PROGRAM OF STUDY: Plumbing







This Program of Study may serve as a graduation guide for the next four plus years, along with other career planning and educational materials. Courses listed in this model may include recommended coursework and should be individualized to students' educational and career goals. Each graduation plan needs to meet minimum high school graduation requirements. Dual Enrollment courses can be high school academic and/or career technical education courses.

COURSE/ GRADE	NINTH	TENTH	ELEVENTH	TWELFTH
ENGLISH	9 th grade Lit/ Composition	10 th grade Lit/ Composition	American Lit/ Composition	World Lit/ Composition / British Lit
MATHEMATICS	Coordinate Algebra / Algebra I	Analytic Geometry / Geometry	Advanced Algebra / Algebra II	Pre-calculus
SCIENCE	Physical Science	Biology	Chemistry	Physics
SOCIAL STUDIES	Government	World History	US History	Economics
PATHWAY COMPLETER	Industry Fundamentals & Occupational Safety	Introduction to Construction	Plumbing I	Another course in focus area, Work-Based Learning, or Youth Apprenticeship
Industry Recognized Credential (Pathway Completer)		Visit the End of Pathway Assessment Page (see note below)		
Required/ Selective Electives	Health & Personal Fitness (can be taken in grades 9-12)	Introduction to Business Technology	Financial Literacy	Plumbing II
	Modern Language/Latin 2 units required for admissions to Georgia University System Colleges/Universities For a listing of Modern Language/Latin courses offered at your high school, please contact your advisor, counselor, or curriculum handbook.		Other Electives For a listing of other elective courses offered at your high school, please check with your advisor, counselor, or curriculum handbook.	

Postsecondary Transition

- · University System of Georgia Institutions: Admissions Testing
 - ACT or SAT
 - · For More Information contact the institution of your choice
- · Technical College System of Georgia
 - Placement Exam
- United States Military
 - ASVAB Assessment
- Use BRIDGE Law platform to inform decisions on postsecondary opportunities
- Dual Enrollment
- Earning high school course credits while taking college courses

Plumbing Career Pathway Completers - Industry Credentialing for High School Students

Upon completion of sequenced courses in the Plumbing Pathway, students are eligible to complete the industry-Recognized student credential for fulfillment of the End of Pathway Assessment. Secondary students completing the Plumbing pathway will be able to sit for the National Industry Credentialed assessment offered on-line from NCCER and SkillsUSA. Once mastery is reached, students will receive recognition for completion and use this credential in conjunction with their job or continuing training. For specific assessment information, refer to: http://bit.ly/ArchConstEOPA.

Plumbing Pathway Description

Construction is one of the nation's largest industries with over 7 million wage and salary jobs and 1.9 million self-employed workers. Construction includes the building of new structures as well as additions and modifications to existing ones. The construction industry also includes maintenance, repair, and improvements on these structures. Plumbers, pipefitters, and steamfitters install and repair pipes that carry water, steam, air, or other liquids or gases to and in businesses, homes, and factories. They work in factories, homes, businesses, and wherever else there are pipes or septic systems. Workers must often lift heavy materials, climb ladders, and work in tight spaces. Some plumbers travel to a variety of work sites every day. Most plumbers, pipefitters, and steamfitters learn on the job through an apprenticeship. Some start out by attending a technical school. Most states and localities require plumbers to have a license. Employment of plumbers, pipefitters, and steamfitters is expected to grow 26 percent from 2014 to 2024, faster than the average for all occupations. Stricter water efficiency standards and new building and power plant construction are projected to spur demand for workers. There are different levels usually depending on training and experience. For example, a master plumber on construction jobs may be involved with developing blueprints that show where all the pipes and fixtures will go. Their input helps ensure that a structure's plumbing meets building codes, stays within budget, and works well with the location of other features, such as electric wires.

Sample In Demand Careers in Georgia							
Occupation Specialties	Level of Education Needed	Georgia Average Salary	Annual Average Openings in Georgia	2018 – 2028 Employment Outlook			
Construction Plumbers	Postsecondary Certificate	\$45,626	1570	In Demand, High Skill			
Pipe Fitters and Steamfitters	Postsecondary Certificate	\$45,626	1570	In Demand, High Skill			
First Line Supervisors of Construction Trades/ Extraction Workers	Postsecondary Certificate	\$61,203	1942	In Demand, High Skill			
Construction Managers	Bachelor's Degree	\$99,756	136	In Demand, High Skill			

Related Pathway Occupations

- Plumbers Plumbing Craft Laborers
- Construction Inspectors Pipefitters & Steamfitters
- Cost Estimators Construction Foremen
- Construction Engineers Project Inspectors

Other Related Occupations

■ Project Managers



O*NET Online

PROGRAM OF STUDY:



Entrance/Exit









NOTE: Students have many options to ENTER and EXIT from their academic studies into the workforce. When a student graduates from high school, they are eligible to choose one of many ENTRANCE POINT options: 1. Enroll in either a 2- or 4-year post-secondary program; 2. Enroll in an apprenticeship program or the military; or 3. Enter the workforce using technical skills learned in high school. When a student finishes a 2- or 4-year degree program, they may choose to EXIT and 1. Enroll in an apprenticeship program or the military; 2. Enroll in a professional university degree program; or 3. Enter the workforce using technical skills learned.

POSTSECONDARY:

TCC

RP11 Residential/Commercial Plumbing Technician TCC **PLBG 1000 Introduction to Plumbing PLBG 1160 Plumbing Drawings** PLBG 1210 Pipes, Valves, and **Fittings PLBG 1220 Drainage Systems PLBG 1240 Water Supply Systems PLBG 1260 Plumbing Fixtures** and Appliances PLBG 1280 Gas Piping, Venting, and Appliances

DIPLOMA OR AAS

PL12 Plumbing Diploma RP11 TCC plus ENGL 1010 Fundamentals of English I **MATH 1012 Foundations of Mathematics EMPL1000 Interpersonal Relations and Professional Development PLBG 1310 Special Plumbing Systems PLBG 1320 Plumbing Service PLBG 1330 Plumbing Codes COMP 1000 Introduction to Computer Literacy 6 Credits of Occupational Electives**

BACHELOR OF SCIENCE

The University **System of Georgia** offers students' higher education options at 30 institutions throughout the state, providing a wide range of academic programming including certificates and associate. baccalaureate. masters, doctoral and professional degrees. https://apps.ds.usg.ed u/ords/f?p=118:1:0:::::

USG Staying on Course

https://www.usg.edu/s tudent affairs/assets/ student affairs/docu ments/Staying on Co urse.pdf

Go to GAfutures at www.gafutures.org for more information about your education and career planning, including valuable financial information (grants and scholarships including HOPE Program, grants, and loans, FAFSA, and CSS forms).

Activities

- Instructional Related
- Connecting

Career Enhancement

Opportunities

- Work-Based Learning
- · Employability Skill Dev.

Postsecondary Options:

- 4-Year Universities/ Colleges
- 2-Year Colleges

Entrance/Exit Point

- **Technical Colleges**
- State Registered Apprenticeships
- Special Purpose Schools
- On-the-Job Training
- Military

Earning Postsecondary Credits While in High School

Entrance/Exit Point

- **Dual Enrollment Program**
 - Earn postsecondary credit while in high school
- You can complete
 - **Industry Credential**
 - Technical Certificate of Credit (TCC)
 - Associates of Applied Science Degree
 - Bachelor's Degree
- Who can help?
- **Parents**
- School Counselor
- Advisor

Career-Related Education

Career Awareness Career Exploration

- - Cooperative Education
 - Internship
 - Youth Apprenticeship
 - Clinicals