



# Memorandum

**To:** Secondary Career-Technical Directors and Superintendents

**From:** Dr. Paula Compton, Associate Vice Chancellor, Articulation and Transfer

**Date:** June 17, 2016

**Subject:** Updated Career-Technical Assurance Guide (CTAG): Information Technology

I am pleased to announce an update to the Career-Technical Assurance Guide (CTAG) that facilitates transfer from Ohio’s public secondary career-technical institutions to Ohio’s Public Colleges and Universities in the area of Information Technology. This memo provides an overview of the Information Technology: Information Support Services (ISS)/Networking CTAG. It also addresses the need for secondary action and continued participation.

### **Information Technology: ISS/Networking**

The updated Information Technology: ISS/Networking CTAG was revised through the Secondary Career-Technical Alignment Initiative (SCTAI), a collaborative effort between the Ohio Department of Higher Education ODHE (formerly, Ohio Board of Regents) and the Ohio Department of Education (ODE), which supports the legislative mandates in ORC 3333.162. Faculty experts from two-year and four-year institutions across the state worked on the initiative to ensure similar academic content by examining and providing input into ODE Content Standards and then aligning those standards with post-secondary learning outcomes. A survey was sent to all of Ohio’s Public Colleges and Universities member institutions for review, comment, and endorsement. Findings favored the continuation of a statewide agreement in Information Technology (ISS/Networking) and the addition of two new CTANs (Indicated by a single asterisk\*) and one newly combined CTAN for statewide articulation (indicated by a double asterisk \*\*). The attached Assurance Guide details the criteria that will provide secondary career-technical students the opportunity to earn credit for the approved Career-Technical Articulation Numbers (CTANs).

**Table A: Information Support Services and Networking CTAG Crosswalk to ODE Courses**

Career-Technical Articulation Numbers (CTANs)	Ohio Department of Education (ODE) EMIS Numbers and Course Names
CTIT002 Networking/CompTIA Network+	145035 Networking <b>and</b> 145045 Network Management
CTIT005 Introduction to Desktop Operating Systems	145030 Computer Software
CTIT006 Introduction to User Support	145050 Network Security
CTIT011 Microsoft Windows Desktop Operating Systems	145030 Computer Software <b>and</b> 145040 Network Operating Systems
CTIT013 Microsoft Server Administration	145040 Network Operating Systems
** CTIT014 PC Operating System, Hardware Operation and Maintenance/A+ (formerly 003 & 004)	145025 Computer Hardware <b>and</b> 145030 Computer Software
* CTIT015 CompTIA Security+	145050 Network Security
* CTIT016 Linux	145040 Network Operating Systems

\* indicates a new CTAN

\*\* indicates a new CTAN that is the result of combining two prior CTANs

**Cisco Courses:** In addition to the aforementioned CTANs above, the following Cisco™ courses are also included in the Information Support Services CTAG. Institutions are advised to follow the Cisco™ curriculum standards for course completion requirements and should submit proof of Cisco™ curriculum to the Course Equivalency Management System.

- **CTIT007 Cisco I: CCNA 1 - Introduction to Networks**
- **CTIT008 Cisco II: CCNA 2 - Routing and Switching Essentials**
- **CTIT009 Cisco III: CCNA 3 - Scaling Networks**
- **CTIT010 Cisco IV: CCNA 4 - Connecting Networks**

### **Instructions for institutions with or without prior approval for CTAN(s).**

**Programs with Prior Approval:** Institutions that have been previously approved for Information Technology ISS/Networking CTANs, will be individually notified about CTAN expirations and required action. Students graduating at the end of the 2016 spring term, from programs that were previously approved, will be able to earn credit for the CTANs for which the institution has had prior approval. Please note, the grandfathering period is also for CTANs CTIT003 and CTIT004. CTANs **CTIT003 and CTIT004 were combined to create a new CTAN CTIT014: PC Operating Systems, Hardware Operation and Maintenance/A+.**

The secondary institution must have already been approved for both CTANs, CTIT003 **and** CTIT004, in order for graduating seniors to receive credit for the newly revised CTAN, CTIT014. At most post-secondary institutions, CTIT014: PC Operating Systems, Hardware Operations and Maintenance/A+ or a similar course, is being taught in a single course.

As a result, students who did not receive instruction on the learning outcomes for CTIT003 **and** CTIT004 may be at a disadvantage. Therefore, we are encouraging post-secondary institutions to consider the award of credit on a case by case basis. Please see the prior approvals list which can be located here <https://goo.gl/CKre42>. This list and accompanying instructions for validating credit will be shared with college and university registrar's offices in a separate communication. All institutions that currently have program approvals should understand **this grace period will expire December 2016**. In order to maintain approval and be listed in CEMS, institutions must submit updated courses no later than December 31, 2016.

**Programs without Prior Approval:** Institutions without prior approval for specified CTAN(s) should enter submissions for all CTANs contained in the Information Technology/ISS Networking CTAG, if comparable ODE courses (outlined in Table A), are offered. Please see the attached CTAG document for course descriptions and learning outcomes. The current review cycle began April 4, 2016 and runs through May 2016.

**Additional Updates and Expirations for CTANs CTIT001-Basic and CTIT012-Microsoft.Net Framework Development Foundation:** Effective December 31, 2016 **CTIT001-Basic** will be expired. There will no longer be a statewide guarantee for this course. Graduating seniors may find a limited number of receiving post-secondary institutions that continue to offer this course. Many institutions have omitted the course that includes these learning outcomes from their course catalog so the guarantee of credit for this specific course alignment does not exist. Please be sure to look at the "effective and expiration" terms in the [reporting system](#) when advising students on this credit award.

Additionally, **CTIT012: Microsoft.Net Framework Development Foundation** has been moved to the Programming CTAG and is no longer a part of the Information Technology/ISS Networking CTAG. Programs with prior approval (as indicated on the attached listing of approved courses highlighted in pink) will be moved to the programming CTAG. Institutions should review other possible courses in the Programming CTAG for possible submission.

**Process for Course Submissions Through CEMS (Affirmation Form):** For the CTANs contained in Table A above, the End of Course (WebXam™) qualifying scores are notated with the corresponding CTAN and ODE course(s). FOR CTAN **CTIT002 - Networking/CompTIA Network+** [ODE courses Networking (EMIS Code 145035), qualifying WebXam™ score of 67 or higher **and** Network Management (EMIS Code 145045), qualifying WebXam™ score of 56 or higher. CTAN **CTIT005 - Introduction to Desktop Operating Systems** [ODE course, Computer Software (EMIS CODE-145030), qualifying WebXam™ score of 73 or higher].

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CTAN **CTIT006 - Introduction to User Support** [ODE course Network Security (EMIS Code 145050), qualifying WebXam™ score of 63 or higher is required. For CTAN **CTIT011- Microsoft Windows Desktop Operating Systems** [ODE courses Computer Software (EMIS Code 145030), qualifying WebXam™ score of 73 or higher is required **and** Network Operating Systems (EMIS Code 145040) students must earn a qualifying WebXam™ score of 64 or higher.

For CTAN **CTIT013 - Microsoft Server Administration** [ODE course Network Operating Systems (EMIS Code 145040) students must earn a qualifying WebXam™ score of 64 or higher. **CTIT014 - PC Operating System, Hardware Operation and Maintenance/A+** [ODE courses, Computer Software (EMIS CODE- 145030, qualifying WebXam™ score of 73 or higher and Computer Hardware (EMIS Code 145025, qualifying WebXam score of 72 or higher in needed. **CTIT015 - CompTIA Security+** [ODE course, Network Security (EMIS CODE- 145050, requires a qualifying score of 63 or higher for the WebXam™. Lastly, CTAN **CTIT016 - Linux** [ODE course, Network Operating Systems (EMIS CODE- 145040, requires students to earn a qualifying score of 64 or higher for the WebXam™.

Programs may submit the Certificate of Affirmation Form for course approval. Students must meet the qualifying scores for each corresponding ODE End-of-Course examination as indicated above. The Certificate of Affirmation Form can be accessed at <https://www.ohiohighered.org/transfer/ct2/affirmation>. The Affirmation Form must be signed by a district administrator. This Affirmation Form requires faculty to confirm that the appropriate ODE courses, aligned with CTANs listed in Table A, are being taught at the secondary institution.

**PLEASE NOTE:** Institutions may only submit course(s) for either CTAN **CTIT006 Introduction to User Support** or **CTIT015 - CompTIA Security +**, but not both. Institutions must also choose to submit course(s) for **CTIT013 - Microsoft Server Administration** or **CTIT016 - Linux**, but not both.

**Process for Students to Earn Credit:** The following steps must occur for secondary students to have the opportunity to access college credit for these courses:

1. Secondary institutions must submit their course information to the Course Equivalency Management System (CEMS) for each CTAN taught at the institution and according to the submission requirements for each CTAN. Course alignments are shown in Table A.
2. Students must accomplish both a & b outlined below:
  - a) pass the ODE aligned course(s) with a "C" or better
  - b) pass the corresponding End-of-Course examination with a qualifying score [for those CTANs requiring the examination]
3. Students must then work with their secondary institution(s) to ensure that their official high school transcript, official WebXam™ scores (where applicable), and the (CT)<sup>2</sup> Verification Form (available on the ODHE website), <https://www.ohiohighered.org/node/5076>, are submitted to the post-secondary institution(s) where the student chooses to enroll. The post-secondary institution must also be a part of the statewide agreement or offer the career-technical discipline in order to facilitate transfer.

If your institution offers any of the CTANs listed in Table A, please submit the course(s) and the Affirmation Form (as applicable), through the Course Equivalency Management System ([CEMS](#)) for review. Providing a submission no later than September 26, 2016 will allow the course and required documentation to be reviewed in the next review cycle. All institutions will need to make a submission for the aforementioned CTANs if they have comparable courses.

I would like to thank all those involved in this process for their dedication and support. The names of the faculty participants are listed on pages 14-15 of the Information Technology CTAG. If you have any questions in reference to content of the ISS/Networking CTAG, please contact Jamilah Tucker, Director of Career-Technical Transfer Initiatives, [jjones@highered.ohio.gov](mailto:jjones@highered.ohio.gov), 614-466-0543 or Monique Menefee-Proffitt, Associate Director of Career-Technical Transfer Initiatives, [mmenefeeprofitt@highered.ohio.gov](mailto:mmenefeeprofitt@highered.ohio.gov), 614-387-1022. Bob Hass, Regional Manager, can also be reached at [haasr@mtc.edu](mailto:haasr@mtc.edu), 740-725-4078 and for technical assistance with a submission, please contact Ryan Cupp, Administrator Career-Technical Transfer Initiatives, [rcupp@highered.ohio.gov](mailto:rcupp@highered.ohio.gov), 614-752-9474.

Enclosures (1)

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