Drywall, Framing, and Finishing-H

Program Length:

900 Total Hours325 Lecture Hours375 Shop Hours200 Externship Hours

Program Description:

This program helps students gain knowledge in carpentry, specifically drywall, framing, and finishing. By utilizing a combination of lectures and applied practice, students will learn about professional standards, safety concerns, material handling, and tools and equipment related to drywall, framing, and finishing. This program is designed to prepare the student for entry-level positions in carpentry. Students are offered learning experiences in the basics of shop math & blueprint reading, tools and equipment used in the trade, framing, drywall installation and finishing, and trim and cabinet installation. In addition, students will be taught how to create a resume and help them build up a proper skillset for the industry. This includes written and verbal communications, resume writing, interviewing, budgeting personal finances, and job search and readiness strategies.

Courses in this program are offered using a hybrid format (both on-ground and distance education). The breakdown in hours is provided below. To see more information about course formats and hybrid courses, see the attendance policy on page 11.

Course/Number		Clock Hours							
Course No.	<u>Title</u>	Lecture DE ⁴	$\frac{\text{Lecture}}{\text{OG}^5}$	<u>Total</u> Lecture	<u>Shop</u> <u>DE</u>	<u>Shop</u> <u>OG</u>	<u>Total</u> <u>Shop</u>	<u>Total</u> Hours	
DFF001-H	Basic Safety	25	4	29	0	24	24	53	
DFF002-H	Construction Math	47	0	50	0	4	4	54	
DFF003-H	Working in Construction	21	3	23	6	12	18	41	
DFF004-H	Tools & Equipment	20	7	27	0	27	27	54	
DFF005-H	Intro to Construction Drawings & Material Handling	20	4	24	0	17	17	41	
DFF006-H	Commercial Drawings	13	0	13	8	7	15	28	
DFF007-H	Framing & Protection	27	3	30	14	25	39	69	
DFF008-H	Roofing & Exterior	33	3	36	3	46	49	85	
DFF009-H	Doors & Door Hardware	25	2	27	0	33	33	60	
DFF010-H	Drywall	23	2	25	4	68	72	97	
DFF011-H	Suspended Ceilings	9	2	11	4	17	21	32	
DFF012-H	Trim & Cabinet Installation	24.5	3.5	28	0	38	38	66	
DFF013-H	Job Application Skills	2	0	2	6	12	18	20	
DFF014-G	Externship	0	0	0	0	200	200	200	
	Total	289.5	35.5	325	45	530	575	900	
	Percentages	DE Hours		37%	OGI	Hours	62	62%	

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⁴ DE: Distance Education

⁵ OG: On-Ground (In-Person)

Program Subjects:

- 1. Working in the Construction Industry & Basic Safety
- 2. Construction and Commercial Drawings
- 3. Construction Math
- 4. Tools and Equipment used in the Trade
- 5. Material Handling
- 6. Cold-Formed Steel Framing
- 7. Exterior Finishing
- 8. Thermal and Moisture Protection
- 9. Drywall Installation
- 10. Drywall Finishing
- 11. Doors, Trim, and Cabinets
- 12. Roofing
- 13. Suspended Ceilings
- 14. Job Application Skills
- 15. Externship

Certification:

A diploma of completion will be given to each student upon completing the program. This diploma will be used to show a perspective employer evidence of program completion and the skills attained for successful work in carpentry, specifically drywall, framing, and finishing.

Course Descriptions - Drywall, Framing, and Finishing

DFF001-H: Basic Safety

In this course, students will learn the basic guidelines necessary to ensure their safety and the safety of their coworkers at a construction site and other sites. Students will be able to follow safe work practices and procedures; inspect and properly use safety equipment; and eliminate hazards or how to work safely around them upon completion of this course.

DFF002-H: Construction Math

This course will help students understand the basics of construction math. Successful completion of this course will allow students to be able to work with whole numbers, fractions, and decimals; convert different forms of measurement, including weight, length, and volume; correctly use rulers and measuring tape; and be proficient in basic geometry.

Prerequisite: DFF001-H

DFF003-H: Working in Construction

This course will teach students how skills related to oral and written communication and reading skills. Students will obtain skills in critical thinking, problem solving, and conflict resolution and gain a better understanding of the construction industry and the opportunities available in terms of career and job growth. Upon completing the course, students should be more confident in their written and oral communication skills, as well as a more comprehensive outlook on the construction business.

Prerequisite: N/A

DFF004-H: Tools & Equipment

Upon successful completion of this course, students will receive instruction in the use and care of hand and powered

carpentry tools. They should be able to demonstrate knowledge of hand and power tools and their practical applications. Demonstrate understanding of workplace safety requirements. Utilize measurement tools correctly and accurately. Demonstrate basic layout and cutting procedures.

Prerequisite: DFF001-H & DFF002-H

DFF005-H: Intro to Construction Drawings & Material Handling

In this course, students will learn how to identify the types and uses of commercial construction drawings and schedules as well as define the use of specifications and how they are referenced. Students will learn how to compare and contrast residential and commercial construction drawings, describe the purpose of a civil drawing, describe the use of architectural drawings and schedules and describe the use of structural drawings. They will also learn the basic concepts of material handling and manual lifting, as well as identify material safety precautions, and will be engaged in tying knots commonly used in material handling. Students will learn about the format of specifications and explain how specifications are written and the essentials of motorized and non-motorized material handling equipment, describe their uses, and create modules.

Prerequisite: DFF002-H & DFF004-H

DFF006-H: Commercial Drawings

In this course, the student will learn how to identify the types and uses of commercial construction drawings and schedules as well as define the use of specifications and how they are referenced. Students will learn how to compare and contrast residential and commercial construction drawings, describe the purpose of a civil drawing, describe the use of architectural drawings and schedules and describe the use of structural drawings. The course will also teach students about the format of specifications and explain how specifications are written.

Prerequisite: DFF005-H

DFF007-H: Framing & Protection

Upon successful completion of this course, students will understand how to work with cold-formed steel and insulation. They will know how to do cost analyses for cold-steel framing projects, and how to use the studs, fasteners, and other accessories associated with those projects. Students will also be the procedures for proper insulation, moisture control, ventilation, waterproofing and air infiltration. This course will teach students how to use one of the more widespread framing methods in the industry as well as the installation techniques for protecting the interior of the home.

Prerequisite: DFF001-H, DFF003-H, DFF004-H, DFF005-H, & DFF006-H

DFF008-H: Roofing & Exterior

In this course, students will learn the materials and installation methods of various exterior finishes, roof drainage systems, and commercial roofing systems. Students will become familiar with flashing and installation, types of cornices, various methods for installing wood, metal, and vinyl siding, composition shingles, roll roofing, wood shingles/shakes, slate, tile, metal, and membrane roofing. Information on stucco, masonry, and other specialty exterior finishes, and common knowledge about residential and commercial roofing will also be presented.

Prerequisite: DFF001-H, DFF003-H, DFF004-H, DFF005-H, & DFF006-H

DFF009-H: Doors & Door Hardware

In this course, students will obtain knowledge on doors, their components, their composition, and the procedures for installation. Students will learn about the various openings for doors, and the associated hardware necessary for each type of situation. This course will allow students to install doors and their components properly and effectively. <u>Prerequisite</u>: DFF007-H

DFF010-H: Drywall

Students will learn the components of a drywall assembly; describe the installation of drywall, contrast rated assemblies to nonrated assemblies and identify how to calculate a quantity takeoff for proper drywall installation. They will list the types of gypsum products, identify drywall fasteners, list their uses, identify drywall accessories, and state their applications. Describe the purpose of a finish schedule, list the tools used for drywall application, identify methods of sound-isolation construction, describe the procedure for drywall construction and list special applications for drywall. This course will also help students to describe single-ply drywall applications and list multiply drywall applications. Students will learn the differences between the six levels of finish established by industry standards, the different materials for proper drywall finishing, the proper tools used in drywall finishing, proper drywall finishing procedures and how to estimate the proper amount of drywall finishing materials. They will be able to describe the automatic taping and finishing procedures involved in drywall finishing, identify common joint problems when finishing drywall, identify common compound problems when finishing drywall, identify common roblems when finishing drywall. Prerequisite: DFF001-H, DFF005-H, & DFF006-H

DFF011-H: Suspended Ceiling

In this course, students will learn about suspended ceiling systems, including the components and how to lay out and install systems based on drawings and blueprints.

Prerequisite: DFF007-H

DFF012-H: Trim & Cabinet Installation

Upon successful completion of this course, students will have gained knowledge about materials and installation methods for trimming windows, ceilings, doors, and floors. Students will be able to identify various types of moldings and estimate the cost of materials. In addition, students will become knowledgeable about cabinets, specifically distinguishing between wall and base units, components and hardware, installation, and cost estimation. Students should be able to install trim for different areas for the home as well as a set of base and wall cabinet units. Prerequisite: DFF007-H & DFF008-H

DFF013-H: Job Application Skills

This course is designed to prepare students to make the move from student to employee. Students will work on their resumes and learn about job searching and interviewing processes. It makes students feel confident and perform well in an interview setting. This course is important because it will prepare students to communicate effectively with co-workers and supervisors in a professional manner in the work environment. Prerequisite: DFF012-H

DFF014G: Externship

Students will acquire working skills on the job as a component of their education and hands-on training at the PTTI School. Emphasis will be placed on applying skills learned, working well with other employees, teamwork, and helping companies become more productive, higher quality and increased quality standards of work. <u>Prerequisite</u>: DFF001-H, DFF002-H, DFF003-H, DFF004-H, DFF005-H, DFF006-H, DFF007-H, DFF008-H, DFF009-H, DFF010-H, DFF011-H, DFF012-H, DFF013-H