



MnAMP Credit for Prior Learning Guide 1.1

Updated – 3/7/2017

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A Member of the Minnesota State Colleges and Universities System, an Equal Opportunity Employer and Educator. This workforce solution was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration.

South Central College is the lead institution of the Minnesota Advanced Manufacturing Partnership.



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Contents

Section 1: Credit for Prior Learning (CPL) Overview	4
Definitions	4
Additional Terms:	4
Why implement CPL Now?.....	5
Minnesota State College and University CPL Policy and Procedures	6
MnAMP Strategy 1.2	7
Section 2: Military Crosswalks	8
Traditional vs. Accelerated Process.....	8
The Accelerated Process – Developing Manufacturing Crosswalks.....	8
Section 3: Awarding Credit for Prior Learning for Industry Credentials	8
Manufacturing Credit for Prior Learning Assessment Map	8
Awarding Credit for Prior Learning for Manufacturing Skill Standards Council-Certified Production Technician (MSSC-CPT)	9
Recommendations for Awarding Credit for Prior Learning for Other Industry Credentials	10
Section 4: Transcribing CPL Credit on Academic Transcripts	10
Notation of Military Credit	11
Notation of Credit for Industry Credentials	11
Appendix	
Appendix A. Minnesota State Credit for Prior Learning Policy to Institutional Policy Chart	12
Appendix B. Manufacturing Credit for Prior Learning Assessment Map	13
Appendix C. South Central College MSSC-CPT and CMAE Course Crosswalks	14
Appendix D. Awarding Credit for Prior Learning for Manufacturing Skill Standards Council- Certified Production Technician (MSSC-CPT).....	15

Section 1: Credit for Prior Learning (CPL) Overview

Definitions

The Minnesota State College and University Charting the Future Credit for Prior Learning task force has developed definitions for consistent use among Minnesota State colleges and universities.

*Update – the following terms are currently under review and updates are pending approval as of 3/7/2017. Please check Minnesota State website for updates to these definitions.

Credit for Prior Learning (CPL) – Credit earned by a learner who demonstrates knowledge, skills and abilities acquired through work, professional training, military training, and other learning experiences and assessed by academically sound and rigorous processes.

Competence – What you know and what you can do. Demonstrates knowledge, skills and abilities which may include theoretical and practical components of what you know and can apply.

Competency-based Education – Focuses on learning and the application of that learning, rather than on the time spent in class or on materials. Progress is measured by learners demonstrating what they know and can do, through a system of rigorous assessments.

Certification – A credential earned by an individual through “high-stakes” assessment that is governed by a board and determined to meet specific competencies.

Certificate – Academic credential earned by acquiring competence(s) through a set of learning outcomes and formal assessment, that business and industry, workforce and training organizations, and accredited higher education institutions recognize.

Certificate of Participation – An award for participation in a learning experience with or without assessed learning outcomes. Such learning outcomes achieved may be applied to a formal competency based assessment.

Additional Terms:

American Council on Education (ACE) – An organization that conducts public policy advocacy, research, and other initiatives related to higher education issues, and plays a significant role in higher education leadership development. ACE provides recommendations for awarding credit for a variety of learning experiences outside of the traditional college classroom, including recommendations for credit for military training.

Council for Adult and Experiential Learning (CAEL) – A nonprofit organization focusing on linking learning and work, CAEL pursues work at various levels within public and private sectors to enhance learning opportunities for adult learners. CAEL has developed standards for awarding college credit through assessment, trained faculty evaluators, and has conducted research on the outcomes of these efforts.

Joint Services Transcript (JST) – A synchronized transcript presenting data for the United States Army, Marine Corps, Navy, and Coast Guard. The JST includes personal service member data, military course completions evaluated by the American Council on Education, military occupation descriptions and skill levels, college level test scores, and other learning experiences. Credit and course recommendations are provided on the JST.

Industry Credential – Within the context of workforce development generally, the term credential refers to an attestation of qualification or competence issued to an individual by a third party (such as an educational institution or an industry or occupational certifying organization) with the relevant authority or assumed competence to issue such a credential. *(Definition from the Department of Labor Training and Employment Guidance Letter No. 15-10)*

Prior Learning Assessment (PLA) – Prior Learning Assessment, as defined by the Council for Adult and Experiential Learning (CAEL), is the evaluation and assessment of an individual's life learning for college credit, certification, or advanced standing toward further education or training.

Prior Learning Portfolio – A portfolio of college level learning outside of the traditional classroom compiled by a student seeking to earn college credit. Prior learning portfolios are reviewed and subsequent credits awarded by faculty.

Transfer Credit – credit granted to a student for courses completed at another college or university.

Why implement CPL Now?

In March of 2010, the Council for Adult and Experiential Learning in conjunction with the Lumina Foundation, completed a 48-institution study of Prior Learning Assessment and adult student outcomes. The following information summarizes the need for creating avenues for students to earn credit for what they already know.

Degrees are important

The U.S. Skills Gap: ¹

- U.S. is “on a collision course with the future.”
- By 2018, our economy will have jobs for 22 million college degrees, but a shortage of only 8 million people with degrees.
- By 2018, 63% of jobs will require postsecondary training

President Obama ²

- Challenged every American to commit to at least one year of higher education or post-secondary training
- Set goal that by 2020, the US would once again have the highest proportion of college graduates in the world.

¹ Report released June 2010 by the Georgetown University Center on Education and the Workforce – Closing the Skills Gap sponsored by the Lumina Foundation,
https://www.luminafoundation.org/files/publications/Closing_the_skills_gap.pdf

² The White House Higher Education – Knowledge and Skills for the Jobs of the Futures,
<https://www.whitehouse.gov/issues/education/higher-education>

Adult completion matters

- Pipeline of young college graduates not enough to meet workforce skills demands
- Over the past 20 years, more than 31 million students have enrolled in college and left without receiving a degree or certificate ³
- With baby boomers' retirements, knowledge and skills gaps grow

Lumina Foundation's Goal 2025 ⁴

- By the year 2025, 60% of Americans will have a high-quality postsecondary credential
- In 2010, 38% of Americans had at least an associate degree

Lumina Foundation 2013 Gallup Poll ⁵

- 87% of Americans think students should be able to receive college credit for knowledge and skills acquired outside the classroom
- 75% indicated they would be more likely to enroll in a higher education program if they could be evaluated and receive credit for what they already know.

Fueling the Race to Postsecondary Success

2010 CAEL report: 48 institutions participated in a longitudinal study of Prior Learning Assessment (PLA) outcomes; 62,475 adult learners were included. ⁶

- Increased graduation rates and persistence
- Took more courses than adult students who did not receive credit for prior learning (54 credits vs 44 credits)
- Decreased time to degree completion
- More than 2X the rate of completion
43% of PLA students earned a bachelor's degree compared to only 15% of non-PLA students
- 13% of PLA students earned an associate's degree compared to 6% of non-PLA students

Minnesota State College and University CPL Policy and Procedures

Minnesota State has developed policies and procedures surrounding Credit for Prior Learning to help Minnesota State institutions implement and enhance CPL options for students. Minnesota State Educational Policy 3.35 and Procedures 3.35.1 Credit for Prior Learning can be found at the following link - <http://www.mnscu.edu/board/policy/335.html>.

Appendix A. depicts the components of the Minnesota State policy that are to be included in individual institution policies and procedures surrounding CPL. Minnesota Advanced Manufacturing Partnership (MnAMP) strategies focus specifically on awarding CPL that aligns with national industry standards and includes assessment of military, work, and other life experiences.

³ National Student Clearinghouse Research Center, <http://nscresearchcenter.org/signaturereport7/>

⁴ Lumina Foundation Goal 2025, https://www.luminafoundation.org/goal_2025

⁵ Report released February 2013 by Gallup, <http://www.gallup.com/poll/160298/americans-say-postsecondary-degree-vital-barriers.aspx>.

⁶ Obtained from PLA 101 and 201 workshops presented by CAEL, April 27-29, 2015. Fueling the Race link - http://www.cael.org/pdfs/pla_fueling-the-race

MnAMP Strategy 1.2

The following strategy is extracted from the MnAMP *Learn Work Earn* Project Narrative:
Strategy 1.2 Implement a consistent, competency-based approach to awarding credit for prior learning that aligns with national industry standards and includes formal and informal assessments of military, work, and other life experiences.

Collaboratively, MnAMP institutions will develop a process to assess prior education and experience in order to ensure efficient and timely transition from training to degree completion. Upon enrollment at a MnAMP institution, participants will experience a comprehensive personal, academic, and career assessment. This includes implementation of a standardized framework to assess prior learning by adapting the methodology used by the Council for Adult and Experiential Learning. Built into this strategy will be an emphasis on assessment protocol designed specifically for veterans and military personnel. Assessment of prior learning will incorporate transcript evaluations and career development and skills assessment with rigorous evaluation of academic achievement and work/life experience that ensures each participant takes the most accelerate route within a career pathway. The design of the framework was informed by the Lumina-funded Fueling the Race to Postsecondary Success study. This study of 62,000+ adult students at 48 institutions concluded that students with prior learning assessment credit had higher graduation rates, better persistence, and lower time to degree in comparison to students without prior learning assessment credit. These results were true at institutions of all sizes, controls, and levels, as well as for students of different age, gender, race/ethnicity, and academic ability.

Activities	Timeframe	Implementers	Deliverables
<ul style="list-style-type: none"> ▪ Map current MNAMP college's CPL systems and policies ▪ Develop strategies to implement CPL assessments with faculty/staff ▪ Develop MNAMP CPL policies and procedures ▪ Identify course competencies for identified programs ▪ Develop a consistent process for awarding credit through industry credential test-outs (MSSC, AWS, NIMS, PMMI) ▪ Utilize digital badging and military translation tools to ease the CPL process for veterans. ▪ Develop and deliver training to personnel involved in CPL via WebEx ▪ Implement the new CPL procedures with incoming adult learners. ▪ Review, evaluate and revise CPL process. 	<p>Jan 2015–Jan 2017</p>	<ul style="list-style-type: none"> ▪ Strategy Lead: SCC ▪ MNAMP Colleges (All) ▪ MNAMP Grant Director ▪ Educational Consultant ▪ Executive Assistant ▪ Deans ▪ Program Faculty ▪ Instructional Design staff and/or consultants ▪ Education and Placement Advisors ▪ College Student Affairs Staffs ▪ Workforce System Staff and Veterans Navigators ▪ Advanced Manufacturing Partnership 2.0 Workforce (Veterans) Committee ▪ NIMS, AWS, PMMI, MSSC 	<ul style="list-style-type: none"> ▪ A written protocol for competency-based credit for prior learning and related assessments ▪ A written crosswalk between Military Occupational Standards and MNAMP mechatronics, machining, and welding programs

Section 2: Military Crosswalks

Traditional vs. Accelerated Process

Minnesota State has devoted resources available to all institutions within Minnesota State to develop pathways for military service members and veterans to obtain credit for military occupations that match learning outcomes to specific college disciplines.

The traditional approach to awarding career and technical credit for military training uses American Council on Education (ACE) recommendations to analyze individual military transcripts, called Joint Services Transcript (JST). The accelerated approach begins with faculty reviewing military occupations and pre-determining what occupations match specific courses and how many credits are to be awarded.

The accelerated process allows individual institutions to create crosswalks for military occupations to specific courses that are then input in the Veterans Transfer System (VETS) for easy access by military members. The accelerated process is facilitated by Gina Sobania, Minnesota State Director of Military, Veteran and Adult Learner Services, and requires less than a day of faculty time to develop crosswalks. The traditional method would require faculty reviewing each JST transcript as people apply to the college.

The Accelerated Process – Developing Manufacturing Crosswalks

MnAMP will host a session for manufacturing faculty to come together to review military occupations and ACE recommendations to create consistent crosswalks with manufacturing courses. The goal of the session will be to create a set of agreed upon military occupations for which service members can obtain credit for CMAE courses. Once crosswalks are created, Minnesota State staff will enter the courses into the VETS system.

Colleges are encouraged to create additional crosswalks with manufacturing courses as they apply to specific programs. Gina Sobania will work directly with the Transfer Specialist on each campus to create course articulations in u.Achieve for transfer processing. It is important to ensure that the Transfer Specialist is aware of and has access to resources for articulating military transfer credits. See Section 4: Transcribing CPL Credit on Academic Transcripts in this guide for more specific information.

Gina Sobania can be reached at (651) 201-1654 or gina.sobania@MinnState.edu for more information or to schedule a session on your campus to create military crosswalks.

Section 3: Awarding Credit for Prior Learning for Industry Credentials

Manufacturing Credit for Prior Learning Assessment Map

The awarding of CPL for industry credentials depends heavily on credential alignment with course learning outcomes. When industry credentials align closely with course outcomes, awarding of credit for specific courses is relatively straightforward. When industry credentials do not fully align with course outcomes, or align with certain course outcomes mixed among

several courses, assessing credit for prior learning may require a combination of reviewing credentials and assessing a student's work and/or prior learning portfolio.

Some colleges have policies that specifically indicate Credit for Prior Learning can be awarded when 75% or more of the learning outcomes of the course are met. This is consistent with the Minnesota State Transfer policy and can be used as a general guideline, however, check with your institution's specific policies regarding how course competencies are to be met for CPL.

Appendix B shows a recommended flow chart for assessing CPL as related to industry credentials and work experience. Faculty are drivers in determining how course competencies are met. If competencies cannot be met through matching industry credentials and/or assessment of work experience or challenge exam, the student should be directed to register for the course.

Awarding Credit for Prior Learning for Manufacturing Skill Standards Council-Certified Production Technician (MSSC-CPT)

MnAMP Strategy 1.1 includes implementing a core curriculum that directly aligns with the Certified Production Technician certificate awarded by the Manufacturing Skills Standards Council (MSSC). Because MnAMP colleges have imbedded MSSC-CPT Critical Production Functions into the core CMAE courses, credit should be awarded for successfully passing each section of the MSSC-CPT assessment.

Appendix C includes a template for use in demonstrating Common Course Outcomes of the CMAE courses as crosswalked with MSSC-CPT Critical Production Functions.

Each section of the assessment has a unique passing rate. Candidates who meet the cut score should be awarded 2 credits each of the corresponding CMAE courses 1514, 1518, 1522, and 1526. Candidates can choose to test for any number of assessments and receive CPL if the cut score is met. Institutions who offer the MSSC-CPT certification on their campus should refer to MSSC-CPT rules for assessment fees.

MSSC-CPT Section	CMAE Core Course	Credit	Cut Score for Passing
Safety	CMAE 1514 Safety Awareness	2 credits	Passing = 76%
Manufacturing Processes & Production	CMAE 1518 Manufacturing Process and Production	2 credits	Passing = 74%
Quality Practices & Measurement	CMAE 1522 Quality Practices	2 credits	Passing = 75%
Maintenance Awareness	CMAE 1526 Maintenance Awareness	2 credits	Passing = 73%

Students who have prior work experience in manufacturing may be well suited to pass the assessments and subsequently receiving credit for one or more CMAE course. Work within your

college CPL process to identify students who are good candidates for potential assessment for CPL through MSSC-CPT assessments. Students who have already earned MSSC credentials and can provide the certificate for documentation, are awarded credit for the corresponding courses.

An interest form may be helpful in assessing eligibility for assessment. Check with your college's CPL policies and procedures to determine what process is in place for assessment of potential CPL. A flow chart recommending a process for awarding CPL for MSSC-CPT Certification is included in Appendix D.

Recommendations for Awarding Credit for Prior Learning for Other Industry Credentials

Additional industry credentials, such as the National Institute for Metalworking Skills (NIMS), the Association for Packaging and Processing Technologies (PMMI), and the American Welding Society (AWS) may be embedded in program curricula. How credit for prior learning is awarded depends largely on how credentials are included in courses. Faculty may need to utilize more than one means of assessing prior learning. For example, matching industry credentials to course outcomes plus a test-out or portfolio assessment may be needed in order to demonstrate course learning outcomes have sufficiently been met to award credit.

MnAMP has contracted with Jenna Kulasiewicz to assist colleges with developing assessment strategies for awarding credit for prior learning. Jenna has extensive experience in assisting faculty and institutions with developing prior learning assessment tools that fit with specific programs. Jenna can be reached at (715) 579-4206 or Jennak@jkies.com. More information on what Jenna can offer is found at: jkies.com.

Section 4: Transcribing CPL Credit on Academic Transcripts

Each college may have specific policy regarding the recording of CPL on academic transcripts.

Minnesota State Educational Policy 3.29 and Procedures 3.29.1 College and University Transcripts can be found at the following link - <http://www.mnscu.edu/board/policy/329.html>. Part 4 of the procedure specifically addresses notation of credit awarded for prior learning:

“Institutions award credit earned by means other than actually taking a course at the institution. These may include “testing out” of a course by taking a locally-designed test, CLEP or AP tests, DANTES or International Baccalaureate. Credit awarded for prior learning or earned by examination may be noted either in the term when it was earned or in the transfer section. If placed in the term section, the type of special credit must be noted in parentheses immediately below the course.”

Notation of Military Credit

Once faculty have completed a review of military occupations and have determined course crosswalks, the DARS team will encode crosswalked courses in uAchieve for your college. Military credit requires some advanced skills in articulation and if your transfer specialist is not familiar with the process, Minnesota State can provide assistance and training.

Resources for Transfer Specialists/Registrar:

- Gina Sobania - (651) 201-1654/ gina.sobania@MinnState.edu – Contact for training and assistance in articulating military credits.
- DARS/Transferology documentation for military articulation - <http://www.dars.mntransfer.org/updates/documentation.html#military>

Notation of Credit for Industry Credentials

Students that have successfully passed all four sections of the MSSC-CPT assessment will receive a certificate indicating CPT certification, as well as certificates for each of the four sections. Students who take less than four of the assessments, or who do not pass all four, will be able to print their test scores for the sections completed. Information on the cut scores for passing are found in this guide in Section 3.

Students should not be assessed a fee beyond standard MSSC-CPT fees for transcribing credits on the transcript. Check with your campus Transfer Specialist or Registrar for documentation needed for awarding credit for CMAE courses.

Check your campus CPL policy and procedure and consult with faculty, Registrar, and Transfer Specialist in determining documentation needed to award CPL for other industry credentials. Credits should be transcribed according to your campus's policy.

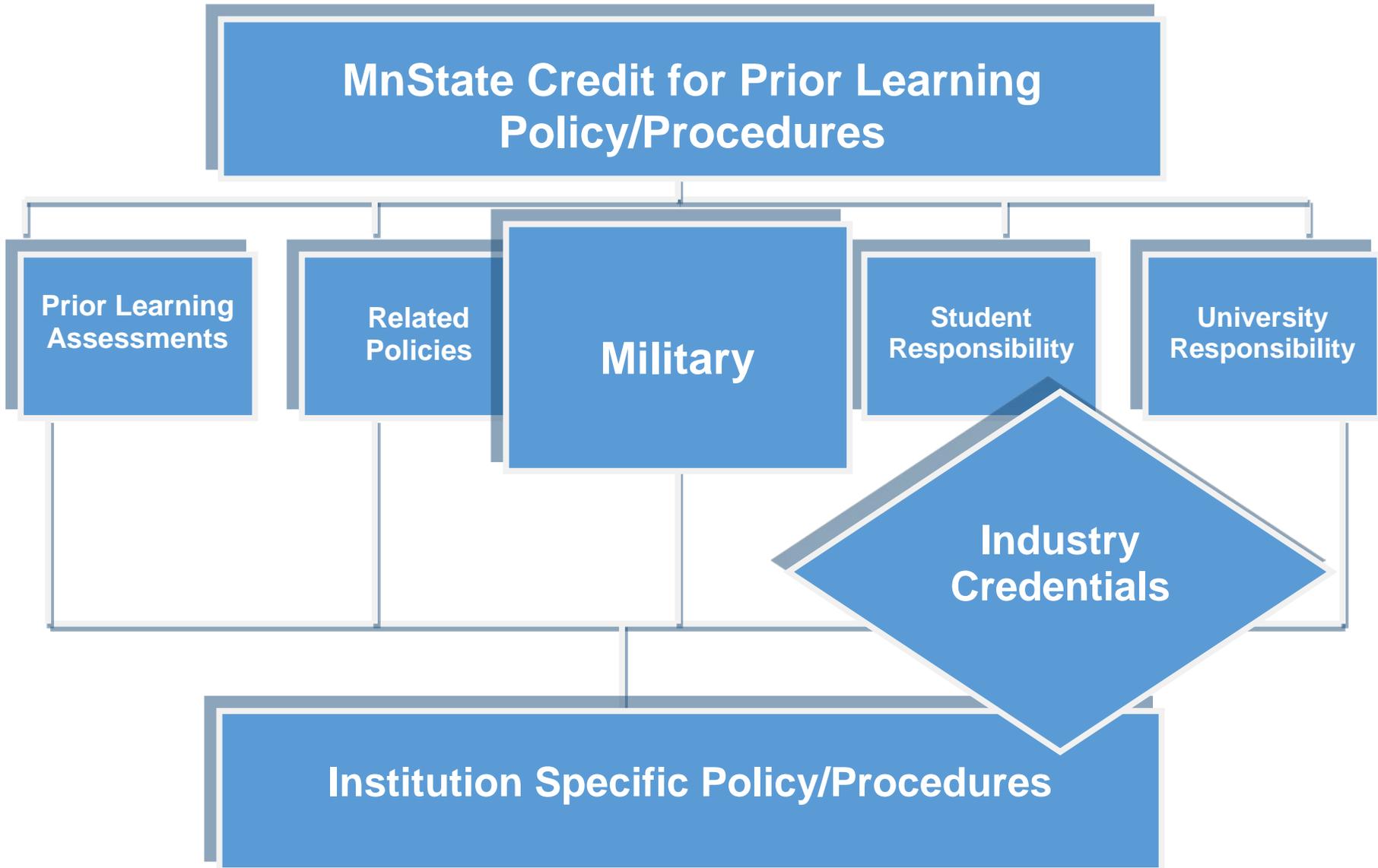
A team of Registrars is currently working on a system wide proposal for consistent notation of CPL credits for Minnesota State colleges and universities that results in better transferability of CPL credits for students. Policies may change as a result.

Section 5: CPL for +Connect

The Minnesota Advanced Manufacturing Partnership (MnAMP), in collaboration with partner colleges throughout Minnesota, is offering a new program called +Connect – a series of training courses led by live instructors via mediated telepresence.

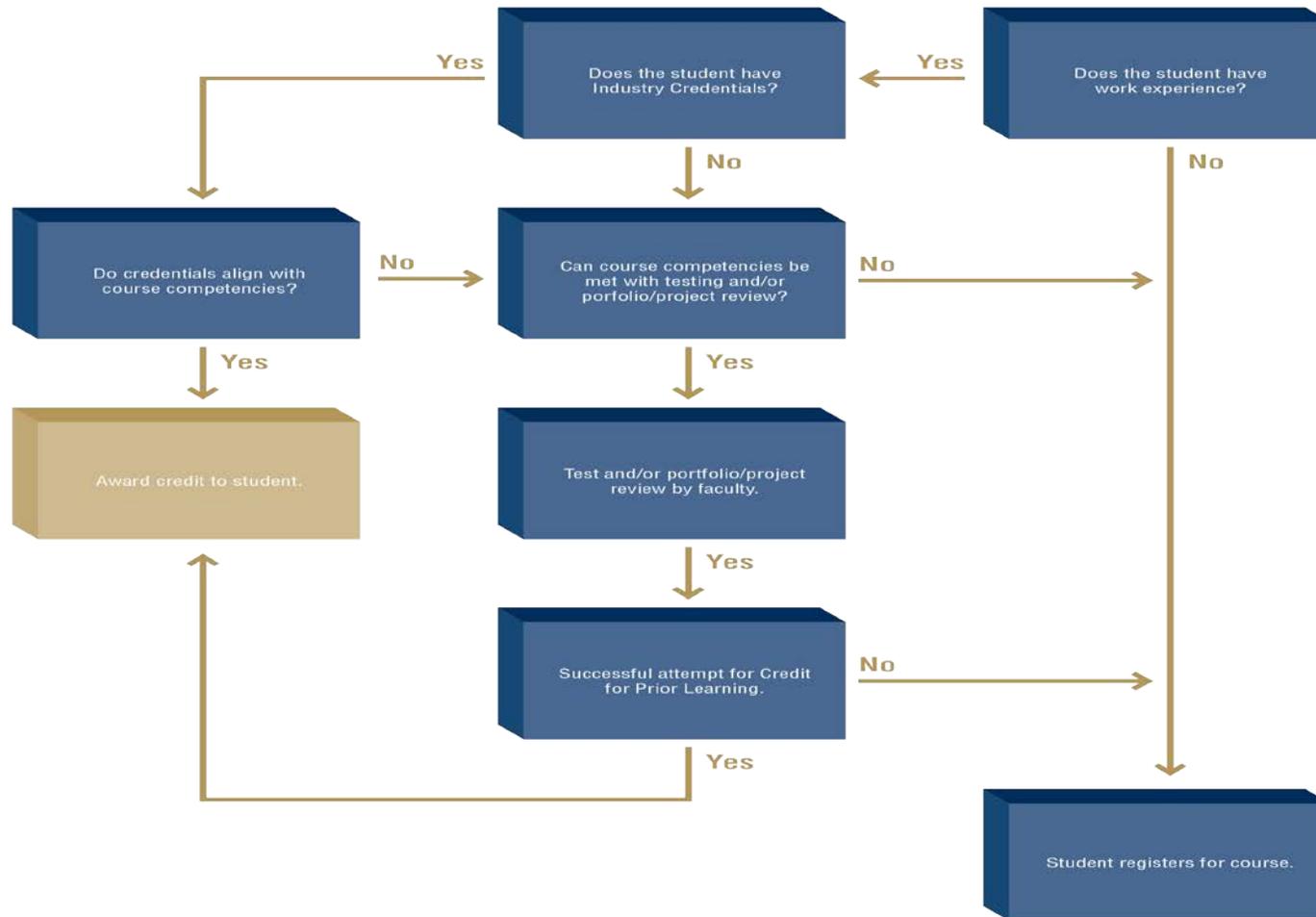
Students may be able to receive CPL for +Connect courses. Students who wish to receive CPL will need to work with faculty and staff at the college they wish to attend. Credit awarded will depend on how closely learning outcomes match current course offerings.

Appendix A. Minnesota State Credit for Prior Learning Policy to Institutional Policy Chart



Appendix B. Manufacturing Credit for Prior Learning Assessment Map

MnAMP Recommended Process Assessing Students for Potential Credit for Prior Learning

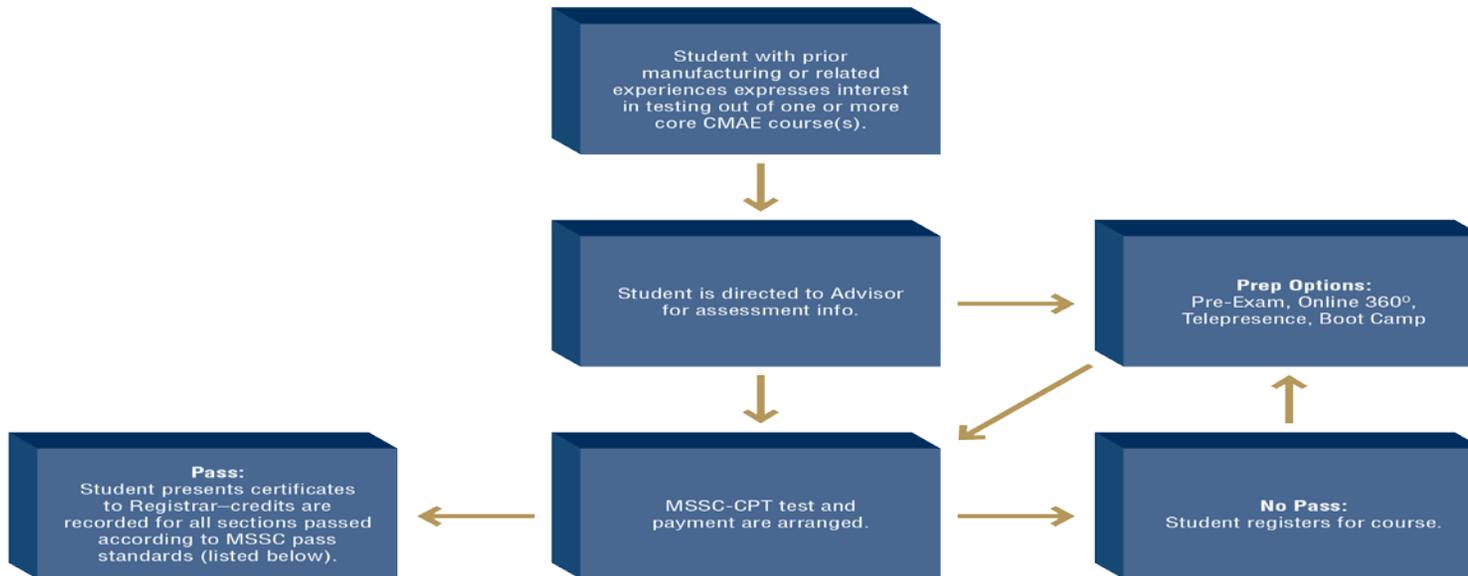


Appendix C. South Central College MSSC-CPT and CMAE Course Crosswalks –

CMAE 1514 - Safety Awareness Course Competencies	MSSC - CPT Critical Production Functions - Safety
Explain characteristics of working in a safe and productive manufacturing workplace	Work in a Safe and Productive Manufacturing Workplace
Describe the process for performing safety and environmental assessments	Perform safety and environmental inspections
Identify procedures related to performing emergency drills and participating in emergency teams	Perform emergency drills and participate in emergency teams
Identify potential unsafe conditions and corrective actions	Identify unsafe conditions and take corrective action
Discuss safety training for manufacturing employees	Provide safety orientation for all employees
Explain proper safe use of equipment	Train personnel to use equipment safely
Describe processes and procedures that support safety in a work environment	Suggest process and procedures that support safety of work environment
Summarize safety and health requirements for maintenance, installation and repair	Fulfill safety and health requirements for maintenance, installation, and repair
Identify aspects of safe equipment and operator performance	Monitor safe equipment and operator performance
Recognize effective, safety-enhancing workplace practices	Utilize effective, safety-enhancing workplace practices
CMAE 1518 - Manufacturing Process and Production	MSSC - CPT Critical Production Functions - Manufacturing Process & Production
Explain aspects of identifying customer needs	Identify customer needs
Discuss how to determine resources available for the production process	Determine resources available for the production process
Identify set-up and verification of equipment for the production process	Set up equipment for the production process
Describe the process of setting team production goals	Set team production goals
Explain job assignments	Make job assignments
Identify work flow with team members and other work groups	Coordinate work flow with team members and other work groups
Discuss communication of production, material requirements, and product specifications	Communicate production and material requirements and product specifications
Explain how to perform, monitor, and document the process to make the product	Perform and monitor the process to make the product
Identify documentation and compliance process in regards to customer requirements	Document product and process compliance with customer requirements
Explain the process of preparing the final product for shipping and distribution	Prepare final product for shipping or distribution
CMAE 1522 - Quality Practices	MSSC - CPT Critical Production Functions - Quality Practices and Measurement
Explain periodic or statistically based internal quality audit activities	Participate in periodic internal quality audit activities
Describe checking and documentation of calibration of gages and other data collection	Check calibration of gages and other data collection equipment
Explain continuous improvement	Suggest continuous improvements
Discuss inspection of materials and product/process at all stages to ensure they meet specifications	Inspect materials and product/process at all states to ensure they meet specifications
Describe documentation of results of quality tests	Document the results of quality tests
Explain communication regarding quality problems	Communicate quality problems
Identify corrective actions to restore or maintain quality	Take corrective actions to restore or maintain quality
Explain how to properly record process outcomes and trends	Record process outcomes and trends
Identify fundamentals of blueprint reading	Identify fundamentals of blueprint reading
Use common measurement systems and precision measurement tools	Use common measurement systems and precision measurement tools
CMAE 1526 - Maintenance Awareness	MSSC - CPT Critical Production Functions - Maintenance Awareness
Explain performance of preventative maintenance	Perform preventive maintenance and routine repair
Discuss the concepts of routine repair	
Discuss monitoring indicators to ensure correct operations	Monitor indicators to ensure correct operations
Describe performance of housekeeping to maintain production schedule	Perform all housekeeping to maintain production schedule
Recognize potential maintenance issues with basic production systems	Recognize potential maintenance issues with basic production systems, including knowledge of when to inform maintenance personnel about problems with: <i>Electrical systems, pneumatic systems, hydraulic systems, machine automation systems, lubrication processes, bearings and couplings, belts and chain drives</i>
Recognize the importance of documentation within a maintenance system	

Appendix D. Awarding Credit for Prior Learning for Manufacturing Skill Standards Council-Certified Production Technician (MSSC-CPT)

Process for Awarding Credit for Prior Learning for MSSC-CPT Certification



Notes for Transcribing Credit

MSSC-CPT certification, regardless of where completed, is treated as a course transfer. No additional fees assessed to the student.

Safety: 76% cut score = 2 credits CMAE 1514 Safety Awareness

Manufacturing Processes & Production: 74% cut score = 2 credits CMAE 1518 Manufacturing Process and Production

Quality Practices & Measurement: 75% cut score = 2 credits CMAE 1522 Quality Practices

Maintenance Awareness: 73% cut score = 2 credits CMAE 1526 Maintenance Awareness

