REQUEST AND RECOMMENDATION

ONE-YEAR OPTION
900+ Clock Hour Programs – Heavy Equipment Maintenance Technology

Background:

To provide another option for adult students to apply prior learning toward a degree, Ohio legislators established what has come to be known as the One-Year Option through Section 363.120 House Bill 59 of the 130th General Assembly. The Chancellor of the Ohio Department of Higher Education, in consultation with the Superintendent of Public Instruction and the Governor’s Office of Workforce Transformation, was tasked to establish a One-Year Option credit articulation system in which graduates of Ohio’s adult career-technical institutions who complete a 900-hour program of study AND obtain an industry-recognized credential approved by the Chancellor will be able to receive 30 technical semester credit hours toward a technical degree upon enrollment in a public institution of higher education. The Chancellor was also to recommend a process to award proportional semester credit hours for adult career-technical institution students who complete a program of study between 600 and 899 hours AND obtain an industry-recognized credential approved by the Chancellor. The Chancellor convened a broad group of stakeholders to develop a system of articulation for the One-Year Option that was presented in a report to the legislature called, “Getting to 30: Establishing a One-Year Option Credit Articulation System for Ohio.”

In order to implement the system of articulation developed with the stakeholders as well as address accreditation requirements for degree granting institutions, the Chancellor convened Credit Affirmation Teams (CATs) to conduct a peer review of programs and certifications for affirmation for a block of 30 semester hours of technical credit. The CATs were comprised of faculty and administrators from Ohio Technical Centers (OTCs) and an equal number from public degree granting colleges and universities in Ohio. The CATs were organized by four discipline clusters: Health and Allied Health, Building and Industrial Technology, Business and Information Technology, and Services. They were charged with reviewing the certifications and, if necessary, program content, to affirm that students completing the selected program at an Ohio Technical Center and earned approved certifications had demonstrated competencies equivalent to 30 semester hours of technical credit. This technical credit would then be granted, as a block, upon enrollment in a degree granting institution. Additional subject matter experts were consulted when core team members did not have sufficient content knowledge of the program being reviewed.
Recommendation

As detailed in the attached template, the Building and Industrial Technology Credit Affirmation Team recommends that students will be eligible for a block of 30 semester hours of technical credit towards an Associate of Technical Studies in Building and Industrial Technology when:

- the student has successfully completed a 900+ clock hour program in Heavy Equipment Maintenance Technology at an Ohio Technical Center.

And currently holds ALL of the following credentials:

- NCCER Core
- NCCER Heavy Equipment Operations Level 1
- NCCER Heavy Equipment Operations Level 2
- NCCER Heavy Equipment Operations Level 3
- OSHA 10 – General Industry
- CDL - Class A

Please note all certifications must be current and valid. Student must have completed the Ohio Technical Center program within 5 years.
End of Comment Period: August 18, 2016 at 12:45 pm
No comments received, recommend approval

<table>
<thead>
<tr>
<th>RECOMMENDATION</th>
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<tbody>
<tr>
<td>The Vice Chancellor of Academic Affairs has verified that this pathway has met the standards and requirements of the Ohio Board of Regents.</td>
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<table>
<thead>
<tr>
<th>Stephanie Davidson, Vice Chancellor of Academic Affairs</th>
<th>Date</th>
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<tbody>
<tr>
<td></td>
<td>8/19/16</td>
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<table>
<thead>
<tr>
<th>APPROVAL</th>
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<tr>
<td>John Corey, Chancellor</td>
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<th>Date</th>
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**One-Year Option**

**900 Clock Hours: Certification Affirmation**

The Program Affirmation is designed to provide a common matrix for a peer review process acceptable to the Higher Learning Commission to soundly affirm 30 semester hours of technical credit for Ohio Technical Center graduates who are eligible for the One-Year Option. The template should be completed for every program/subject and signed by the co-chairs of each of the four-cluster program areas for every Industry-recognized credential and program reviewed.

*Please note: All Ohio Technical Centers must be accredited by one of the following: Council on Occupational Education (COE) and/or Accrediting Commission of Career Schools and Colleges (ACCSC).*

### Program Name: Heavy Equipment Maintenance Technology/Technician

### CIP Code: 47.0302

### Cluster

- **Business & Information Technologies**
- **Health/Allied Health**
- **Industrial Trades**
- **Service Industries & Agriculture**

### CIP CODE DEFINITION

A program that prepares individuals to apply technical knowledge and skills in the field maintenance and repair of heavy equipment, and in the general maintenance and overhaul of such equipment. Includes instruction in inspection, maintenance, and repair of tracks, wheels, brakes, operating controls, pneumatic and hydraulic systems, electrical circuitry, engines and in techniques of welding and brazing.

### STEP ONE: CREDENTIAL REVIEW: PATHWAY

<table>
<thead>
<tr>
<th>Details/Explanation</th>
<th>Comments</th>
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<tbody>
<tr>
<td><strong>Primary Industry Credential (if there are competing certifications complete page multiple times)</strong></td>
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</table>
**Name:** The National Center for Construction Education and Research (NCCER) Certifications  
**Type:**  
- License  
- Registry  
- Certification  

- NCCER Core  
- NCCER Heavy Equipment Operations Level 1  
- NCCER Heavy Equipment Operations Level 2  
- NCCER Heavy Equipment Operations Level 3

**Program requirements by credentialing body:**  
The program must be a NCCER Accredited Training Sponsor (ATS) and a NCCER Accredited Assessment Center. “Entities that have been approved by NCCER as having the resources to effectively conduct a quality training program that utilizes NCCER curriculum are designated as an ATS. Entities that have been approved by NCCER as having the resources to effectively conduct a quality assessment program that utilizes the National Craft Assessment and Certification Program (NCACP)

**About the Exams:**

NCCER offers a complete series of entry- and journey-level written assessments as part of its National Craft Assessment and Certification Program (NCACP). These assessments evaluate the knowledge of an individual in a specific craft area and provide a prescription for upgrade training when needed. All assessments are based upon the NCCER.
**One-Year Option**

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Assessments and performance verifications are designated as an NCCER Accredited Assessment Center. NCCER’s accreditation process assures that students and craft professionals receive quality training based on uniform standards and criteria. Training Sponsors and Assessment Centers are subject to audit on a three year cycle.”

For more information, please see: [http://www.nccer.org/assessments-performance-verifications?mID=616](http://www.nccer.org/assessments-performance-verifications?mID=616)

| Instructional hours | NCCER Core required instructional hours: 72.5  
| NCCER HEO Level 1 required instructional hours: 92.5  
| NCCER HEO Level 2 required instructional hours: 167.5  
| NCCER HEO Level 3 required instructional hours: 215  

All competencies must be covered. Remaining 352.5 hours may vary per program based on local advisory business/industry committees.

| Competencies demonstrated by credential attainment. | NCCER Core Competencies:  
| • Module 00101-09: Basic Safety  
| • Module 00102-09: Introduction to Construction Math  
| • Module 00103-09: Introduction to Hand Tools  
| • Module 00104-09: Introduction to Power Tools  
| • Module 00105-09: Introduction to Construction Drawings  
| • Module 00106-09: Basic Rigging (Elective)  
| • Module 00107-09: Basic Communication Skills  

Curriculum and have been developed in conjunction with Subject Matter Experts from the industry and Prov™, NCCER’s test development partner. Module assessments consist of knowledge verification via the successful completion of a written assessment. In addition to the knowledge verification, some modules also require successful completion of a practical performance in the laboratory setting.

**Renewal:** NCCER does not have a renewal option.

**Exam Integrity:** NCCER, through their testing partner Prov™, administers training module exams through a secure web-based platform, the Testing Management System. Module tests are created, launched, scored and electronically stored. Instructors and proctors are certified to NCCER requirements.

547.5 clock hours of instruction to complete NCCER Curriculum requirements.

Each equipment specific module typically contains operation, controls, maintenance, and safety guidelines.

NCCER Core  
### One-Year Option

**900 Clock Hours: Certification Affirmation**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Module 22103-12: Identification of Heavy Equipment</td>
<td></td>
<td></td>
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<tr>
<td>Module 22104-12: Basic Operational Techniques</td>
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<tr>
<td>Module 22105-12: Utility Tractors</td>
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<tr>
<td>Module 22201-12 Introduction to Earthmoving</td>
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<tr>
<td>Module 22106-12: Grades</td>
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</table>

**NCCER HEO Level 2 Competencies**

- Module 22206-13: Rough Terrain Forklifts
- Module 22202-13: On-Road Dump Trucks
- Module 22207-13: Excavation Math
- Module 22209-13: Interpreting Civil Drawings
- Module 22210-13: Site Work
- Module 22308-13: Soils
- Module 22212-13: Skid Steers
- Module 22205-13: Loaders
- Module 22204-13: Scrapers

**NCCER HEO Level 3 Competencies**

- Module 22203-14: Compaction Equipment
- Module 22310-14: Off Road Dump Trucks
- Module 22303-14: Backhoes
- Module 22302-14: Dozers
- Module 22304-14: Excavators
- Module 22305-14: Motor Graders
- Module 22307-14: Finishing and Grading

**Rationale:** The Trades and Industry Credit Affirmation Team (CAT) utilized the following process to complete the assessment regarding the number of semester hours that would be awarded at the college level as block credit based on the industry credentials plus 900-clock hours earned at an Ohio Technical Center (OTC).

- Research the competencies tested by the industry credential(s). The Trades and Industry CAT reviewed information about the industry credential(s) to determine the competencies signaled by earning the credential(s).
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- Complete a nationwide internet search to review how other accredited colleges and universities are applying credit to NCCER Core, HEO 1, HEO 2, and HEO 3. Pima Community College awards 30.25 college credits towards an Associated of Applied Science degree in Business and Industry Technology to students of NCCER's accredited sponsors who successfully complete NCCER Core, HEO 1, HEO 2 and HEO 3 standardized craft training modules and the Pima-approved challenge exam for those modules.
- Review the value of local program advisory committee recommendations to meet the local industry needs. The Team concurred that there was value in having lab/practical, internships and/or externships as part of the program to meet local industry/business needs.
- Review OSHA 10-Hour Hazard Recognition Training for Construction. OSHA 10 includes content essential to general-related work such as fall protection, personal protective equipment, fire prevention and safety, OSHA inspection procedures and more.
- Reviewed the Ohio Department of Transportation: CDL – Class A Licensure. Training includes driving safely, transporting cargo safely, air brakes, combination vehicles, pre-trip inspection, and vehicle control/driving skills. Training allows a person to operate any combination of vehicles with a combined gross vehicle weight rating of 26,001 pounds or more, if the gross vehicle weight rating of the vehicle or vehicles being towed is in excess of 10,000 pounds.

The Trades and Industry CAT confirms:
- The certifications exams are valid, reliable, and peer-reviewed on a regular basis to ensure the content accurately measures intended competencies.
- The competencies measured by the NCCER Core, HEO 1, HEO 2 and HEO 3, OSHA 10 certificate and CDL – Class A Licensure are developed by industry and reflect industry standards.

The Trades and Industry CAT also considered competencies signaled by lab and practical learning experiences. As part of the program offered by OTCs, student will participate in lab/practical experience as recommended by the local program advisory committee to meet local business and industry needs. The lab/practical experiences will reinforce the instructional competencies through hands-on learning.

Upon successful completion of the 900+ hour program in the field of plumbing at an Ohio Technical Center and attainment of the following certifications:
- NCCER Core
- NCCER Heavy Equipment Operations Level 1
- NCCER Heavy Equipment Operations Level 2
- NCCER Heavy Equipment Operations Level 3
### One-Year Option
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- OSHA 10 – General Industry
- CDL - Class A

A student shall be awarded 30 technical semester hours towards completion of an Association of Technical Studies at a public degree granting college or university.

### ONLY IF NECESSARY TO AFFIRM 30 CREDITS----STEP TWO: PROGRAM-RELATED COMPETENCIES OBTAINED OUTSIDE OF PRIMARY CREDENTIAL

<table>
<thead>
<tr>
<th>Additional related complementary credential(s) or badge(s) (e.g. OSHA 10, CPR)</th>
<th>Details/Explanation</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>OS Ana 10-Hour: General Industry Certification</td>
<td>OSHA 10-Hour: General Industry Certification CDL – CLASS A</td>
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</tbody>
</table>

**Competencies demonstrated by additional credential attainment.**

**OSHA 10- Hour: General Industry:**

**Mandatory - 7 hours of training**
- Introduction to OSHA
- Walking and Working Surfaces, including fall protection
- Electrical
- Personal Protective Equipment
- Hazard Communication

**Elective - 2 hours of Training**
Must present at least two hours of training on the following topics. At least two topics must be presented. The minimum length of any topic is one-half hour.
- Hazardous Materials
- Materials Handling
- Machine Guarding
- Introduction to Industrial Hygiene
- Bloodborne Pathogens
- Ergonomics

Must be taught by a Certified OSHA Outreach Trainer.
https://www.osha.gov/dte/outreach/program_requirements.pdf

OSHA safety training compliance standards are for the jobsite and individual receive a wallet card and certificate. OSHA 10 can only be taught by an OSHA Outreach Trainer in good standing, who has been approved by OSHA standards and has completed OSHA Train-the-Trainer course work.
### One-Year Option

#### 900 Clock Hours: Certification Affirmation

- Safety and Health Program
- Fall Protection

**Optional - 1 hour of Training**

Teach other general industry hazards or policies and/or expand on the mandatory or elective topics. The minimum length of any topic is one-half hour.

**CDL – CLASS A**

- Driving Safely
- Transporting Cargo Safely
- Air Brakes
- Combination Vehicles
- Pre-Trip Vehicle Inspection
- Basic Vehicle Control Skills Test
- On-Road Driving

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**Ohio Revised Code, Section 4506.12 (B)**

The classes of CDL and the commercial motor vehicles that they authorize the operation of are as follows:

**Class A:** Any combination of vehicles with a combined gross vehicle weight rating of 26,001 pounds or more, if the gross vehicle weight rating of the vehicle or vehicles being towed is in excess of 10,000 pounds

[http://bmv.ohio.gov/cdl.stm](http://bmv.ohio.gov/cdl.stm)

Ohio Commercial Driver License Manual


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| Description of additional program elements beyond primary credential. |  |
| Program related competencies/learning outcomes outside of credential(s). Include how competencies are demonstrated. |  |
| Other Parameters of Competency. |  |

**Related Programs as of Fall 2015:**

<table>
<thead>
<tr>
<th><strong>Ohio Technical Center</strong></th>
<th><strong>Program Name</strong></th>
<th><strong>Clock Hours</strong></th>
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<tbody>
<tr>
<td>Buckeye Career Center</td>
<td>Heavy Equipment/CDL A Class</td>
<td>900</td>
</tr>
<tr>
<td>Miami Valley Career Tech JVSD</td>
<td>Heavy Equipment</td>
<td>900</td>
</tr>
</tbody>
</table>
## Committee Members and Subject Matter Experts:

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Institution</th>
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<tbody>
<tr>
<td>Barbara Wagner</td>
<td>Co-Chair</td>
<td>Upper Valley Career Center</td>
</tr>
<tr>
<td>Kelly Zelesnik</td>
<td>Co-Chair</td>
<td>Lorain County Community College</td>
</tr>
<tr>
<td>Jon Buttelwerth</td>
<td>Member</td>
<td>Cincinnati State Technical and Community College</td>
</tr>
<tr>
<td>Larraine Kapka</td>
<td>Member</td>
<td>Sinclair Community College</td>
</tr>
<tr>
<td>Mike Sizemore</td>
<td>Member</td>
<td>Miami Valley Career Technical Center</td>
</tr>
<tr>
<td>Tim Conley</td>
<td>Member</td>
<td>Pickaway Ross Career and Technology Center</td>
</tr>
<tr>
<td>Jeffrey Jones</td>
<td>Member</td>
<td>Ashland County West Holmes Career Center</td>
</tr>
</tbody>
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### OTHER COMMENTS.

Material covered is adequate to allow 30 hours of credit to be granted.

### AFFIRMED NUMBER OF TECHNICAL BLOCK CREDITS

30 semester hours

### LENGTH OF TIME CREDENTIAL CAN BE USED FOR ONE-YEAR OPTION:

Must have completed a 900+ hour Carpentry program at an Ohio Technical Center and hold all five of the following certifications:

- NCCER Core
- NCCER Heavy Equipment Operations Level 1
- NCCER Heavy Equipment Operations Level 2
- NCCER Heavy Equipment Operations Level 3
- OSHA 10 – General Industry
- CDL - Class A

#### Co-chair signatures:

Dr. Barbara G. A. Wagner, Adult Division Director
Upper Valley Career Center – Ohio Technical Center

Kelly A. Zelesnik, Dean of Engineering Technologies
Lorain County Community College

Date: 8/1/2016