# **HEAVY EQUIPMENT OPERATION (HEO)**

## HEO 125 (3 credit hours) **Special Problems I**

Reinforces material presented in HEO 150, 200, and 250. Discusses job orientation, blueprint reading, and equipment operation. Pre-requisite Or Lab: 3.0 credits (90 contact hours).

Co-requisite: DIT 103. Attributes: Technical Components: LAB: Laboratory

## HEO 130 (5 credit hours)

## **Power Shovel Backhoe Operator**

Identifies and describes the common uses, types, components, instruments, controls, and attachments of backhoes. Presents safety guidelines, prestart inspection procedures, and preventive maintenance requirements. Describes basic startup and operation, and covers common work activities associated with backhoes. Laboratory: 5 credits (150 contact hours).

Pre- or co-requisite: DIT 103. Attributes: Technical Components: LAB: Laboratory

## HEO 131 (5 credit hours)

## **Bulldozer Operator**

Identifies and describes the common uses, types, and components of bulldozers. Presents safety guidelines, prestart inspection procedures, and preventive maintenance requirements. Describes basic startup and operation, and covers common work activities associated with dozers. Laboratory: 5 credits (150 contact hours).

Pre- or co-requisite: DIT 103. Attributes: Technical

Components: LAB: Laboratory

## HEO 132 (5 credit hours)

## **Utility Tractor Loader Operator**

Covers operation of general utility tractors in the construction industry. Describes duties and responsibilities of the operator, safety rules for operation, the attachment of implements, and basic preventive maintenance practices. Laboratory: 5 credits (150 contact hours). Pre- or co-requisite: DIT 103.

Attributes: Technical

Components: LAB: Laboratory

## HEO 133 (5 credit hours)

## **Motor Grader Loader Operator**

Identifies and describes the common uses and types of motor graders. Presents safety guidelines, prestart inspection procedures, and preventive maintenance requirements. Describes basic startup and operation, and covers common work activities associated with motor graders. Laboratory: 5 credits (150 contact hours).

Pre- or co-requisite: DIT 103. Attributes: Technical Components: LAB: Laboratory

## HEO 134 (5 credit hours)

## Hydraulic Excavator Operator

Identifies and describes the common types, uses, and components of excavators. Presents safety guidelines, prestart inspection procedures, and preventive maintenance requirements. Describes basic startup and operation, and covers common work activities associated with excavators. Laboratory: 5 credits (150 contact hours).

Pre- or co-requisite: DIT 103. Attributes: Technical

Components: LAB: Laboratory

## HEO 141 (3 credit hours)

## Heavy Equipment Operating I

Instructs in the operation of heavy equipment such as bulldozers, backhoes, front-end loaders, graders, and scrapers. Explains techniques of operation such as digging, ditching, sloping, stripping, grading, backfilling, clearing fields, and foundation excavating. Lecture: 3 credits (45 contact hours).

Pre- or co-requisite: DIT 103. Attributes: Technical

Components: LEC: Lecture

## HEO 211 (3 credit hours) Heavy Equipment Operating II

Reinforces material first presented in HEO 141. Provides intermediate instruction for students in the operation of heavy equipment such as bulldozers, backhoes, front-end loaders, graders, and scrapers. Practices techniques in digging, ditching, sloping, stripping, grading, backfilling, clearing trees and rubble, and foundation excavating. Demonstrates the proper care and maintenance of equipment. Laboratory: 3 credits (90 contact hours).

Pre-requisite: HEO 141. Attributes: Technical Components: LAB: Laboratory

## HEO 215 (1-4 credit hours) **Heavy Equipment Operations**

Provides students nearing graduation with valuable and expanded experience in Heavy Equipment Operation not allowable by the program's limited resources. Focuses on job awareness in addition to construction requirements. Permits the student to gain experience on industry's latest and largest equipment. Prerequisite: HEO 100 and Consent of Instructor (Students must be enrolled in the HEO program and be at least a second semester student or demonstrate prior experience and skills necessary for safe equipment operation.) Laboratory: 1-4 credits (45-180 contact hours).

Attributes: Course not offered in two years Components: LAB: Laboratory

## HEO 225 (3 credit hours)

## **Special Problems II**

Reinforces material presented in HEO 150, 200, and 250. Instructs all facets of project control. Laboratory: 3 credits (90 contact hours). Pre- or co-requisite: DIT 103.

Attributes: Technical

Components: LAB: Laboratory

## HEO 231 (3 credit hours)

## Heavy Equipment Operating III

Reinforces material presenting in HEO 211. Provides advanced instruction in the operation of heavy equipment such as bulldozers, backhoes, front-end loaders, graders, and scrapers. Refines techniques in digging, ditching, sloping, stripping, grading, backfilling, clearing trees and rubble, and foundation excavating. Demonstrates in the proper care and maintenance of equipment. Lecture: 3 credits (45 contact hours). **Pre-requisite:** HEO 211. **Attributes:** Technical **Components:** LEC: Lecture