

Perkins Technical Skills Assessments (TSAs) and MSIP-5 Industry Recognized Credentials (IRCs)

This document is intended to provide further guidance to schools as they identify Technical Skills Attainment (TSA) assessments and Industry Recognized Credentials (IRC) that best meet the needs of their students. TSAs are required by Perkins IV for both secondary and post-secondary programs. IRCs, in this context, are intended for use with secondary students and for school districts interested in addressing MSIP-5, College and Career Readiness Standard 3, Indicator 4. In some instances an IRC is also identified, and could be reported as, a TSA.

Concentrator: A student who has earned three or more sequential credits in any state-approved CTE program grades 9-12. Sequential credits can consist of courses that crossover into different program areas. (Note: It is a local decision to determine the sequence; therefore, it is a local decision to determine when a student becomes a concentrator and completes a program).

Industry Recognized Credential (IRC): A portable, recognized credential that validates an individual has successfully demonstrated skill competencies in a core set of content and performance standards in a specific set of work-related tasks, single occupational area, or a cluster of related occupational areas. A student does not have to be a concentrator to take an IRC.

Technical Skill Attainment (TSA): A technical skill assessment measures skill proficiency of Career and Technical Education (CTE) students who are concentrators (a student who has earned three or more sequential credits in any state-approved CTE program grades 9-12) and has completed an approved CTE program. A TSA is not intended to be taken after every course.

- Please refer to the MSIP-5 current [Comprehensive Guide to the Missouri School Improvement Program \(2017\)](#) for clarification on Performance Standard 3, Indicator 4 (College and Career Readiness).
- [MOSIS Code Sets](#)

Beginning in FY2015 (the 2014-2015 school year), several assessments that had temporarily been on the MSIP IRC approved list were removed. Those assessments will remain on the approved Perkins TSA list.

IRCs are identified a year prior to the reporting year in order to give schools ample time to prepare for the assessments. Please note clarification statements as some IRCs require both a knowledge and performance assessment. TSAs and IRCs that are listed under a career cluster may be appropriate for other career clusters. However, schools should contact their CTE Program Director to be sure the assessment is appropriate for the approved program.

School districts will have an opportunity to request that additional IRCs be added, removed, or clarification statements be revised on the MSIP-5 list during the spring IRC Application window.

New for school year 2018-2018: The TSA/IRC list has been aligned to the [American Council on Education \(ACE\)](#) post-secondary credit review. School Districts must contact ACE and the appropriate institution to determine costs and specific procedures to follow for the transcription of post-secondary credit. Schools may also request a curriculum review from ACE to determine if a particular course is recommended for credit.

Note: This guidance document will be updated periodically with web links or other information as needed.

Agriculture, Food and Natural Resources

Assessment	ACE College Credit Recommendation	Perkins TSA	Clarification/Reporting Criteria TSA	MSIP IRC	Clarification/Reporting Criteria IRC (Effective FY2016)	IRC Code
MO Agriculture Skill & Knowledge Assessment MOASK Host Site Agreement		✓		✓		AGSK
Agriculture Biotechnology - NOCTI		✓				
Agricultural Mechanics - NOCTI		✓				
Animal Systems - NOCTI		✓				
Conservation -- NOCTI		✓				
Floricultural NOCTI		✓				
Floriculture-Greenhouse (NOCTI)		✓				
Forest Products & Processing – NOCTI		✓				
Horticulture - Landscaping -- NOCTI		✓				
Natural Resource Systems -- NOCTI		✓				
Production Agriculture – NOCTI		✓				
Small Animal Science & Technology -- NOCTI		✓				
<i>Veterinary Assistant – Animal Care Technologies</i>		✓		✓		AGVET

Architecture and Construction

Assessment	ACE College Credit Recommendation	Perkins TSA	Clarification/Reporting Criteria TSA	MSIP5 IRC	Clarification/Reporting Criteria IRC (Effective FY2016)	IRC Code
Air Conditioning Certification – HVAC Excellence		✓		✓		HVAC
American Design Drafting Association- (ADDA)		✓		✓		ADDA
Architectural Drafting – SkillsUSA		✓				
Autodesk Certified User <ul style="list-style-type: none"> • AutoCad • 3dsMax • Maya • Fusion 360 • Revit Architecture • Inventor 		✓		✓	Student must pass three of the six assessments listed to have earned the IRC. (This assessment will be available for MSIP reporting beginning in June, 2020)	
Autodesk Professional Certification (Certified Professional) assessments: <ul style="list-style-type: none"> • AutoCAD Certified Professional • Revit Architecture Certified Professional • Revit Structure Certified Professional • Revit MEP Certified Professional: Mechanical • Revit MEP Certified Professional: Electrical • Inventor Certified Professional; • 3ds Max Certified Professional; 		✓		✓	Student must pass one Autodesk Professional Certification--Certified Professional assessment in the appropriate instructional area to have earned the IRC.	ACP

• Maya Certified Professional						
AutoCAD – Brainbench		✓				
Building Construction Occupations – NOCTI		✓				
Building Trades Maintenance – NOCTI		✓				
Cabinetmaking –NOCTI		✓				
Cabinetmaking – WoodLINKS USA		✓				
CAD - NOCTI		✓				
Carpentry Career Connections To schedule the exam, schools should contact: R. J. Catizon, Instructor rcatizon@cjtf.org 314-457-8300 Ext. 5663 or 314-337-8399 (cell) St Louis Carpenters Joint Apprenticeship Program 8300 Valcour Avenue St Louis MO 63123		✓	Student must pass Career Connections Level 1 and/or Level 2 Exam.	✓	Student must pass Career Connections Level 2 or above Exam.	PACT
Carpentry—NCCER Please contact Cathy Tyler (386-518-6949) or at Ktyler@nccer.org with NCCER to set up your program and to purchase the NCCER exam.		✓		✓	Carpentry Level One	NCCER-CARP
Carpentry Basic --NOCTI		✓				
Carpentry – NOCTI		✓				

Carpentry – SkillsUSA		✓				
Carpentry – PACT		✓		✓	This assessment will remain available for reporting through the June, 2019 cycle. The IRC Review Committee will review this assessment in September, 2019 to determine if it remains an approved IRC for reporting after June, 2019.	PACT
Construction – Ramsay Corporation		✓				
Construction Masonry – Block laying option – NOCTI		✓				
Construction Masonry - Bricklaying option – NOCTI		✓				
Construction Masonry - Stone option – NOCTI		✓				
Technical Drafting – NOCTI		✓				
Drafting – SkillsUSA		✓				
Electrical Construction Wiring (Residential Wiring)- SkillsUSA		✓				
Housing – AAFCS		✓		✓		AAFCS-HOUS
HVAC—NC3 Trane Residential OR		✓	Student earns TSA if NC3 Trane residential OR commercial/building automation systems is passed.	✓	Student earns the IRC when both the NC3 Trane residential AND the commercial/building automation systems assessment is passed.	

HVAC—NC3 Trane Commercial HVAC/Building Automation Systems					(This assessment will be available for MSIP reporting beginning in June, 2020)	
HVAC—NCCER Please contact Cathy Tyler (386-518-6949) or at Ktyler@nccer.org with NCCER to set up your program and to purchase the NCCER exam.		✓		✓		NCCER- HVAC
HVAC – NOCTI		✓				
HVAC/R – NOCTI		✓				
HVAC/R – SkillsUSA		✓				
Industrial Maintenance Mechanics– NOCTI		✓				
Masonry—NCCER Please contact Cathy Tyler (386-518-6949) or at Ktyler@nccer.org with NCCER to set up your program and to purchase the NCCER exam.		✓		✓		NCCER-MAS
Masonry – SkillsUSA		✓				
Construction—NCCER Please contact Cathy Tyler (386-518-6949) or at Ktyler@nccer.org with NCCER		✓		✓		NCCER-CNST

to set up your program and to purchase the NCCER exam.						
Plumbing – NOCTI		✓				
Plumbing – SkillsUSA		✓				

Arts, A/V Technology and Communications

Assessment	ACE College Credit Recommendation	Perkins TSA	Clarification/Reporting Criteria TSA	MSIP5 IRC	Clarification/Reporting Criteria IRC (Effective FY2016)	IRC Code
3-D Visualization and Animation – SkillsUSA		✓				
Adobe Certified Associate (ACA) by Certiport, Inc. <ul style="list-style-type: none"> • Adobe Photoshop • Adobe Flash Professional • Adobe Illustrator • Adobe Dreamweaver • Adobe Premier • Adobe InDesign 	✓	✓	Students must pass two ACA assessments to earn the TSA.	✓	Students must earn three Adobe Certified Associate (ACA) certifications to earn the ACA Specialist credential—and to have passed the IRC. Schools should refer to the Certiport website for specific information on the ACAs associated with a specific ACA Specialist credential.	Adobe CAC
Audio-Radio Production – SkillsUSA		✓				
Audio-Visual Communications – NOCTI		✓				
Broadcasting and Journalism – NOCTI		✓				
Final Cut Certified Pro		✓		✓		FCCP
Graphic Communications – Printed		✓	The name/branding of this assessment changed in	✓	The name/branding of this assessment changed in FY16	GCOM-SUSA

			FY16 to SkillsUSA/PrintED. The content of the assessment did not change.		to Graphic Communications (PrintED co-brand) The content of the assessment did not change. This assessment continues to be an IRC.	
Graphic Production Technology – NOCTI		✓				
Housing – AAFCS		✓		✓		AAFCS-HOUS
Performing Arts – NOCTI		✓				
Photography – SkillsUSA		✓				
PrintEd Graphic Design		✓				
PrintED/SkillsUSA Advertising Design		✓		✓		GCOM-SUSA
Screen Printing Technology – SkillsUSA		✓				
Television Production – NOCTI		✓				
Television (Video) Production – SkillsUSA		✓				
Visual Arts – NOCTI		✓				
Visual Communication and Multimedia Design – NOCTI		✓				

Business, Management and Administration

Assessment	ACE College Credit Recommendation	Perkins TSA	Clarification/Reporting Criteria TSA	MSIP5 IRC	Clarification/Reporting Criteria IRC (Effective FY2016)	IRC Code
Certification for Legal Professionals– ALS		✓		✓		ALS
Entrepreneurship – MBA Research		✓				

Fundamental Business Concepts – ASK Institute		✓		✓		ASK-FIN
Missouri Business Management and Entrepreneurship – MBA Research		✓				
Missouri Business Management – MBA Research		✓				

Education and Training Services

Assessment	ACE College Credit Recommendation	Perkins TSA	Clarification/Reporting Criteria TSA	MSIP5 IRC	Clarification/Reporting Criteria IRC (Effective FY2016)	IRC Code
Early Childhood Education – AAFCS		✓		✓		AAFCS-ECE
Early Childhood Care and Education – NOCTI		✓	NOCTI 3016, 4016 or 4017			
Education and Training – NOCTI		✓				
Youth Development Credential		✓		✓		YDEVA
Education Fundamentals – AAFCS		✓		✓	This is the required IRC for the Career Pathways to the Teaching Profession program.	AAFCS-EF

Finance

Assessment	ACE College Credit Recommendation	Perkins TSA	Clarification/Reporting Criteria TSA	MSIP5 IRC	Clarification/Reporting Criteria IRC (Effective FY2016)	IRC Code
Accounting Basic – NOCTI		✓				
Accounting Advanced – NOCTI – Postsecondary Only		✓				

ASK		✓		✓		ASK-FINn
Finance - End of Program – MBA Research		✓				

Health Science











Assessment	ACE College Credit Recommendation	Perkins TSA	Clarification/Reporting Criteria TSA	MSIP5 IRC	Clarification/Reporting Criteria IRC (Effective FY2016)	IRC Code
1st Responder – National Registry of Emergency Medical Technicians (NREMT)		✓	Appropriate for Perkins only			
Associate Degree Nursing (ADN) –NCLEX-RN-- MO Division of Professional Registration		✓	Appropriate for Perkins reporting			
Certified Dental Assistant, Infection Control Exam (ICE) – Dental Assisting National Board, Inc.		✓		✓		CDAICE
Certified Dental Assistant, Radiation Health & Safety Exam (RHS) – Dental Assisting National Board, Inc.		✓		✓		CDARHS
Certified Nurse Aide (CNA) – Missouri Department of Health and Senior Services		✓		✓		CNA
Dental Assistant - MO - EFDA		✓				
Dental Assisting – NOCTI		✓				
Dental Assisting – SkillsUSA		✓				

Dental Hygienists – MO Division of Professional Registration		✓				
Dental Lab Technology – NOCTI		✓				
EMT-Basic – Brainbench		✓				
EMT-Basic – NREMT		✓		✓		NREMT
Health Assisting – NOCTI		✓				
Home Health Aide – NOCTI		✓				
Lab/Pharmacy Tech (Secondary Only)– PassAssured		✓				
Massage Therapists – MO Division of Professional Registration		✓				
Medical Assisting – NOCTI		✓				
Medical Assisting – SkillsUSA		✓				
Missouri Assessment of Basic Dental Assisting Skills		✓		✓		MABDAS
National Health Care Foundation Skill Standard Assessment – National Consortium on Health Science and Technology Ed.		✓				
Nursing Assisting – NOCTI		✓				
Nurse Assisting – SkillsUSA		✓				
Nutrition – AAFCS		✓		✓		AAFCS-N

Practical Nursing NCLEX-PN -- MO Division of Professional Registration		✓				
Practical Nursing – NOCTI		✓				
Practical Nursing – SkillsUSA		✓				
Pharmacy technicians – Institute for the Certification of Pharmacy Technicians		✓				
Pharmacy technicians Pharmacy Technician Certification Board		✓				
Project Lead The Way: Biomedical		✓	Student must pass two of three PLTW biomedical or two of three engineering or two of three computer science EOCs with a stanine score of four or above on each assessment.			
Radiology Technologists – American Registry of Radiologic Technologists		✓				
Respiratory Therapist – National Board for Respiratory Care		✓				
Surgical Technologists – National Board of Surgical Technology and Surgical Assisting		✓				

Hospitality and Tourism

Assessment	ACE College Credit Recommendation	Perkins TSA	Clarification/Reporting Criteria TSA	MSIP5 IRC	Clarification/Reporting Criteria IRC (Effective FY2016)	IRC Code
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ACF Certification Assessment – NOCTI			Comply with the requirements for an accredited American Culinary Federation program. For the Perkins TSA, student must be a concentrator that completes an approved CTE program.		To earn the Certified Junior Culinarian (CJC) certification a student must complete the requirements for an accredited American Culinary Federation program, pass the NOCTI written and practical exam with a score of 70% or higher. A student does not need to be a concentrator when used as an IRC.	ACF
Hospitality and Tourism Management (HTMP) I & II American Hotel and Lodging Educational Institute (AHLEI)			For TSA: to be a concentrator a student could take two supporting CTE courses in a personal plan of study or pathway and then HTMP I or one supporting CTE course, HTMP I and HTMP II But not complete the mentored work requirement. In this case, the HTMP I or HTMP II assessments could be used as the TSA.		To earn the AHLEI – internationally recognized - Certified Hospitality and Tourism Management Professional (CHTMP) a student must pass the American Hotel and Lodging Educational Institute's HTMP Year 1 final exam and HTMP Year 2 final exam and complete 100 hours of paid or unpaid work experience in one of four qualifying positions. You must have all three components to receive the IRC, and the assessments must be given at the end of each course.	AHLEI
Commercial Baking – SkillsUSA						
Commercial Foods – NOCTI						
Culinary Arts – AAFCS						AAFCS-CA
Culinary Arts – SkillsUSA						

Culinary Arts I: Prep Cook – NOCTI		✓				
Culinary Arts II: Cook – NOCTI		✓				
Hospitality Mgmt: Food & Beverage Option – NOCTI		✓				
Hospitality Mgmt: Lodging Option – NOCTI		✓				
ProStart I & II National Restaurant Association Education Foundation		✓	For TSA: to be a concentrator a student could take two supporting CTE courses in a personal plan of study or pathway and then ProStart I or one supporting CTE course, ProStart I and ProStart II BUT not complete the mentored work requirement. In this case, the ProStart I or ProStart II assessments could be used as the TSA.	✓	To earn the ProStart National Certification of Achievement (COA), a student must pass the National Restaurant Association's ProStart Year 1 and ProStart Year 2 final exams, and complete 400 hours of mentored work experience.	PROSTART
Restaurant, Food and Beverage Services – NOCTI		✓				
Retail Commercial Baking – NOCTI		✓				
Travel and Tourism – NOCTI		✓				

Human Services

Assessment	ACE College Credit Recommendation	Perkins TSA	Clarification/ Reporting Criteria TSA	MSIP5 IRC	Clarification/Reporting Criteria IRC (Effective FY2016)	IRC Code
Apparel & Textile Production & Merchandising – NOCTI		✓				

Broad Field Family and Consumer Sciences – AAFCS		✓				
Child Development Associate (CDA)		✓		✓		CDEVA
Cosmetology – MO Division of Professional Registration		✓		✓		CSCBE
Cosmetology – SkillsUSA		✓				
Cosmetology – NOCTI		✓				
Early Childhood Care and Education– NOCTI		✓				
Early Childhood Education – AAFCS		✓		✓		AAFCS-ECE
Family and Community Services – AAFCS		✓		✓		AAFCS-FAM
Fashion, Textiles, and Apparel – AAFCS		✓		✓		AAFCS-FASH
Food Science – AAFCS		✓		✓		AAFCS-FS
Interior Decorating and Design – NOCTI		✓				
Interior Design Fundamentals – AAFCS		✓		✓		AAFCS-ID
Nail Care - State Cosmetology Board		✓		✓	Nail Technician—Missouri State Board of Cosmetology and Barber Examiners—Manicure.	NTSCBE
Nail Care – NOCTI		✓				
Nail Care – SkillsUSA		✓				

Nutrition – AAFCS						AAFCS-N
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Information Technology

Assessment	ACE College Credit Recommendation	Perkins TSA	Clarification/ Reporting Criteria TSA	MSIP5 IRC	Clarification/Reporting Criteria IRC (Effective FY2016)	IRC Code
Adobe Certified Associate (ACA) (Certiport, Inc.)						Adobe CAC
C + + Certified Associate Programmer	✓					CAP
Certified Internet Web Professional – CIW					Student must earn at least one certificate by passing requisite assessments for that certificate: Web Development Professional Certificate, Web Foundation Associate Certificate, Web Design Professional Certificate, or Web Security Associate Certificate	CIW
Cisco Certified Entry level Network Technician (CCENT)						CCENT
Cisco Certified Network Association (CCNA) Final Exam – Cisco Networking Academy						
Cisco Certified Networking Associate Security (CCNA Security)						CCNA-S

Cisco CCNA Discovery Final Exam – Cisco Networking Academy		✓				
Cisco CCNA Exploration Final Exam – Cisco Networking Academy		✓				
Cisco CCNP Final Exam – Cisco Networking Academy		✓				
Cisco I.T. Essentials Final Exam – Cisco Networking Academy		✓				
CompTIA A+ Certification		✓		✓		COMPTIA
CompTIA Network+		✓		✓		COMPNTIA
CompTIA Security		✓		✓		COMPSECTIA
CompTIA Strata (this assessment includes CompTIA Strata Fundamentals through August 2015 and CompTIA Strata IT Fundamentals after August 2015)		✓		✓	Assessment name change in 2015. Student must pass CompTIA Strata IT Fundamentals after August 2015.	COMPSTRTIA
Computer Maintenance and Networking– TestOut		✓				
Computer Maintenance Technology – SkillsUSA		✓				
Computer Networking – NOCTI		✓				
Computer Programming – NOCTI		✓				
Computer Repair Technology – NOCTI		✓				
Final Cut Certified Pro		✓		✓		FCCP

Internetworking – SkillsUSA		✓				
Microsoft MTA	✓	✓		✓	Student must earn the IT Infrastructure, Database or Developer MTA certification	MTA
Microsoft Office Specialist	✓	✓		✓	Students must pass Word, Excel, PowerPoint and Access.	MOS
*Missouri IT Exam, Sequence 1 (50% Computer Applications; 50% Business Technology) – NOCTI		✓				
*Missouri IT Exam, Sequence 2 (50% Computer Applications; 25% Desktop Publishing; 25% Multimedia)– NOCTI		✓				
*Missouri IT Exam, Sequence 3 (50% Computer Applications; 25% Desktop Publishing; 25% Web Design)– NOCTI		✓				
*Missouri IT Exam, Sequence 4 (25% Computer Applications; 25% Desktop Publishing; 25% Multimedia; 25% Web Design) – NOCTI		✓				
*Missouri IT Exam, Sequence 5 (50% Computer Applications; 25% Web Design; 25% Multimedia) – NOCTI		✓				

Oracle Database SQL Fundamentals I		✓		✓		ODSFI
Network Pro		✓		✓	Students must pass the TestOut Network Pro assessment to have earned an IRC. The school and teacher must have signed proctoring agreements on file.	TONETWPRO
OPAC		✓				
Security Pro		✓		✓	Students must pass the TestOut Security Pro assessment to have earned an IRC. The school and teacher must have signed proctoring agreements on file.	TOSECPRO
TestOut PC Pro		✓		✓	Students must pass the TestOut PC Pro assessment to have earned an IRC. The school and teacher must have signed proctoring agreements on file.	TOPCPRO
Web Design (NOCTI)		✓				

Missouri IT Exams

- State Developed [Assessment Blueprints & Pricing Information](#)
- *If administering the NOCTI pre and post-test, pretest must be administered prior to November 30th. Please reference NOCTI's [pretest policy](#)

Law, Public Safety, Corrections and Security

Assessment	ACE College Credit Recommendation	Perkins TSA	Clarification/Reporting Criteria TSA	MSIP5 IRC	Clarification/Reporting Criteria IRC	IRC Code
Basic Firefighter – Mo Division of Fire Safety		✓				
Crime Scene Investigation & Criminal Justice – SkillsUSA		✓				
Criminal Justice – NOCTI		✓				
Criminal Justice – Precision Exams		✓				
Emergency and Fire Management Services – NOCTI (Added as a TSA 2.4.2015)		✓				
EMT-Basic – Brainbench		✓				
EMT-Basic – NREMT		✓		✓		NREMT
Firefighter I & II – MO Division of Fire Safety (Fire and Rescue Training Institute, University of Missouri)	✓	✓		✓	Students must pass both Firefighter I and II to have earned the IRC	FIREII
Hazardous Materials Awareness and Operations (when bundled with Basic Firefighter) – Missouri Emergency Response Commission or Missouri Division of Fire Safety (Fire and Rescue	✓	✓				

Training Institute, University of Missouri)						
Law Enforcement/Criminal Justice-- MOLESK		✓	The written assessment is approved as a TSA for Perkins.	✓	A student must pass both the written assessment and the performance assessment to earn the IRC. Host testing sites must be approved and registered; all sites must adhere to all MOLESK testing protocols for assessments to be valid.	MOLESK
Peace Officer Standards and Training-- Department of Public Safety - Peace Officer Standards and Training POST		✓	This assessment is approved as a TSA for the post-secondary level only.			

Manufacturing

Assessment	ACE College Credit Recommendation	Perkins TSA	Clarification/Reporting Criteria TSA	MSIP5 IRC	Clarification/Reporting Criteria IRC (Effective FY2016)	IRC Code
Automated Manufacturing Technology – SkillsUSA		✓				
Cabinetmaking – SkillsUSA		✓				
Certified Computer Service Technician – ETA		✓		✓		ETA
Certified Production Technician (CPT)		✓		✓		CPT

Cisco Certified Network Association (CCNA) Final Exam – Cisco Networking Academy		✓				
Cisco CCNA Discovery Final Exam – Cisco Networking Academy		✓				
Cisco CCNP Final Exam – Cisco Networking Academy		✓				
Cisco I.T. Essentials Final Exam – Cisco Networking Academy		✓				
Cisco CCNA Exploration Final Exam – Cisco Networking Academy		✓				
Cisco Student Certification		✓		✓	Student must pass both Introduction to Networking and Routing & Switching Essentials at a 75% level on both the performance and written components of the test.	CSC
CNC Milling and Turning Technology – SkillsUSA		✓				
Computer Repair and Computer Networking – Cisco Networking Academy		✓				
Electronics Technicians Association (ETA)		✓		✓		ETA
International Society of Certified Electronics Technicians (ISCET) Online Certification	✓	✓		✓		ISCET
Electronics Applications & Technology – SkillsUSA		✓				
Electronics Technology – NOCTI		✓				

Industrial Electricity – NOCTI		✓				
IT Essentials I final exam – CISCO		✓				
Machine Tool Technology – NIMS		✓		✓		NIMS
Major Appliance Technology – SkillsUSA		✓				
Manufacturing Technician Level 1 (MT1) Certification from the Manufacturing Skills Institute		✓		✓		MT1
Manufacturing Technology – NOCTI		✓				
Mechatronics – SkillsUSA		✓				
Precision Machining – NOCTI		✓				
Robotics Technology – CERT		✓				
Robotics and Automation Technology – SkillsUSA		✓				
Telecommunications Cabling – SkillsUSA		✓				
American Welding Society– AWS		✓	The TSA does not require one weld evaluated and approved by an AWS-certified teacher or inspector who is not the student’s current teacher.	✓	Passing the NCCER Welding Exam or SkillsUSA Welding Exam or NOCTI Welding Exam or Precision Welding Exam or SENSE exam PLUS pass at least one weld evaluated and approved by an AWS-certified teacher or inspector who is not the student’s current teacher.	AWS
Welding—NCCER		✓	The TSA does not require one weld evaluated and	✓	Passing the NCCER Welding Exam PLUS passing at	AWS

Please contact Cathy Tyler (386-518-6949) or at Ktyler@nccer.org with NCCER to set up your program and to purchase the NCCER exam.			approved by an AWS-certified teacher or inspector who is not the student's current teacher.		least one weld evaluated and approved by an AWS-certified teacher or inspector who is not the student's current teacher.	
Welding – NOCTI			The TSA does not require one weld evaluated and approved by an AWS-certified teacher or inspector who is not the student's current teacher.		Passing the NOCTI Welding Exam exam PLUS passing at least one weld evaluated and approved by an AWS-certified teacher or inspector who is not the student's current teacher.	AWS
Welding-- SENSE			The TSA does not require one weld evaluated and approved by an AWS-certified teacher or inspector who is not the student's current teacher.		Passing the SENSE exam PLUS passing at least one weld evaluated and approved by an AWS-certified teacher or inspector who is not the student's current teacher.	AWS
Welding – SkillsUSA			The TSA does not require one weld evaluated and approved by an AWS-certified teacher or inspector who is not the student's current teacher.		Passing the SkillsUSA Welding Exam PLUS passing at least one weld evaluated and approved by an AWS-certified teacher or inspector who is not the student's current teacher.	AWS
Welding Technician Intermediate 596— Precision Exams			The TSA does not require one weld evaluated and approved by an AWS-certified teacher or inspector who is not the student's current teacher.		Passing the Precision Welding Exam PLUS passing at least one weld evaluated and approved by an AWS-certified teacher or inspector who is not the student's current teacher.	AWS

Marketing

Assessment	ACE College Credit Recommendation	Perkins TSA	Clarification/Reporting Criteria TSA	MSIP5 IRC	Clarification/Reporting Criteria IRC (Effective FY2016)	IRC Code
ASK		✓		✓		ASK-MKTG
Cooperative Education Employability Skills– NOCTI		✓				
Entrepreneurship – MBA Research		✓				
Marketing End of Program – MBA Research		✓				
Workplace Readiness – NOCTI (Approved for CCE programs only)		✓				

Science, Technology, Engineering and Mathematics

Assessment	ACE College Credit Recommendation	Perkins TSA	Clarification/Reporting Criteria TSA	MSIP5	Clarification/Reporting Criteria IRC (Effective FY2016)	IRC Code
Marine Service Technology – SkillsUSA		✓				
Pre-Engineering/Engineering Technology – NOCTI		✓				
Project Lead The Way: Engineering and Computer Science		✓	Student must pass two of three PLTW engineering or two of three biomedical or two of three computer science EOCs with a stanine score of four or above on each assessment.			
Volvo Penta		✓				
Mercury Marine		✓				

Transportation, Distribution and Logistics

Assessment	ACE College Credit Recommendation	Perkins TSA	Clarification/Reporting Criteria TSA	MSIP5 IRC	Clarification/Reporting Criteria IRC (Effective FY2016)	IRC Code
Auto Collision Repair Technology-ASE		✓	A student must pass either B2 or B3. NATEF and ASE work together with NATEF covering curricular areas and ASE the credentialing.	✓	A student must pass either B2 or B3. NATEF and ASE work together with NATEF covering curricular areas and ASE the credentialing.	ASE
Auto Technology – Today's Class		✓				
Automotive Refinishing – SkillsUSA		✓				
Automotive Service Technology – SkillsUSA		✓				
Automotive Technician Advanced – NOCTI		✓				
Automotive Technician Core – NOCTI		✓				
Automotive Technician Examination – ASE		✓	A student will complete the ASE assessment in Brakes, Steering and Suspension, Engine Performance, and Electrical. If the student's average score is higher than the average cut score in these four areas, the student will be marked as a pass	✓	Student must pass all four core assessments: brakes, steering and suspension, engine performance, and electrical OR the student must pass MLR plus one of the following: brakes, steering and suspension, engine performance OR electrical	ASE
Automotive Youth Education Systems Exit Examination – AYES		✓				
Aviation Maintenance Technology (Secondary) – SkillsUSA		✓				

Aviation Maintenance Technology (Post secondary) – SkillsUSA		✓				
Collision Repair/Refinishing Technology(combination) – NOCTI		✓				
Collision Repair – NOCTI		✓				
Collision Repair – ICAR		✓		✓	Student must pass either NST ProLevel 1 or REF ProLevel 1 to earn the IRC.	ICAR
Collision Repair Technology – SkillsUSA		✓				
Diesel Engine Technology – NOCTI		✓				
Medium/Heavy Truck (Diesel) - ASE		✓	A student will complete the ASE assessment in brakes, steering and suspension, engine performance, and electrical. When a student's average score is higher than the average cut score in these four areas, the student will be marked as a pass.	✓	Student must pass all four core assessments: brakes, steering and suspension, engine performance, and electrical	ASE
Diesel Engines & Electronic Systems – SkillsUSA		✓				
Heavy Equipment Maintenance and Repair – NOCTI		✓				
Motorcycle Service Technology – SkillsUSA		✓				
Power Equipment Technology – SkillsUSA		✓				
Small Engine Technology – NOCTI		✓				

MOSIS/IRC Code Sets

Name	Code	Definition	Effective Date
A*S*K* Certification-A*S*K Business Institute	ASK	A*S*K* Certification-A*S*K Business Institute	7/1/2012
Adobe Certified Specialist Certification	ADOBE-CAC	Adobe Certified Associate Certification	7/1/2012
American Culinary Federation–ACF	ACF	American Culinary Federation Retail Baking –ACF	7/1/2012
American Design Drafting Association (ADDA)	ADDA	American Design Drafting Association (ADDA)	7/1/2012
American Hotel and Lodging Association (AH&LA)	AHLA	American Hotel and Lodging Association (AH&LA)	7/1/2012
American Welding Society (AWS)	AWS	American Welding Society (AWS)	7/1/2012
ASK Certification - ASK Finance	ASK-FIN	ASK Certification - ASK Finance	7/1/2012
ASK Certification - ASK Marketing	ASK-MKTG	ASK Certification - ASK Marketing	7/1/2012
Autodesk Certified Professional	ACP	Autodesk Certified Professional	7/1/2015
Automotive Technician Exam (Student Certification)-ASE	ASE	Automotive Technician Exam (Student Certification)-ASE	7/1/2012
C + + Certified Associate Programmer	CAP	C + + Certified Associate Programmer	7/1/2016
Carpentry-PACT	PACT	Carpentry-PACT	7/1/2012
Certification for Legal Professionals-ALS	ALS	Certification for Legal Professionals-ALS	7/1/2012
Certified Dental Assistant, Infection Control Exam-Dental Assisting National Board, Inc.	CDAICE	Certified Dental Assistant, Infection Control Exam-Dental Assisting National Board, Inc.	7/1/2012

Certified Dental Assistant, Radiation Health & Safety Exam- Dental Assisting National Board, Inc.	CDARHS	Certified Dental Assistant, Radiation Health & Safety Exam- Dental Assisting National Board, Inc.	7/1/2012
Certified Internet Web Professional (CIW)	CIW	Certified Internet Web Professional (CIW)	7/1/2012
Certified Nurse Aide (CNA)	CNA	Certified Nurse Aide (CNA)	7/1/2012
Certified Production Technician (CPT)	CPT	Certified Production Technician (CPT)	7/1/2012
Child Development Associate	CDEVA	Child Development Associate	7/1/2012
Cisco Certified Entry Level Network Technician (CCENT)	CCENT	Cisco Certified Entry Level Network Technician (CCENT)	7/1/2012
Cisco Certified Network Associate Security (CCNA Security)	CCNA-S	Cisco Certified Network Associate Security (CCNA Security)	7/1/2012
Cisco Student Certification	CSC	Cisco Student Certification	7/1/2018
Collision Repair - ICAR	ICAR	Collision Repair - ICAR	7/1/2012
Comp TIA Network+ Certification	COMPNTIA	Comp TIA Network+ Certification	7/1/2012
CompTIA A+ Certification	COMPTIA	CompTIA A+ Certification	7/1/2012
CompTIA Security+	COMPSECTIA	CompTIA Security+	7/1/2012
CompTIA Strata	COMPSTRTIA	CompTIA Strata	7/1/2012
Cosmetology-State Cosmetology Board Exam	CSCBE	Cosmetology-State Cosmetology Board Exam	7/1/2012
Culinary Arts-AAFCS	AAFCS-CA	Culinary Arts-AAFCS	7/1/2012
Early Childhood Education-AAFCS	AAFCS-ECE	Early Childhood Education-AAFCS	7/1/2012
Education Fundamental-AAFCS	AAFCS-EF	Education Fundamental-AAFCS	7/1/2012
Electronics Technicians Association (ETA)	ETA	Electronics Technicians Association (ETA)	7/1/2012
Family and Community Services -AAFCS	AAFCS-FAM	Family and Community Services -AAFCS	7/1/2012
Fashion Textiles & Apparel-AAFCS	AAFCS-FASH	Fashion Textiles & Apparel-AAFCS	7/1/2012
Final Cut Certified Pro	FCCP	Final Cut Certified Pro	7/1/2015
Fire II – Missouri Division of Fire Safety	FIREII	Fire II – Missouri Division of Fire Safety	7/1/2012
Food Science-AAFCS	AAFCS-FS	Food Science-AAFCS	7/1/2012
Graphic Communication-SkillsUSA/PrintED	GCOM-SUSA	Graphic Communication-SkillsUSA	7/1/2012
Housing-AAFCS	AAFCS-HOUS	Housing-AAFCS	7/1/2012
HVAC Excellence	HVAC	HVAC Excellence	7/1/2012
Interior Design Fundamentals-AAFCS	AAFCS-ID	Interior Design Fundamentals-AAFCS	7/1/2012

International Society of Certified Electronics Technicians (ISCET)	ISCET	International Society of Certified Electronics Technicians (ISCET)	7/1/2012
Manufacturing Technician Level 1 (MT1) Certification from the Manufacturing Skills Institute	MT1	Manufacturing Technician Level 1 (MT1) Certification from the Manufacturing Skills Institute	7/1/2016
Masonry-NCCER	NCCER-MAS	NCCER-Masonry	7/1/2016
Microsoft MTA	MTA	Microsoft MTA	7/1/2012
Microsoft Office Specialist	MOS	Microsoft Office Specialist	7/1/2015
Missouri Assessment of Basic Dental Assisting Skills	MABDAS	Basic Dental Assisting	7/1/2018
Missouri Law Enforcement Skills and Knowledge	MOLESK	Missouri Law Enforcement Skills and Knowledge	7/1/2016
MO Agriculture Skill & Knowledge Assessment	AGSK	MO Agriculture Skill & Knowledge Assessment	7/1/2012
Nail Technician-State Cosmetology Board Exam	NTSCBE	Nail Technician-State Cosmetology Board Exam	7/1/2012
National Automotive Technicians Ed. (NATEF)	NATEF	National Automotive Technicians Ed. (NATEF)	7/1/2012
National Institute for Metalworking Skills	NIMS	National Institute for Metalworking Skills	7/1/2012
National Registry of Emergency Medical Technician	NREMT	National Registry of Emergency Medical Technician	7/1/2012
National Restaurant Association Education Foundation – ProStart	PROSTART	National Restaurant Association Education Foundation – ProStart	7/1/2012
NCCER-Carpentry	NCCER-CARP	NCCER-Carpentry	7/1/2012
NCCER-Construction	NCCER-CNST	NCCER-Construction	7/1/2012
NCCER-HVAC	NCCER-HVAC	NCCER-HVAC	7/1/2012
Nutrition - AAFCS	AAFCS-N	Nutrition - AAFCS	7/1/2012
Oracle Database SQL Fundamentals I	ODSFI	Oracle Database SQL Fundamentals I	7/1/2015
TestOut Network Pro	TONETWPRO	TestOut Network Pro	7/1/2016
TestOut PC Pro	TOPCPRO	TestOut PC Pro	7/1/2016
TestOut Security Pro	TOSECPRO	TestOut Security Pro	7/1/2016
Veterinary Assistant Animal Care Technologies-MVMA	AGVET	Veterinary Assistant Animal Care Technologies-MVMA	7/1/2012
Youth Development Credential	YDEVA	Youth Development Credential	7/1/2012
MO Agriculture Skill & Knowledge Assessment	AGSK	MO Agriculture Skill & Knowledge Assessment	7/1/2012
Veterinary Assistant Animal Care Technologies-MVMA	AGVET	Veterinary Assistant Animal Care Technologies-MVMA	7/1/2012
HVAC Excellence	HVAC	HVAC Excellence	7/1/2012
Carpentry-PACT	PACT	Carpentry-PACT	7/1/2012
American Design Drafting Association (ADDA)	ADDA	American Design Drafting Association (ADDA)	7/1/2012

Graphic Communication-SkillsUSA/PrintED	GCOM-SUSA	Graphic Communication-SkillsUSA	7/1/2012
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ASK Certification - ASK Marketing	ASK-MKTG	ASK Certification - ASK Marketing	7/1/2012
NCCER-Carpentry	NCCER-CARP	NCCER-Carpentry	7/1/2012

Updated 11.13.2018

NCCER-Construction	NCCER-CNST	NCCER-Construction	7/1/2012
NCCER-HVAC	NCCER-HVAC	NCCER-HVAC	7/1/2012