

Concreting, Masonry and Framing

Program Length:

900 Total Hours
200 Hours Lecture
500 Hours Shop
200 Hours Externship

Program Description:

The program is designed to help students gain knowledge in concrete, construction, masonry decoration and framing works. After graduation, a student can start working as a concrete worker, construction assistant or constructor. Students will gain experience and training that include industrial and personal safety, safe operation and practices for using concrete, frame setup and foundation layout, blueprint reading, interpretation of engineering plans and instructions, basic shop math and concrete mixing skills, wall and floor construction, drainage and masonry. This program will teach students 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.

Concrete, Masonry and Framing Program

| Course/Number | | Clock | Hours | |
|---------------|---|---------|-------|-------------|
| Lesson | Title | Lecture | Shop | Clock Hours |
| CTT001 | Introduction to Concrete | 10 | 10 | 20 |
| CTT002 | Concrete Safety | 20 | 20 | 40 |
| CTT003 | Blueprint reading and shop math | 30 | 10 | 40 |
| CTT004 | Introduction to foundation | 20 | 80 | 100 |
| CTT005 | Wall Construction | 43 | 168 | 211 |
| CTT006 | Floor Construction | 20 | 40 | 60 |
| CTT007 | Drainage | 20 | 55 | 75 |
| CTT008 | Retrofits and Add-ons | 8 | 32 | 40 |
| CTT009 | Concrete Applications in real life | 25 | 75 | 100 |
| CTT010 | Interviewing Skills and Resume Building | 4 | 10 | 14 |
| CTT011 | Externship | 0 | 200 | 200 |
| Total: | | 200 | 700 | 900 |

Program Subjects:

1. Introduction to concreting
2. Concreting Safety
3. Blueprint reading and shop math
4. Introduction to Foundation
5. Wall Construction
6. Floor Construction
7. Drainage

8. Retrofits and Add-on
9. Concreting Applications in Real Life
10. Interviewing Skills and Resume Build up
11. Externship

Certification:

A diploma of completion will be given to each student upon completing the Program. This diploma will be used to show a prospective employer evidence of program completion and the skills attained for successful work in the Concreting, Masonry and Construction industry.

Course Descriptions – Concreting, Masonry and Framing

CTT001-Introduction to Concreting

In this course Students will learn the usage and definition of concreting, the students will gain knowledge of the concreting industry, basic concreting tools and skills. The knowledge gained in this course will provide general information of concreting and wall materials.

CTT002 - Concreting Safety

In this course Students will learn the basics of concreting safety, different types of concreting tools, tool handling and proper techniques to reduce the risk of injury. The knowledge gained in this course will provide a safe working environment and a solid foundation for the concrete workers' success in the workplace.

CTT003 - Blueprint Reading and Shop Math

By gaining the knowledge of shop math, understanding key terminology, and performing base knowledge experiments the students will begin to formulate a foundation for concreting. Blueprint reading is an important piece to becoming a professional concrete worker. PTT students will learn how to accurately read and interpret a blueprint layout and elevation in order to properly achieve such goals as tasked. While applying such previously learned things as shop math a student will compound that learning by being able to assess drawing scales and dimensions. PTT students will also learn computer drawings and special views along with other important skill sets to becoming a proficient blueprint reader.

CTT004 - Introduction to Foundation

In this course Students will learn basic knowledge of foundations, types of foundations and the steps to set up and build a foundation. Foundation is an important preparation step in concreting works. The knowledge gained in this course will provide general ideas on how to start a concreting job and give the students a good beginning of the program.

Prerequisite: CTT001, CTT002

CTT005 - Wall Construction

In this course students will learn how to mix concrete and work with it, layout, set up and build a wall out of concrete, build scaffolds to ensure a safe and easy working environment. The knowledge gained in this course will provide professional skills in concreting jobs and help the students able to build up their own concrete works

Prerequisite: CTT004

CTT006 - Floor Construction

In this course Students will learn upper floor and ground floor construction skills, different types of floors, floor finishes, ventilation and floor protection methods. The knowledge gained in this course will provide general ideas on floor construction and help students succeed in their career

Prerequisite: CTT004

CTT007 - Drainage

In this course Students will learn the importance of a dry foundation, principles of drainage, systems of drainage, terms of drainage and construction of drainage, also the students will understand the testing of drains. The knowledge gained in this course will provide general ideas of drainage systems build up for residents and commercials, help the students prevent the work from being flooded and sunk. Contamination.

Prerequisite: CTT004

CTT008 – Retrofits and Add-on

In this course Students will learn concepts of retrofitting, different retrofit methods, repair foundations when the structure goes bad, fast footing and foundation build up skills. The knowledge gained in this course will provide students a good retrofitting skill, make them understand the necessity and methods to retrofit. This would be an important part of work in their future careers.

Prerequisite: CTT004, CTT005, CTT006, CTT007

CTT009 - Concreting Applications in Real Life

In this course Students will learn Actual concreting applications in real life. They will be taught about Retaining Wall material choices, Masonry, and Driveway placement. Students would be introduced to real life concreting applications and learn in a industrial environment. After completion of the course, they can be able to handle simple concreting jobs like building a stone sitting wall or placing a concrete walkway, and they will learn about Masonry skills.

Prerequisite: CTT004, CTT005, CTT006, CTT007

CTT010 - Interviewing Skills and Resume Build up

Students will acquire a working knowledge of interviewing skills, teamwork and management communications to help them secure employment in an entry level position as a concreting technician. PTTI Students will be prepared to work professionally and communicate effectively environment upon completion of this course.

Prerequisite: CTT009

CTT011 – Externship

Students will acquire real-time, hands-on, on-the-job education-related experience and apply learned skills as a component of their education. Emphasis will be placed on applying skills learned, working well with other employees, teamwork, and helping companies become more productive. The 200-hour Externship experience will provide students with the opportunity to provide employers high quality standards of work in the concreting, masonry and framing area.

Prerequisite: CTT010