



## REQUEST AND RECOMMENDATION

### ONE-YEAR OPTION 900+ Clock Hour Programs – Electrician

#### 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 130<sup>th</sup> 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 Electrician program at an Ohio Technical Center.

**And** currently holds **ALL** of the following credentials:

- NCCER Core
- NCCER Electrical Level 1
- NCCER Electrical Level 2
- NCCER Electrical Level 3
- OSHA 10- General Industry

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

**RECOMMENDATION**

The Vice Chancellor of Academic Affairs has verified that this pathway has met the standards and requirements of the Ohio Board of Regents.

*SDavidson*

*8/19/16*

Stephanie Davidson, Vice Chancellor of Academic Affairs

Date

**APPROVAL**

*John Carey*

*9/8/16*

John Carey, Chancellor

Date

*APR*

**One-Year Option**

**Certification Affirmation: 900 Clock Hour Program**

*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 \(ACCSC\)](#).*

<b>Program Name:</b> Electrician	<b>Cluster</b>	<input type="checkbox"/> Business & Information Technologies <input type="checkbox"/> Health/Allied Health <input checked="" type="checkbox"/> Industrial Trades <input type="checkbox"/> Service Industries & Agriculture
<b>CIP Code:</b> 46.0302		
<b>CIP Code Program Definition:</b>		
A program that prepares individuals to apply technical knowledge and skills to install, operate, maintain, and repair electric apparatus and systems such as residential, commercial, and industrial electric-power wiring; and DC and AC motors, controls, and electrical distribution panels. Includes instruction in the principles of electronics and electrical systems, wiring, power transmission, safety, industrial and household appliances, job estimation, electrical testing and inspection, and applicable codes and standards.		
<b>STEP ONE: CREDENTIAL REVIEW</b>		
	<b>Details/Explanation</b>	<b>Comments</b>
Primary Industry Credential (if there are competing certifications complete page multiple times)	<b>Name:</b> The National Center for Construction Education and Research (NCCER) Certifications <b>Type:</b> <input type="checkbox"/> License <input type="checkbox"/> Registry <input checked="" type="checkbox"/> Certification	<ul style="list-style-type: none"> <li>• NCCER Core</li> <li>• NCCER Electrical Level 1</li> <li>• NCCER Electrical Level 2</li> <li>• NCCER Electrical Level 3</li> </ul>
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)	<b>About the Exams:</b> 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

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	<p>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.”</p> <p>For more information, please see: <a href="http://www.nccer.org/assessments-performance-verifications?mID=616">http://www.nccer.org/assessments-performance-verifications?mID=616</a></p>	<p>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.</p> <p><b>Renewal:</b> NCCER does not have a renewal option.</p> <p><b>Exam Integrity:</b> 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.</p>
Instructional Hours	<p>NCCER Core required instructional hours: 72.5 NCCER Electrical 1 required instructional hours: 185 NCCER Electrical 2 required instruction hours: 145 NCCER Electrical 3 required instructional hours: 155 OSHA 10 Required instructional hours: 10</p> <p>All competencies must be covered. Remaining 342.5 hours may vary per program based on local advisory business/industry committees.</p>	<p>557.5 clock hours of instruction to complete NCCER Curriculum requirements.</p>
Competencies demonstrated by credential attainment.	<p>NCCER Core Competencies:</p> <ul style="list-style-type: none"><li>• Module 00101-09: Basic Safety</li><li>• Module 00102-09: Introduction to Construction Math</li><li>• Module 00103-09: Introduction to Hand Tools</li><li>• Module 00104-09: Introduction to Power Tools</li><li>• Module 00105-09: Introduction to Construction Drawings</li><li>• Module 00106-09: Basic Rigging (Elective)</li></ul>	<p>Each equipment specific module typically contains operation, controls, maintenance, and safety guidelines.</p> <p>NCCER Core <a href="http://www.nccer.org/uploads/fileLibrary/Core_2009_courseplanning816201351231PM63.pdf">http://www.nccer.org/uploads/fileLibrary/Core_2009_courseplanning816201351231PM63.pdf</a></p>

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### **Certification Affirmation: 900 Clock Hour Program**

- Module 00107-09: Basic Communication Skills
- Module 00108-09: Basic Employability Skills
- Module 00109-09: Introduction to Materials Handling

#### NCCER Electrical Level 1 Competencies:

- Module 26101-08: Orientation to the Electrical Trades
- Module 26102-08: Electrical Safety
- Module 26103-08: Introduction to Electrical Circuits
- Module 26104-08: Electrical Theory
- Module 26105-08: Introduction to the National Electrical Code
- Module 26106-08: Device Boxes
- Module 26107-08: Hand Bending
- Module 26108-08: Raceways & Fittings
- Module 26109-08: Conductors and Cables
- Module 26110-08: Basic Electrical Construction
- Module 26111-08: Residential Electrical Services
- Module 26112-08: Electrical Test Equipment

#### NCCER Electrical Level 2 Competencies

- Module 26201-08: Alternating Current
- Module 26202-08: Motors: Theory and Application
- Module 26203-08: Electrical Lighting
- Module 26204-08: Conduit Bending
- Module 26205-08: Pull and Junction Boxes
- Module 26206-08: Conductor Installations
- Module 26207-08: Cable Tray
- Module 26208-08: Conductor Terminations and Splices
- Module 26209-08: Grounding and Bonding
- Module 26210-08: Circuit Breakers and Fuses
- Module 26211-08: Control Systems and Fundamental Concepts

#### NCCER Electrical Level 3 Competencies

- Module 26301-08: Load Calculations – Branch and Feeder Circuits

#### NCCER Electrical Level 1

[http://www.nccer.org/uploads/fileLibrary/Electrical\\_L1\\_CEP.pdf](http://www.nccer.org/uploads/fileLibrary/Electrical_L1_CEP.pdf)

#### NCCER Electrical Level 2

[http://www.nccer.org/uploads/fileLibrary/Electrical\\_L2\\_CEP.pdf](http://www.nccer.org/uploads/fileLibrary/Electrical_L2_CEP.pdf)

#### NCCER Electrical Level 3

[http://www.nccer.org/uploads/fileLibrary/Electrical\\_L3\\_CEP.pdf](http://www.nccer.org/uploads/fileLibrary/Electrical_L3_CEP.pdf)

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- Module 26302-08: Conductor Selection and Calculations
- Module 26303-08: Practical Applications of Lighting
- Module 26304-08: Hazardous Locations
- Module 26305-08: Overcurrent Protection
- Module 26306-08: Distribution Equipment
- Module 26307-08: Transformers
- Module 26308-08: Commercial Electrical Services
- Module 26309-08: Motor Calculations
- Module 26310-08: Voice, Data & Video
- Module 26311-08: Motor Controls

**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).
- Complete a nationwide internet search to review how other accredited colleges and universities are applying credit to NCCER Core, Electrical 1, Electrical 2, and Electrical 3. Pima Community College awards 22.5 college credits towards an Associate of Applied Science degree in Business and Industry Technology to students of NCCER's accredited sponsors who successfully complete NCCER Core, Electrical 1, Electrical 2, and Electrical 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.

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, Electrical 1, Electrical 2, and Electrical 3, and OSHA 10 certificate 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

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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. The hours of instruction are hours of direct classroom instruction. The remaining additional hours related are supervised and serve as practicum.

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 Electrical Level 1
- NCCER Electrical Level 2
- NCCER Electrical Level 3
- OSHA 10- General Industry

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**

	<b>Details/Explanation</b>	<b>Comments</b>
Additional related complementary credential(s) or badge(s) (e.g. OSHA 10, CPR).	OSHA 10-Hour: Construction	
Competencies demonstrated by additional credential attainment.	<p>OSHA 10- Hour: Construction</p> <p><b>Mandatory - 7 hours of training</b></p> <ul style="list-style-type: none"> <li>• Introduction to OSHA</li> <li>• General Safety and Health Provisions</li> <li>• Health Hazards: Hazard Communication</li> <li>• Health Hazards: Hazardous Materials</li> <li>• Cranes and Rigging</li> <li>• Focus Four: Electrical Safety</li> <li>• Struck-By and Caught in Between</li> <li>• Fall Protection</li> <li>• Personal Protective Equipment</li> </ul>	<p>Must be taught by a Certified OSHA Outreach Trainer.</p> <p><a href="https://www.osha.gov/dte/outreach/program_requirements.pdf">https://www.osha.gov/dte/outreach/program_requirements.pdf</a></p> <p>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.</p>

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	<ul style="list-style-type: none"> <li>• Hand and Power Tools</li> <li>• Scaffolds</li> <li>• Stairways and Ladders</li> </ul>																									
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 border="0"> <tr> <td><b>Ohio Technical Center</b></td> <td><b>Program Name</b></td> <td><b>Clock Hours</b></td> </tr> <tr> <td>Collins Career Center</td> <td>Electricity</td> <td>900</td> </tr> <tr> <td>EHOVE Career Center</td> <td>Electrical Technician</td> <td>936</td> </tr> <tr> <td>Miami Valley CTC</td> <td>Electric</td> <td>900</td> </tr> <tr> <td>Pickaway-Ross Career &amp; Technology Center</td> <td>Electrical</td> <td>900</td> </tr> <tr> <td>Scioto County Career Technical Center</td> <td>Industrial Constructional Electricity</td> <td>1200</td> </tr> </table>	<b>Ohio Technical Center</b>	<b>Program Name</b>	<b>Clock Hours</b>	Collins Career Center	Electricity	900	EHOVE Career Center	Electrical Technician	936	Miami Valley CTC	Electric	900	Pickaway-Ross Career & Technology Center	Electrical	900	Scioto County Career Technical Center	Industrial Constructional Electricity	1200							
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<b>OTHER COMMENTS.</b>	Material covered is adequate to allow 30 hours of credit to be granted.																									
<b>AFFIRMED NUMBER</b>	30 semester hours	<b>LENGTH OF TIME CREDENTIAL CAN BE</b>																								

**One-Year Option**

**Certification Affirmation: 900 Clock Hour Program**

**OF TECHNICAL  
BLOCK CREDITS**

**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 Electrical Level 1
- NCCER Electrical Level 2
- NCCER Electrical Level 3
- OSHA 10- General Industry

All certifications must be current and valid. Must have completed the Ohio Technical Center program within 5 years.

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