

Key
Carrer Pathway Academic Required Courses
Career Pathway Recommended Courses/Learner Activities
Articulated Courses
1-year Certificate
AAS Degree
University
Proposed Pathway Course

# Mountainside High School

## Industrial & Engineering - Building Construction Pathway

*This program of study should serve as a guide, along with other career planning materials, as you continue your career path. Courses listed within this plan are only recommended coursework and should be individualized coursework to meet each learner's educational and career goals.*

Proposed Pathway Course									
Education Levels	Grade	English / Language Arts	Math	Science	Social Studies / Sciences	Other Required Courses and Electives	Career Pathway Core Classes	Recommended Courses and/or Learning Activities	Degree or Diploma
	Grade Level	PROGRAM OF STUDY							
HS	9	Lit and Comp 9	AGS 1	STEM Physics	America in a Global Context I	PE 1, World Language	Woodworking 1		Diploma
	10	Lit and Comp 10	AGS 2	STEM Chemistry	America in a Global Context II	Health 1, World Language	Woodworking 2		
							CAD 1		
	11	Lit and Comp 11	AGS 3	Biology	IB Global Polotics	PE 2	Construction 1		
							CAD 2		
	12	Lit and Comp 12	IB Math Applications SL	Post Secondary Prep -Additional Year or semester of Science	IB Economics	Health 2	Construction 2		
	TERM	PROGRAM OF STUDY						Certificates/Degrees/Occupations	
	FIRST TERM	BCT 102 Residential Printreading	BCT 103 Residential Materials and Methods	BCT 104 Construction Mathematics	BCT 106 Hand Tool/ Power Tool Use & Safety			1-year Certificate in Building Construction Technology	
	SECOND TERM	BCT 101 Principles of Construction Surveying	BCT 127 Concrete Construction I	ARCH 132 Residential Building Codes	ARCH 110 Intro to Architectural Drawing			Minimum 37 credits. Students must meet all certificate requirements. Career possibilities exist for those going into business for themselves or seeking employment in the construction industry. PCC offers associate degrees and a certificate in several construction industry specialties. This program is designed to help students develop the technical qualifications and life skills needed to enter the construction industry, as well as	
	THIRD TERM	BCT 120 Floor Framing	BCT 121 Wall Framing	BCT 122 Roof Framing I	BCT 123 Roof Framing II				

PCC	FOURTH TERM							to help those currently in the construction trades upgrade and learn new skills.	
	TERM	PROGRAM OF STUDY							Certificates/Degrees/Occupations
PCC									
	FIRST TERM	BCT 102 Residential Printreading	BCT 103 Residential Materials and Methods	BCT 104 Construction Mathematics	BCT 106 Hand Tool/ Power Tool Use & Safety	General Education		Associate of Applied Science Building Construction Technology CIPS# 151001	
	SECOND TERM	BCT 135 Residential Building Codes	BCT 127 Concrete Construction I	COMM 215 Small Group Communication: Process and Theroy	ARCH 110 Intro to Architectural Drawing	BCT Elective	General Educator	Minimum of 100 credits Graduates might work in the construction field as framers, carpenters, remodelers, site supervisors, concrete workers, siding installers, roofers, trim carpenters, etc. After gaining job site experience, graduates might even start their own construction companies. Coursework includes hands-on instruction in the BCt shop, or at the BCt worksite in tool safety residential worksite, in tool safety, residential Concrete, Floor/Wall/roof Framing, exterior/interior Finish, Cabinetmaking, and remodeling. Classroom instruction consists of lectures and exercises that will teach skills in residential Printreading, Materials and Methods, Building Codes, estimating, Construction Math, drafting, and sustainable Building	
	THIRD TERM	BCT 120 Floor Framing	BCT 121 Wall Framing	BCT 122 Roof Framing I	BCT 123 Roof Framing II	BCT 118 Introduction to Space Planning and Design			
	FOURTH TERM	BCT 128 Exterior Finish	BCT 129 Mechanical Planning for Kitchens and Baths	BCT 223 Finished Stair Construction	BCT 229 Introduction to Kitchens and Baths	Students must also meet Associate Degree Comprehensive Requirements and Associate of Applied Science Requirements. Students must complete a total of sixteen credits of General Education. Some courses specified within the program may be used as General Education. Math/computation competency is met through the courses in the program of study indicated with a § symbol. Students should consult with program advisors for course planning.			
	FIFTH TERM	BCT 203 Interior Finish	BCT 219 Cabinetmaking	General Education					
SIXTH TERM	BCT 206 Sustainable Constuction Practices	BCT 204B Construction Estimating - Residential	BCT 211 Remodeling	WR 227 Technical Writing					
PCC									
UNI									