

# Commonwealth of Virginia Plan of Study

Student Name: \_\_\_\_\_  
School: TC Williams  
Date: 3-2018

## Cluster: Architecture & Construction

## Pathway: Design and Pre-Construction

This Career Pathway Plan of Study can serve as a guide, along with other career planning materials, as learners continue on a career path. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner's educational and career goals. This Plan of Study, used for learners at an educational institution, should be customized with course titles and appropriate high school graduation requirements as well as college entrance requirements.

EDUCATION LEVELS	GRADE	English/ Language Arts	Mathematics	Science	Social Studies/ Science	Other Required Courses Recommended Electives Learner Activities	Recommended Career and Technical Courses Source: Administrative Planning Guide <a href="http://www.cteresource.org/apg/">http://www.cteresource.org/apg/</a>	SAMPLE – Occupations Relating to This Pathway: <a href="http://www.doe.virginia.gov/instruction/career_technical/career_clusters/sample_plans_study/index.shtml">http://www.doe.virginia.gov/instruction/career_technical/career_clusters/sample_plans_study/index.shtml</a> <a href="http://www.careerclusters.org">http://www.careerclusters.org</a> <a href="http://www.cteresource.org/cpg/">http://www.cteresource.org/cpg/</a>	
		NOTE: Indicate State Course Titles and Codes							
<b>Graduation Requirements:</b> <a href="http://www.doe.virginia.gov/instruction/graduation/index.shtml">http://www.doe.virginia.gov/instruction/graduation/index.shtml</a>									
MIDDLE	7	English 7 (1110)	Math 7 (3111)	Life Science (4115)	U S History (2354)	Health, PE, Family Life (7120)	Computer Solutions (6609) Inventions & Innovations (8464)	Architect Building Code Inspector Civil Engineer Computer Aided Drafter Cost Estimator Electrical Engineer General Contractor Green Technology Specialist Environmental Designer Interior Designer Landscape Architect Materials Engineer Mechanical Drafter Modeler Planner/Designer Preservationist Protection Engineer Regional and Urban Renderer Renewable Technology Engineer Specifications Writer Surveying and Mapping Technician	
	8	English 8 (1120)	Math 8 (3121) or Algebra I (3130)	Physical Science (4125)	Civics & Economics (2357)	Health, PE, Family Life (7200)	Digital Input Technologies (6160) Technological Systems (8463)		
<b>Career Assessment:</b> Identify an appropriate career assessment instrument at the middle school level used to help students and their parents plan for high school: VA Wizard <input type="checkbox"/> or other assessment (please indicate): <u>Naviance</u>									
SECONDARY	9	English 9 (1130)	Algebra I (3130) or Geometry (3143)	Biology (4310)	World History/ Geography I (2215)	Economics & Personal Finance (6120) Health & PE (2 years) Foreign Language (3 years) Other Electives to Complement Pathway (Core Academic and CTE):	Engineering Explorations (8435)		
	10	English 10 (1140)	Geometry (3143) or Algebra II (3135)	Earth Sciences (4210)	World History/ Geography II (2216) or AP World (2380)		Basic Technical Drawing (8435)		
	11	English 11 (1150) or AP Language (1196) or DE College Composition (1601)	Algebra II (3135) or Pre-Calculus (3162)	Chemistry (4410)	US/VA History (2360) or DE US History or AP US History (2319)		Architectural Drawing & Design (8437)		
	12	English 12 (1160) or AP Literature (1195) or DE World Literature (1602)	Pre-Calculus (3162) or AP Calculus BC (3177)	AP Science	US/VA Government(2440) or AP Government (2445)		Engineering Drawing & Design (8436) or Sustainable & Renewable Technologies (8414)		
<b>College courses offered locally in the high school for college credit should be coded: DE (Dual Enrollment), AP (Advanced Placement) and/or VC (Validated Credit)</b>									
<b>List related certifications/credentials approved by VDOE and offered locally:</b> <a href="http://www.cteresource.org/apg">http://www.cteresource.org/apg</a> (Go to Certification – License Section) Financial Literacy Certification (WISE) Workplace Readiness Skills for the Commonwealth (CTECS)						<b>Additional Learning Opportunities:</b> CTSO Organization(s): <input type="checkbox"/> DECA <input type="checkbox"/> FBLA <input type="checkbox"/> FCCLA <input type="checkbox"/> FFA <input type="checkbox"/> FEA <input type="checkbox"/> HOSA <input checked="" type="checkbox"/> SkillsUSA <input checked="" type="checkbox"/> TSA  <b>Work-Based Learning:</b> <input checked="" type="checkbox"/> Career Research <input type="checkbox"/> Cooperative Education <input type="checkbox"/> Internship <input type="checkbox"/> Mentorship <input checked="" type="checkbox"/> Job Shadowing <input type="checkbox"/> Service Learning Project <input type="checkbox"/> Student Apprenticeship			
College Entrance Exams such as ACT, SAT and AP									
POSTSECONDARY	<b>SAMPLE POSTSECONDARY PROGRAMS RELATED TO THIS CAREER PATHWAY</b> Individual plans must include locally agreed upon courses at the postsecondary level (See page 2)								
	Pathway	Associate Degree, College Certificate, or Apprenticeship			Bachelors Degree		Postgraduate Degree		
Design & Pre-Construction	Architecture Technology, AAS			Architecture, BS		Architecture, MS			

College: [Northern Virginia Community College](#)

School Division(s): [Alexandria City Public Schools](#)

Postsecondary: Placement Assessments such as Virginia Placement Test, ACT or SAT

POSTSECONDARY - COMMUNITY COLLEGE or APPRENTICESHIP - Determined Locally	Semester	English	Mathematics	Science	Social Studies	Required Courses or Recommended Electives				
	<b>POSTSECONDARY PLAN OF STUDIES MUST INCLUDE POSTSECONDARY ACADEMIC, CTE, AND OTHER ELECTIVE COURSES APPROPRIATE FOR AN ASSOCIATE DEGREE.</b>									
	Year 1 1st Semester	ENG 111 College Composition					ARC 200 History of Architecture & CAD 201 Computer Aided Drafting & Design I	ARC 123 Architectural Graphics I	ARC 133 Construction Methodology & Procedures I	SDV 100 College Success Skills
	Year 1 2nd Semester		MTH 115 Technical Mathematics I				ARC 138 Structures for Architects	ARC 124 Architectural Graphics II	ARC 134 Construction Methodology & Procedures II	ARC 298 Seminar & Project or ARC Elective
	Year 2 1st Semester				Social Studies Elective		CAD 202 Computer Aided Drafting & Design II	ARC 225 Site Planning	ARC 231 Architectural Design & Graphics I	ARC 243 Environmental Systems
Year 2 2nd Semester	CST Communication Elective				Humanities- Fine Arts Elective	CAD 203 Computer Aided Drafting & Design III	ARC 240 Designing Sustainable Built Environments or Technical Elective	ARC 232 Architectural Design & Graphics II	PED 116 Lifetime Fitness & Wellness	

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Related Industry Certifications Available:

Additional Suggested Learning Opportunities:

**Work-Based Learning:**

- Cooperative Education     Internship     Mentorship  
 Job Shadowing     Service Learning Project     Registered Apprenticeship

**UNIVERSITY**

University/College: University of Virginia  
 Degree or Major: Architecture  
 Number of Articulated CC Credits: varies

**Notes:** This pathway is designed for students seeking to enter the workforce. Students wishing to pursue a BS degree should follow the General Studies degree and align courses to the university they plan to attend.