## **Student Services Department**

#### Studentservices@eascarpenterstech.edu

Pittsburgh Training Center 652 Ridge Road Pittsburgh PA. 15205 (412) 262-1830

#### Heavy Highway PROGRAM - YEAR 1

NEW COURSE NUMBER	COURSE TITLE AND DESCRIPTION	CONTACT HOURS
HH 101 Basic Skills I	This module will introduce basic Heavy Highway Carpenter skills to include OSHA 10, Construction Fall Protection, and First aid/CPR/AED Upon successful completion of this course, participants will have a beginner's knowledge of Heavy Highway Carpenter skills.	40
HH 102 Concrete I	This Module will introduce basic Heavy Highway Carpenter skills. This will include basic hand skills, wood formwork, and clamping form systems. Basic Hand skills will include safety module on hand tools and power tools, tools and materials terminology, print reading view and line recognition, and 2 practical exercises building a sawhorse and a job built ladder. Wooden formwork lesson includes safely working with wood formwork, terminology related to wood form parts, creating wood form sketch, and building an equal pressure form. The clamping form work module includes safely working with clamping forms, clamping formwork terminology, creating a formwork sketch, and building a pumphouse form.	40
HH 103 Bridge I	This module will introduce participants to Bridge construction. We will talk about bridge terminology, different bridge parts, and bridge types. We will discuss the construction of bridge overhangs including safety, print reading, and building an overhang. We will introduce stay in place bridge deck forms. We will discuss safety, print reading, theory, and installing SIP deck pans.	40
HH 104 Piledriver Basics	This module will introduce participants to Piledriving basic skills. Piledriving basics such as safety, terminology, oxy acetylene torch cutting, SMAW welding basics. Upon successful completion of this course participants will have a basic knowledge of basic piledriving skills.  Understand piledriving safety, Knowledge of piledriving terminology, Safely use oxy acetylene torch, Safely perform SMAW welding process	40
HH 105 Basic Skills II	This module will introduce additional Heavy Highway Carpenter skills. Participants will learn skills to become proficient with MEWPs. Participants will also learn layout skills such as construction math, print reading, basic hand layout. Math skills in Pythagorean theorem, rise, run, and diagonal, the 3, 4, 5 triangle, and the construction master calculator.	40
HH 105 Layout I	The Module of this course will introduce the participants to Oxy-Acetylene Cutting and Basic Welding. The Module topics cover Personnel Protective Equipment, all parts, gases, power tools and welding machines. Participants will learn the proper and professional use and safety associated.	40

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CONT190	CONSTRUCTION INTERNSHIP I	1800
	This course consists of paid OJT, internship, or practicum performed	
	in a business, industry, trade, or technical career setting within the	
	student's occupational area. The contact hours experienced through	
	on-the-job training will be verified by an employer or union official	
	and will be placed on the student's record. There are specific	
	competencies from work experience required.	
	TOTAL	192

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	Heavy Highway PROGRAM – YEAR 2	
NEW COURSE NUMBER	COURSE TITLE AND DESCRIPTION	CONTACT HOURS
HH 201 Scaffold	Participants will learn the recommended practices of scaffold safety and installation referencing OSHA 1910 and 1926 CFR regulations, manufactures recommendations and the CITF Scaffold Curriculum. The intent of this class is to give the participant a basic introduction to this facet of carpentry, and what level of understanding will be expected of the participant on the job site by the employer	40
HH 202 Bridge II	Participants will be introduced to concrete placement and formwork projects such as Bridge pier caps and transition forms. Construction math, print reading, best practices, and hands on techniques used on Heavy Highway projects.	40
HH 203 Concrete II	Participants will be introduced to concrete placement and formwork projects such as Inlet rain forms and Endwall drainage forms. Construction math, print reading, best practices, and hands on techniques used on Heavy Highway drainage projects.	40
HH 204 Layout I	Participants will be introduced to entry level layout: Construction math, print reading, best practices, and hands on techniques commonly used for Heavy Highway layout on jobsites. The intent of this class is to give the participant an introduction to this facet of Heavy Highway Carpentry and what level of understanding will be expected by the employer.	40
HH 205 Concrete III	This Module will build on basic formwork knowledge. The participant will learn about the safety, terminology, math, print reading, and hands on techniques needed to be proficient on the job site. The intent of this class is to give the participant a basic introduction to this facet of Heavy Highway Carpentry, and what level of understanding will be expected of the participant by the employer.	40
CONT199	CONSTRUCTION INTERNSHIP II  This course consists of paid OJT, internship, or practicum performed in a business, industry, trade, or technical career setting within the student's occupational area. The contact hours experienced through on-the-job training will be verified by an employer or union official and will be placed on the student's record. There are specific competencies from work experience required.	1800

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	Heavy Highway PROGRAM – YEAR 3	
New Course Number	Course Title & Description	Contact hours
HH 301 Rigging	This module will cover the required information to become a Qualified Rigger and Signal Person. The class begins with a minimum of thirty-two hours of classroom instruction. Topics covered are Hardware, Inspections, Cranes, Signals, Knot tying, and Mathematical Calculations associated with Rigging. A one hundred question test will be given by a third-party proctor. The course will conclude with a practical test where the student will use appropriate signals to maneuver a load through prescribed set of tasks. This Qualification has a four-year duration. A refresher class and re-test are required to keep the certification current.	40
HH 302 Welding I	The Module of this course will introduce the participants to Oxy-Acetylene Cutting and Basic Welding. The Module topics cover Personnel Protective Equipment, all parts, gases, power tools and welding machines. Participants will learn the proper and professional use and safety associated.	40
HH 303 Welding II	The Module of this course will introduce more advanced Welding techniques. The Module topics cover Personnel Protective Equipment, welding techniques and welding machines. Participants will learn the proper and professional use and safety associated.	40
HH 304 Bridge III	This Module will provide basic knowledge of bridge deck welding. The participant will learn about the safety, terminology, math, print reading, and hands on techniques needed to be proficient on the job site. The intent of this class is to give the participant a basic introduction to this facet of Heavy Highway Carpentry, and what level of understanding will be expected of the participant by the employer.	40
HH 305 Drilled Shaft	This Module will increase welding skills. The course will cover advanced techniques in Shielded Metal Arc Welding. Participants will learn skills to complete welds in joints at all positions and angles and gain more experience at diagnosing discontinuities. The learning and usage of P.P.E and safety will continue to enhance throughout the course.	40
CONT290	CONSTRUCTION INTERNSHIP III  This course consists of paid OJT, internship, or practicum performed in a business, industry, trade, or technical career setting within the student's occupational area. The contact hours experienced through on-the-job training will be verified by an employer or union official and will be placed on the student's	1800

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record. There are specific competencies from work experience	
required.	
TOTAL	192

#### Heavy Highway PROGRAM – YEAR 4

NEW COURSE NUMBER	COURSE TITLE AND DESCRIPTION	CONTACT HOURS
HH 401 Concrete IV	Participants will be introduced to concrete stair formwork. The participant will learn about the safety, terminology, math, print reading, and hands on techniques needed to be proficient on the job site. The intent of this class is to give the participant a basic introduction to this facet of Heavy Highway Carpentry, and what level of understanding will be expected of the participant by the employer.	40
HH 402 Bridge IV	Participants will be introduced to the Bidwell roller paver. The participant will learn about the safety, terminology, math, print reading, and hands on techniques needed to be proficient on the job site. The intent of this class is to give the participant a basic introduction to this facet of Heavy Highway Carpentry, and what level of understanding will be expected of the participant by the employer.	40
HH 403 Regional Project (Creech)	This module will cover the volunteer project Creche teardown. The participant will learn about the safety, terminology, math, print reading, and hands on techniques needed to be proficient on the job site. The intent of this class is to give the participant a basic introduction to this facet of Heavy Highway Carpentry, and what level of understanding will be expected of the participant by the employer.	40
HH 404 Concrete V	Participants will be introduced to Concrete shoring. The participant will learn about the safety, terminology, math, print reading, and hands on techniques needed to be proficient on the job site. The intent of this class is to give the participant a basic introduction to this facet of Heavy Highway Carpentry, and what level of understanding will be expected of the participant by the employer.	40
HH 405 Total Station	This module will introduce the participant to the Robotic total station. The participant will learn about the safety, terminology, math, print reading, and hands on techniques needed to be proficient on the job site. The intent of this class is to give the participant a basic introduction to this facet of Heavy Highway Carpentry, and what level of understanding will be expected of the participant by the employer.	40
CONT290	CONSTRUCTION INTERNSHIP III	1800

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required.

TOTAL 192

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