

# APPLIED INDUSTRIAL TECHNOLOGY (PILE DRIVING) (ATPD)

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## **ATPD-1310 Technical Measurements, Hand & Power Tool Use in Pile Driving** **2 Credits**

Introduction of safe use of pile driving tools. Topics include measurements, tool groups and tool applications.

*Lecture: 2 hours*

*Prerequisite(s): ATCT-1301 Introduction to Carpentry, and departmental approval: admission to Carpenter apprentice program.*

## **ATPD-1330 Print Reading for Pile Driving** **2 Credits**

Introduction to blue print reading as it pertains to the Pile Driver. In depth discussion on line types, scale, views, and revision information. Use of optical tooling for layout also included.

*Lecture: 2 hours*

*Prerequisite(s): ATCT-1301 Introduction to Carpentry, and departmental approval: admission to Carpenter's apprentice program.*

## **ATPD-1370 Pile Driving on Land and Water** **2 Credits**

Introduction to basic pile types and applications. Topics include recognition and use of different types of hammers, pile families designs, structural characteristics, pile driving leads, required equipment and accessories, and pile driving on land and water.

*Lecture: 2 hours*

*Prerequisite(s): ATCT-1301 Introduction to Carpentry, and departmental approval: admission to Carpenter's apprentice program.*

## **ATPD-2020 Pile Driving Technologies** **2 Credits**

Advanced study of set up and breakdown of various cranes and equipment types. Includes identification of crane types, hardware & hitch usage, signals, and equipment capacities.

*Lecture: 2 hours*

*Prerequisite(s): ATCT-1301 Introduction to Carpentry, and departmental approval: admission to Carpenter's apprentice program.*

## **ATPD-2220 False Work and Heavy Timber** **2 Credits**

Efficient uses, advantages, disadvantages, and special considerations related to shoring methods. Examples of types of shoring equipment shown. Matching most efficient shoring system to application is also included.

*Lecture: 2 hours*

*Prerequisite(s): ATCT-1301 Introduction to Carpentry, and departmental approval: admission to Carpenter's Apprentice program.*

## **ATPD-2370 Advanced Pile Driving on Land** **2 Credits**

In-depth study of pile driving. Includes caissons and drilled shafts, tie back walls, cofferdams and cells, shoring and lagging, and fundamentals of geo-technical engineering and soil.

*Lecture: 2 hours*

*Prerequisite(s): ATCT-1301 Introduction to Carpentry, and departmental approval: admission to Carpenter's Apprentice program.*

## **ATPD-2380 Advanced Pile Driving on Water** **2 Credits**

In depth study of pile driving on water. Topics include sheet pile and caissons, auger cast pile, cofferdams, stone setting, and extraction.

*Lecture: 2 hours*

*Prerequisite(s): ATCT-1301 Introduction to Carpentry, and departmental approval: admission to Carpenter's Apprentice program.*

## **ATPD-2700 Millwright-Pile Driver Weld IV** **2 Credits**

Reinforcement of necessary skills required for large multi-pass welds. Preparation for A.W.S. D1.5 vertical up unlimited thickness certification test. Includes in-depth review of blueprint reading for welders.

*Lecture: 2 hours*

*Prerequisite(s): ATMW-2520 Millwright Pile Driver Weld III, and departmental approval: admission to Carpenter's Apprentice program.*

## **ATPD-2710 Millwright-Pile Driver Weld V** **2 Credits**

Advanced welding practices as applied to pile driving. GMAW topics include innershield welding, safe set up and use of wire fed welding machines.

*Lecture: 2 hours*

*Prerequisite(s): ATPD-2700 Millwright-Pile Driver Weld IV, and departmental approval: admission to Carpenter's apprentice program.*