



Commonwealth of Virginia Plan of Study

Student Name: _____
 School: _____
 Date: _____

Cluster: Architecture & Construction Pathway: Design/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 www.doe.virginia.gov/VDOE/ Instruction/CTE/apg/	SAMPLE – Occupations Relating to This Pathway: www.doe.virginia.gov/VDOE/ Instruction/CTE/careerclusters/ www.careerclusters.org www.cteresource.org/cpg/	
Graduation Requirements: http://www.doe.virginia.gov/2plus4in2004/index.shtml									
MIDDLE	7	English	Math 7/3111	4115/Life Science	Social Studies 7/2355	Health & PE	Elective/Keyboarding 6150 9 Wks/Inventions & Innovations/8464	<ul style="list-style-type: none"> - Architect - Architectural Drafter - Building Code Inspector - Building Code Official - Building Designer - Civil Engineer - Code Official - Cost Estimator - Drafter - Electrical Engineer - Electrical Engineering Technician - Electronic Engineer - Electronic Engineering Technician - Environmental Designer - Environmental Engineer - Environmental Engineering Technician - Fire Prevention/Protection Engineer - Industrial Engineer - Interior Designer - Landscape Architect - Materials Engineer - Mechanical Drafter - Mechanical Engineer - Regional and Urban Planner/Designer - Safety Director - Specification Writer - Structural Engineer - Surveying/Mapping Technician - Surveyor 	
	8	English	Math 8/3112	4125/Physical Science 8	Social Studies 8/2220 Civics & Economics	Health & PE	Elective/Technological Systems 8462/ Computer Applications 6617		
Career Assessment: Administration of a career assessment instrument is appropriate at the middle school level to help students and their parents plan for high school (Virginia's Career Planning System or other assessment product).									
SECONDARY	9	English	Algebra I	Earth Sciences	World History/ Geography	Health & PE (2 years) Foreign Language (3 years) Other Electives to Complement Pathway (Core Academic and CTE):	Computer Information Systems 6612/ITE 115		
	10	English	Geometry	Biology	World History/ Geography		Technical/Drawing/Design/ CAD 8435 DE		
	11	English	Algebra II	Chemistry	US/VA History		CAD I 8530/Computer-Aided Drafting I/ DE		
	12	English	Trigonometry/ Advanced Algebra	Physics (or Principles of Technology I and II)	US/VA Government		CAD I 8531/Computer-Aided Drafting II/ DE		
High school courses in the pathway offered locally for college credit should be coded: DE (Dual Enrollment) and/or VC (Validated Credit)									
List related certifications/credentials approved by VDOE and offered locally: http://www.doe.virginia.gov/VDOE/Instruction/CTE/apg/ (Go to Section 9.) Basic Principles of Construction: Residential Construction Academy Examination						Additional Learning Opportunities: 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			
						Work-Based Learning: <input 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 checked="" type="checkbox"/> Student Apprenticeship			
Postsecondary: Placement Assessments such as COMPASS & SAT II						College Entrance Exams such as ACT & SAT			
POSTSECONDARY	SAMPLE POSTSECONDARY PROGRAMS RELATED TO THIS CAREER PATHWAY								
	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	Architectural & Civil Engineering Technology/Industrial Design Specialization (JSRCC)								

College: [J. Sargeant Reynolds Community College](#)

School Division(s): _____

Postsecondary: Placement Assessments such as COMPASS & SAT II

POSTSECONDARY - COMMUNITY COLLEGE or APPRENTICESHIP - Determined Locally	Semester	English	Mathematics	Science	Social Studies	Required Courses or Recommended Electives			
	POSTSECONDARY PLAN OF STUDIES MUST INCLUDE POSTSECONDARY ACADEMIC, CTE, AND OTHER ELECTIVE COURSES APPROPRIATE FOR AN ASSOCIATE DEGREE.								
	Year 1 1 st Semester	ENG 111 College Composition I DE	MTH 115 Technical Mathematics I	ARC 121 Architectural Drafting I	ARC 131 Materials & Methods of Construction I	DRF 231 Computer-Aided Drafting	Personal Wellness Elective		
	Year 1 2 nd Semester	ENG 112 College Composition II DE	MTH 116 Technical Mathematics II	ARC 122 Architectural Drafting II	ARC 132 Materials & Methods of Construction II	PHY 201 General College Physics I	Personal Wellness Elective		
	Year 2 1 st Semester	BLD 210 Building Structures or EGR 135 Statics for Engineering Technologies	CIV 171 Surveying I	EGR 216 Computer Methods in Engineering & Technology or DRF 232 Computer-Aided Drafting II	ARC 212 Architectural Drafting III	ARC 241 Building Mechanical Systems	Social/Behavioral Science Elective		
Year 2 2 nd Semester	BLD 231 Construction Estimating	ARC 213 Architectural Drafting IV	ARC 242 Building Electrical Systems	Humanities/Fine Arts Elective	Approve ARC or DRF Technical Elective				

College courses offered locally in the high school for college credit should be coded: DE (Dual Enrollment) and/or VC (Validated Credit)

Related Industry Certifications Available:

AutoCAD 2004 (Brainbench)

Additional Suggested Learning Opportunities:

Work-Based Learning:

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

UNIVERSITY

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

Notes: