1003)
	12	English Honors 4, AP English Literature & Composition or DE Communications 1 ENC1101 / DE Technical Writing ENC 2210	AP Calculus, AP Statistics or DE College Algebra MAC 1105/Statistics STA 2023	AP Physics B or DE Science	World Cultural Geography, Advanced Micro & Macro Economics or DE Sociology SYG 2000 / DE Psychology PSY 2012	AP Elective or DE AutoCAD Fundamentals ETDC 2320/ DE Drafting	Digital Electronics	Engineering Aerospace Design and Development Capstone
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.							
	Information regarding high school to college and career transition can be accessed from FACTS.org							
	BREVARD COMMUNITY COLLEGE						UNIVERSITY PROGRAM(S) Bachelors Degree (four-year)	
	*Denotes certificates or degrees that may be available at other colleges but not at BCC.							
	Applied Technology Specialist CCC			Engineering Technology AAS			Electronics Technology BSET	
Engineering Technology Support Specialist CCC						Computer Engineering BS		
						Electronics Engineering BSEE		
			Associate in Arts (AA) degrees are offered at all Florida Community Colleges and allow students to move on to complete a four-year degree.			Mechanical Engineering BS		
CAREER	SAMPLE CAREER SPECIALTIES							
	technical assembler, manufacturing technician, solderer			advanced repair technician, junior engineer, biomedical repair technician, computer-aided design engineer, and cellular telephone repair technician			electrical engineer, electronics engineer, mechanical engineer, computer engineer	
*Industry Certifications (Students):								
Secondary: NOCTI Pre-engineering/Engineering Technology, Certified SolidWorks Associate								
Postsecondary: Manufacturing Skills Standards Certification (MSSC)								

Cell: C5

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

Cell: D5

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: E5

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: F5

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: H10

Comment: BCC: Tech Prep/Advance Standing Credit agreement course. Completion of Engineering Tech 1, 2 and 3 w/ "B" or higher can lead to BCC credit in EET 1084 and ETIC 2851.

Cell: H11

Comment: BCC: Tech Prep/Advance Standing Credit agreement course. Completion of Engineering Tech 1, 2 and 3 w/ "B" or higher can lead to BCC credit in EET 1084 and ETIC 2851.

Cell: G12

Comment: BCC/ Dual Enrollment SPC2600 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.

Cell: H12

Comment: BCC: Tech Prep/Advance Standing Credit agreement course. Completion of Engineering Tech 1, 2 and 3 w/ "B" or higher can lead to BCC credit in EET 1084 and ETIC 2851.

Cell: C13

Comment: Honors English or AP English are suggested but not required.

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

Cell: D13

Comment: BCC: 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: F13

Comment: BCC: Dual Enrollment: Sociology SYG 2000 and General Psychology PSY 2012 are suggested for qualified students who are seeking an AA or BS/BA degree.

Cell: B18

Comment: BCC: Tech Prep/Advance Standing Credit can apply to this certificate. EET 1084 and ETIC 2851.

Cell: E18

Comment: BCC: Tech Prep/Advance Standing Credit can apply to this degree. EET 1084 and ETIC 2851.

Cell: B19

Comment: BCC: Tech Prep/Advance Standing Credit can apply to this certificate. EET 1084 and ETIC 2851.