# **CAREER PROGRAM OF STUDY**

**Pathway:** Design/Pre-Construction; Construction; Maintenance/Operations



Career Cluster: ARCHITECTURE & CONSTRUCTION

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Student Name:			

Career Clusters identify pathways from high schools to two- and four-year technical colleges, universities, apprenticeship programs and the workplace so that learners can recognize the relationship between what they learn in school and what they can do in the future.

Knowledge and Skills Needed to Succeed in this Career Cluster: Academics, Communications, Problem Solving & Critical Thinking, Information Technology Applications, Systems, Safety, Health & Environmental, Leadership & Teamwork, Ethics & Legal Responsibilities, Employability & Career Development, and Technical Skills.

		9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
•		Core Courses			
English	En	glish I glish Prep 2 glish Prep I	English II Basic Skills English English Prep 2 English Prep I	Adv. Comp. & Early Amer. Lit. American Literature Basic Skills English English Prep 2	AP English World Literature Adv. Comp. & Early Amer. Lit. Technical Writing Everyday English
Schedule a Sophomore Individual Planning Conference with your Counselor				Counselor	
Social Studies	OOL COURS	S. History	World History	Modern American History (req.) Psychology Sociology Comparative Politics Modern Global Issues	AP American History Pop Culture Microeconomics Macroeconomics
•	H O	Schedule College Visits & College Entrance Exams for Junior Year			
Math	σ Ex	gebra I tended Algebra cometry	Geometry Extended Geometry Algebra II	Probability & Stats Adv. Geometry Pre-Calculus FST	AP Calculus Discrete Math ACT Math Prep
•		Schedule Senior Interview with your Counselor before October 1			
Science	Bio	egrated Science blogy ant Science	Biology Chemistry Animal Science	Physics AP Chemistry AP Physics	AP Biology Food Science Animal Health & Nutrition

Elective Courses Within This Cluster Include:			School Activities	
Employability Skills Activities in Construction Activities in Transportation Personal Finance Intro to Microsoft Office Drafting & CAD Home Servicing Accounting I	Power & Energy Materials & Processing Electricity & Electronics Cabinet Making Architectural Planning Computer Programming I Building Trades Advanced Technical Design Welding		Skills USA-VICA Key Club Youth Apprenticeship Band Choir	
Student Signature:		Date:		
Parent/Guardian Signature: Date:				
Counselor Signature:		Date:		



## **ARCHITECTURE & CONSTRUCTION**

		Career Majors			
MS	Wisconsin Technical College System – 2 year www.witechcolleges.com		Wisconsin College/University System – 4 year www.uwhelp.wisconsin.edu Wisconsin Independent Colleges & Universities www.wisconsinmentor.org		
POST SECONDARY PROGR	Air Conditioning, Heating & Refrigeration Technology Architectural Design Architectural Drafting/ Construction Technology Architectural Woodworking/ Cabinet Making Bricklaying & Masonry Carpentry Construction & Remodeling	Electrical Power Distribution Electricity Gas Utility Construction & Service Land Survey Technician Model Building Design & Construction Preparatory Plumbing Residential Building Systems Specialist Wood Tech	Architectural Studies Construction Civil Engineer Engineering Electrical Engineer Electronic Engineer Environmental Designer Environmental Engineer Landscape Architecture Materials Engineer Mechanical Engineer Paper Science Occupational Safety Urban Planning		
	Le	 arn more about career prog	rams at www.careervoyages.com		

### **Specialty Careers / Occupations**

#### Design/Pre-Construction

Architect

Architectural and Civil Drafter

Drafter

Regional and Urban Planner/Designer

Industrial Engineer

Materials Engineer

Mechanical Drafter

**Environmental Designer** 

Civil Engineer Programmer

Mechanical Engineer

Electrical Engineer

Preservationist

**Environmental Engineer** Landscape Architect

Fire Prevention and Protection Engineer

Cost Estimator

**Electrical and Electronic** 

**Engineering Technician** 

Civil Engineering Technician

Environmental Engineering Technician

Surveying and Mapping Technician

Interior Designer

Landscape Designer

Specifications Writer

**Building Code Official** Computer Aided Drafter (CAD)

Renderer (traditional and computer)

Modeler (traditional and computer)

#### Construction

General Contractor/Builder

Specialty Contractor

Construction Engineer

Construction Manager

Superintendent

Project Manager Construction Foreman

Estimator

Project Inspector

Manufacturer's Representative

Sales and Marketing Manager

**Equipment and Material Manager** 

Scheduler

Safety Director

Education and Training Director/Coordinator

Construction Inspector

Subcontractor

Preservationist Service Contractor

Field Supervisor

Specialty Trades Subcontractor

Mason

Construction Craft Laborer

Iron/Metalworker (structural and reinforcing)

Carpenter System Installer

Electrician

Boilermaker

Electronic Systems Technician

Sheetmetal Worker

Security/Fire Alarm Systems Installer

Concrete Finisher

Glazier

Tile and Marble Setter

Landscaper/Groundskeeper

Elevator Installer

Roofer

Painter and Plasterer/Drywall

**Explosives Worker** Insulation Worker

Drywall Installer

Plumber

Pipe Fitter

Millwright

Heating, Ventilation, Air Conditioning and

Refrigeration Mechanic

Carpet Installer

Electrician Steamfitter

Terrazo Worker and Finisher

#### Maintenance/Operations

General Maintenance Contractor

Construction Engineer

Construction Manager

Superintendent

Project Manager

Estimator

Facilities Engineer Reliability Engineer

**Environmental Engineer** 

**Demolition Engineer** 

Project Inspector Manufacturer's Representative

Sales and Marketing Manage

**Equipment and Material Manager** 

Scheduler

Maintenance Planner/Scheduler

Security Controls Manager • Preservationist

Safety Director

Construction Inspector

Service Contractor

Field Supervisor

Specialty Trades Subcontractor

Mason

Iron/Metalworker

Carpenter

System Installer

Electrician

Boilermaker

Cost Estimator

Sheetmetal Worker

Security and Fire Alarm System Installer

Concrete Finisher

Glazier

Tile and Marble Setter

Hazardous Materials Remover

Landscaper/Groundskeeper

Elevator Installer

Drywall & Insulation Worker Plumber / Pipe Fitter

Milworker

Heating, Ventilation, Air Conditioning and

Refrigeration Mechanic

Carpet Installer

Electrician

Steamfitter

Terrazo Worker and Finisher

Refractory Technician

Hydro Testing Technician

Thermal Control Technician Restoration Technician

Wastewater Maintenance Technician Highway Maintenance Worker

Learn more about specific occupations at: http://www.bls.gov/oco/