

Scope and Sequence Plumbing & Heating

Academic Subjects – Career success and postsecondary education success require the same level of college prep coursework. The Pennsylvania Department of Education’s (PDE) focus is to ensure that every student is prepared for college and a career. Academic courses such as applied math or general science cannot be listed on the program’s scope and sequence. PDE’s goal is to have all students perform at the competent or advanced level on the PSSA, and earn the Pennsylvania Skills Certificate on the end-of-program assessment.

	SECONDARY				POSTSECONDARY based on PENN COLLEGE OF TECHNOLOGY			
	Ninth Grade	Tenth Grade	Eleventh Grade	Twelfth Grade	Semester One	Semester Two	Semester Three	Semester Four
Technical Units		Orientation Safety Print Reading and Calculations Pipe Joining DWV Systems Pressure Systems Job Seeking/Keeping Skills	Print Reading & Calculations DWV Systems Pressure Systems Fixtures/Faucets/Valves Water Heating Miscellaneous OSHA Job Seeking/Keeping Skills	Print Reading & Calculations Fixtures/Faucets/Valves Water Heatings Pumps Employment Skills Management Skills Welding	WEL 113: Oxy-Fuel Welding and Cutting I WEL 114: Shielded Metal Arc I WEL 115: Oxyfuel Welding & Cutting II WEL 116: Shielded Metal Arc II	CSC 110: Intro to Info Technology QAL 237: Nondestructive Testing I WEL 120: Gas Metal Arc I WEL 124: Gas Metal Arc II WEL 123: Gas Tungsten Arc I WEL 129: Gas Tungsten Arc II	QAL 247: Nondestructive Testing II WEL 210: Flux-Cored and Sub Arc I WEL 213: Gas Tungsten Arc III WEL 214: Flux-Cored and Sub Arc II WEL 219: Gas Tungsten Arc IV WEL 240: Basic CNC Programming	WEL 230: Shielded Metal Arc III WEL 234: Shielded Metal Arc V WEL 247: Welding Design WEL 233: Shielded Metal Arc IV/Pipe Welding WEL 239: Shielded Metal Arc VI / Pipe Welding WEL 248: Robotic Welding
English	College Prep English I	College Prep English II	College Prep English III	College Prep English IV	ENL 111: English Comp	ENL 201: Technical & Professional Communication		
Math	Algebra I	Algebra II	Geometry	College Prep Math (recommended)	MTH 124: Technical Algebra & Trig I			

					MTH 180: College Algebra and Trig I			
Science	Biology	Chemistry	Physics					
Humanities	Civics	American History	World Studies					ECO 111: Principles of Macroeconomics
Other Required Courses/ Electives	Foreign Language I (recommended)	Foreign Language II (recommended)			EDT 107: Blueprint Reading	FIT: Elective: Fitness		