# Microcredentialing Task Force End of Year (2024) Report

**Membership**

**Chair: Nick Swartz, School of Professional & Continuing Education**

**Members:** Michele Estes, College of Education; Lori Gano-Overway, College of Health and Behavioral Studies; Gilpatrick Hornsby, Center For Faculty Innovation; Teddy Levin, School of Professional & Continuing Education; Sarah MacDonald, School of Professional and Continuing Education; Meg Mulrooney, Faculty Affairs and Curriculum; Leigh Nelson, College of Arts and Letters; Scott Paulson, University Studies; Sam Prins, College of Science and Mathematics; Rhonda Syler, College of Business

**Charge:** Goal 3, Objective 2 of the Academic Affairs Strategic Plan identifies continuing to develop JMU's online capacity, presence and expertise as a priority for our division. Higher education institutions, including many R2 universities, are responding quickly to the changing post-COVID economy and workplace expectations. One significant movement is towards micro-credentials as a "new currency of learning," where employers and students expect "demonstrated skills and competencies completed through more stackable pathways of higher education" (UPCEA & Modern Campus, 2021).

This task force will:

- Establish clear goals and vision for JMU's approach to micro-credentials that responds to industry and employer needs while maintaining JMU's institutional identity and brand.

- Make recommendations for both specific topic areas to explore and procedures and guidelines for development, including funding, curricular approval, issuing digital badges, and other institutional policies.

**Summary of Current Semester Activity:**

- The full task force met 4 times during this academic year. Most of the work occurred at the subcommittee level. The 3 subcommittees and their charge are below.

    - **<u>Group 1: Market Analysis:</u>**
      -Develop survey for top 20 employers of JMU grads and regional employers
      -Analyze survey results
      -Analyze report from Education Dynamics.

      The questions considered were:
        - What does market want?
        - What would bring value to our grads when interviewing as well as when currently employed i.e. employability and career growth?
        - Do we focus on both i.e. is it current students for employability, or is it non-students for career growth, or both? Career growth may be for non-credit.
        - How do you want credentialing to occur?
        - What packages/skills would they be interested in if not "MATH 220, BUS 328"…

- **Group 2: What can JMU Deliver?**
  -Develop survey for faculty:
    -Awareness
    -Interest
    -Capacity
  -Identify areas of competitive advantage that we could take to a national market, like civic engagement or ethical reasoning.

- **Group 3: Systems & Processes**
  -Examine other institutions.
    - Financial and budget model
    - Approval process
    - Curriculum review
    - Registrations
    - Marketing
    - Assessment

- The task force developed a JMU Micro-credential Summary white paper. The sections of the white paper are:
  - Definition
  - Micro-credentials in Context
  - Taxonomy
  - Stackable Credentials
  - Benefits and Challenges
  - Review of Higher Education Institutions Offering Micro-credentials
  - Emerging Themes in the Literature
  - What Employers Want Out of Partnerships
  - Quality Careers and Employability Support
  - Building Stackable Credentials at State and College Levels
  - Framework for Assessment and Recognition
  - Recognition of Workbase Learning

- The taskforce developed Draft JMU Guidelines on Micro-credentials. The key recommended procedures identified by the task force are:

  - **Focus on Non-Credit Microcredentials:** The primary focus should be on non-credit microcredentials.

  - **Financial Models:** Two financial models were proposed: SPCE supported and independent. For microcredentials targeting audiences outside the current JMU community (alumni, corporate employees, community members), the SPCE budget model is more appropriate. For those aimed at current JMU students, the independent budget model is recommended.

  - **Centralized Functions:** We suggest centralizing certain functions such as management of credential issuance, verification, security, documentation, and records on JMU badge platform within SPCE. Additionally, SPCE will handle marketing and promotional efforts to enhance the visibility and recognition of JMU microcredentials.

- **Content Development and Delivery:** This should remain the responsibility of individual academic units.

**Future Work Planned:**

- The work of the task force is now complete. The recommended guidelines and white paper were submitted to the Provost on 5/17/2024.

- Should the recommended guidelines be approved, the next step is for SPCE to develop a draft policy to be shared with the Deans and Academic Council. Subsequently, SPCE will develop a website that includes:

    - The JMU Microcredential Policy
    - The white paper on microcredentials from the task force
    - Images of sample JMU badges
    - Guidelines for the information that should accompany a badge
    - Microcredential proposal forms
    - Chart of the various types of microcredentials

**Appendices**

**Table of Appendices**

| Number or Title | Brief Description |
|---|---|
| **JMU Micro-credential Summary white paper** | The sections of the white paper are:<br>○ Definition<br>○ Micro-credentials in Context<br>○ Taxonomy<br>○ Stackable Credentials<br>○ Benefits and Challenges<br>○ Review of Higher Education Institutions Offering Micro-credentials<br>○ Emerging Themes in the Literature<br>○ What Employers Want Out of Partnerships<br>○ Quality Careers and Employability Support<br>○ Building Stackable Credentials at State and College Levels<br>○ Framework for Assessment and Recognition<br>○ Recognition of Workbase Learning |
| **Draft JMU Guidelines on Microcredentials** | The taskforce developed Draft JMU Guidelines on Microcredentials. The key recommended procedures include:<br>• Focus on Non-Credit Microcredentials<br>• Financial Models<br>• Centralized Functions:<br>• Content Development and Delivery |

# JMU Micro-credential Summary

## Definition

A singular definition of 'micro-credential' has not been widely agreed. Key characteristics of micro-credentials include:

- Smaller, shorter, and more narrowly-focused units of study (class, workshop, or program) than a 'macro-credential' (e.g. a bachelor's degree)
- Additional, alternative, or complementary to formal qualification
- Require less time to complete than a traditional degree
- Often stackable and can provide pathway to certificate or degree completion

## Micro-credentials in Context

Employers increasingly seek workers who are job-ready and can utilize their skills immediately upon hire. Likewise, employees face growing pressure to increase their independence and desirability in the labor market. Workers increasingly expect training opportunities designed using industry-aligned curriculum and work-focused learning approaches, whose quality is verified by employers.

In response to these trends, higher education institutions worldwide have begun offering micro-credentials; this move has been heralded by advocates as an effective tactic for increasing enrollment and access, growing diversity, and aligning higher education with employer and industry needs. While micro-credentials are seeing renewed and growing interest, their principles (competency-based, short or time-driven experiences, and established standards of quality) have been in use in higher education for decades.

The COVID-19 pandemic accelerated a shift to a new economy, to which higher education institutions must adapt. A 2021 report by Modern Campus and University Professional and Continuing Education Association (UPCEA) asserts that, "[t]he new currency of learning will no longer be measured exclusively through degrees and credit offerings, but rather through demonstrated skills and competencies completed through more stackable pathways of higher education" (1).

## Taxonomy

The following terms are used to describe different types of micro-credentials (Quigley, 2021):

- Souvenir
    - A record of a learner's awareness, attendance, and/or participation in extra-curricular events and activities. Typically verified by the activity or event sponsor.
- Ribbon
    - Documents a learner's introduction to skills and competencies, demonstrating learning but not mastery.
- Badge/digital badge
    - A digital token that validates the learner's mastery of skills and competencies that carry career value. Require learner-produced artifacts and assessment by grantors. May be 'stacked' to achieve a certification or even degree.

- Certificate or certification
    - Typically awarded and/or assessed by industry or occupational association to confirm the learner's knowledge, skills, and ability to perform a specific job in that industry. Require learner-produced artifacts or multiple stacked badges.
- Massive open online course (MOOC)
    - Online, open-access class taught by faculty in a particular time period, that addresses specific learning outcomes.
- Short course
    - Program taught by faculty during a short period of time to achieve specific learning objectives.

*Other terms/language:* short-term courses, nanodegrees, micro-masters

An example of micro-credential types is seen below.

***Table: Kennesaw State University Taxonomy of Micro-credentials***

| | SOUVENIR | RIBBON | BADGE | DIGITAL CERTIFICATE |
|---|---|---|---|---|
| Outcome | • Aware<br>• Attendance<br>• Participation | • Practiced<br>• Achievement<br>• Demonstration of learning | • Competent<br>• Skilled<br>• Demonstration of mastery | • Qualified |
| Learner Activity | Awareness, Attendance, Physical or Virtual Presence | Demonstration of specific skill, vocabulary, or knowledge in simulated or non-authentic environments | Demonstration of specific skill or competency applicable in professional environments | Demonstration of a collection of competencies or industry standards |
| Assessment | Attendance record | Submission evaluated by an expert for quality or completeness | Submission evaluated by an expert for quality. Should be uploaded to Badgr as Evidence. | Submission evaluated by an expert for quality. Should be uploaded to Badgr as Evidence. |
| Special Recognition | | Distinction option | Distinction option | |
| Metadata Required | | | Learner-made artifacts | Learner-made artifacts or multiple stacked badges |
| Approval Required | Owl Life | Micro-Credential Committee | Micro-Credential Committee | Micro-Credential Committee |

**Stackable Credentials**

Depending on the granting institution and assessor requirements, some micro-credentials can be combined, or 'stacked,' to comprise a higher level of micro-credential. For example, a

learner might achieve and stack multiple badges to qualify for a certification. In turn, certificates might expedite achievement of a master's degree.

Credentials can be stacked:

- Vertically:
    - A single topic is explored in detail. (e.g. Microsoft Excel Level 1, Level 2, Level 3)
- Horizontally:
    - Knowledge is gained across several topics. (e.g. marketing, graphic design, and Adobe products)
- Hybrid:
    - A combination of vertical and horizontal. Learners explore several topics in increasing levels of difficulty (Quigley, 2021).

An example of a university's taxonomy and structure of micro-credentials is seen below.

## APPENDIX

### APPENDIX A: MICRO-CREDENTIAL IMAGES


*Souvenir*


*Ribbon*


*Ribbon with Distinction*


*Badge*


*Badge with Distinction*


*Digital Certificate*

Two examples of James Madison University's badges are also seen below.


**Benefits & Challenges**

*For learners:*

- Benefits:
  - Strengthen knowledge and skills
  - Develop professional competencies (task mastery and professional technique)
  - Re-skill and upskill quickly in response to labor market demands
  - Increase employability, earn promotions, and advance careers
  - Work toward completion of a credential or degree program
  - Validate to employers their attainment of specific skills
- Challenges:
  - Low awareness/understanding among students of micro-credentials
  - Inadequate academic backgrounds prior to enrolling in micro-credential courses
  - Technology issues (knowledge of and access to online learning tools)
  - Course fees
  - Time constraints, especially among adult learners

*For higher education institutions:*

- Benefits:
  - Update teaching materials and provide relevant supplements to student learning
  - Provide innovative and industry-aligned curriculum, creating greater value for students seeking professional development
  - Compete with private, non-institutional training services (like bootcamps)
  - Maintain and advance institutional relevance with employers and students, by connecting programming with needs of learners and employers
  - Strengthen ties with industry
- Challenges:
  - Skepticism/low awareness among faculty/staff of micro-credentials
  - Lack of resources for implementation
  - Developing and updating teaching resources to keep up with fast-paced industry changes
  - Ensuring academic integrity and honor codes

*For employers:*

- Benefits:
    - Meet employer's needs for specially-trained and work-ready employees
    - Create a higher skilled workforce
    - Validates potential or current employee's skillset
- Challenges:
    - Low awareness and understanding among employers
    - Assuring quality of instruction and validity of skills

**Review of Higher Education Institutions Offering Micro-credentials**

Fong et al.'s (2021) survey of 606 higher education faculty and staff revealed that 54% of respondents felt their institutions had embraced or were embracing new credentialing initiatives. Reasons for developing new credentials included: responding to industry demand, interest from students/prospective and current employees, expanding the institution's reach, helping students gain more experience and assist with future employment, and raising revenue. Most respondents (66%) said their institutions were designing micro-credentials for professional advancement.

Additional key findings:

- 88% of higher education leaders say new credential initiatives are aligned with their institution's strategic plan, with half of respondents indicating these initiatives are totally or very aligned with their strategic plan
- 79% of higher education leaders say labor and occupational data are extremely or very important to informing development of new credential initiatives
- 71% of higher education leaders say alternative credentials will help them achieve institutional revenue and enrollment goals
- 58% of higher education leaders say micro-credentials allow them to more effectively highlight students' discrete competencies and skills (Fong et al., 2023)

A review by SPCE graduate assistants of institutions comparable to JMU[1] (n = 46) found that 28 institutions offer some form of micro-credentials. The most common type of micro-credential offered are badges, followed by certifications. Of these institutions, 11 offer some form of stackable micro-credentials. A few micro-credentials that were not stackable were embedded within a certificate or degree program. Among institutions who charged a fee for micro-credential enrollment, costs ranged from $600 to $1,500.

[1] This review included a mix of R2 and regional comprehensive universities: American University, Arkansas State University, Boise State University, Central Michigan University, Clark University, College of William and Mary, DePaul University, East Carolina University, Eastern Michigan University, Florida Atlantic University, Georgia Southern University, Howard University, Illinois State University, Marshall University, Miami University, New Mexico State University, Oakland University, Old Dominion University, Rowan University, Rutgers University, Texas State University, University of Denver, University of Maine, University of North Dakota, University of Rhode Island, University of South Alabama, and William & Mary.

These institutions offered micro-credentials related to the following topics:

- Leadership
- Engineering
- Assessment
- Teaching/pedagogy
- Educational technology
- Scholarly research
- Grant-writing
- Project management
- Environmental health & safety
- Cybersecurity
- Diversity, equity, and inclusion
- Cultural competency
- Mental health, wellness, and self-care
- 4-H and agriculture
- Career readiness and workforce development
- Financial literacy
- Information literacy
- Communication
- Human resource management
- Critical thinking and problem solving
- Teamwork and collaboration

Note that many micro-credential programs focus on building content knowledge of specific subjects and developing skills related to these topics. For example, the topic 'teaching/pedagogy' might include a micro-credential in "Teaching with Primary Sources." Likewise, diversity, equity, and inclusion can include topics in healthcare, education, leadership, among others.

**Emerging Themes in the Literature**

Ha Thi Ngoc et al.'s (2022) systematic literature review suggests micro-credentials are in an early stage of development, the benefits appear worthy of investment by higher education institutions, and attaining micro-credentials is no 'micro' feat for students.

*Early stage of development:*

The articles included in the authors' review were written between 2014 and 2021, with just over half written in 2020 and 2021. The COVID-19 pandemic contributed to a surge in interest in micro-credentials and increasing interest in and intention to implement micro-credentials has been reported in higher education. Government and nongovernmental organizations worldwide are considering how to define and include micro-credentials in qualification frameworks across vocational education, higher education, and industry. Global trends in policy

and implementation, along with increasing research, suggest potential for growth and further development of micro-credentials in higher education.

*Worthy of investment:*
The review found evidence that is generally supportive of the further development of micro-credentials in higher education. The authors found that micro-credentials provided students benefits related to career progression, including development of different forms of employability capital (human, social, cultural, identity, and psychological). Micro-credentials have a major limitation – studies reported disappointment in significant learning (or learning that significantly changes people's lives). This is probably due to their short time span and hyper-focused curriculum. Despite this limitation, the literature found that micro-credentials were generally considered valuable to learners pursuing mastery learning goals.
Ultimately, the authors conclude that "micro-credentials' gain is not macro-credentials' loss; each potentially complements and strengthens the other," (12) noting that the literature reveals benefits for all stakeholders: learners, higher education institutions, and employers (Ha Thi Ngoc et al, 2022).

*No 'micro' task:*
Although micro-credentials offer increased flexibility and accessibility for many learners, completing their requirements is no easy task. Challenges for learners include technology issues, inadequate academic backgrounds, course fees, and time. The review found that many micro-credential learners are adults engaged in the workforce who have competing priorities, suggesting that this method of learning might be best suited for self-regulated, autonomous, and active learners.

Implementing effective micro-credential programs is no 'micro' task for higher education institutions, either. Challenges for institutions include student recruitment, course design, quality assurance, resources, and buy-in among leadership, faculty, and staff.

*Future areas of inquiry:*
The authors identify a need for future studies that:

- Explore implementation and outcomes of micro-credentials
- Examine long-term value and benefits of micro-credentials for learners
- Center the voices of university leaders, faculty, lecturers, and industry employers
- Uncover awareness of micro-credentials among students and employers
- Employ mixed-methods and qualitative research methods (Ha Thi Ngoc et al., 2021).

**Business and Program Models**
UPCEA's (2023) study of business and program models for alternative credentials found that despite an average number of 64 credentials offered by member institutions, there are still a significant number of institutions that do not feel that alternative credentials are a strategic

priority. UPCEA listed this as noteworthy because those who do include alternative credentials in their strategic plan seem to have more support to explore and develop programming.

Many institutions are leveraging their existing curriculum and faculty expertise to develop alternative credentials. This includes deconstructing courses for delivery as alternative credentials, with faculty being actively involved in the effort. Employer engagement and partnerships are also instrumental, both by providing input into skills they need, and co-creating curriculum. Many universities have cited employer engagement as a priority and a challenge. Employers are strategic partners and consumers of the content, but often there are multiple parties responsible for employer outreach on campuses, which causes confusion.

Very few institutions use the same business model for alternative credentials that they use for their existing non-credit offerings. There is a mix of fee-based and revenue share business models, and not all have a clear focus on the financial viability of alternative credentials. Institutions using the revenue share model have slightly higher confidence that their model is both financially sustainable and scalable than those using the fee-based model. UPCEA notes interest in that organizations which have been doing this longer are less consistent than those which have only begun to offer alternative credentials in the past year.

Additional key findings:

- Of the institutions that participated in this study, 53% were public research institutions and 13% were master's comprehensive institutions, differing from UPCEA's member demographics, which is comprised of 32% public research institutions and 36% master's comprehensive institutions
- 65% of respondents strongly agree or agree that senior leadership at their institution recognizes the PCO (Professional, Continuing, and Online education) unit's central role in delivering alternative credentials for their institution
- 60% of large institutions and 53% of medium institutions have been offering alternative credentials for more than 5 years (UPCEA, 2023).

**Figure 3: Does Your Institution Offer Alternative Credentials? (n=100)**

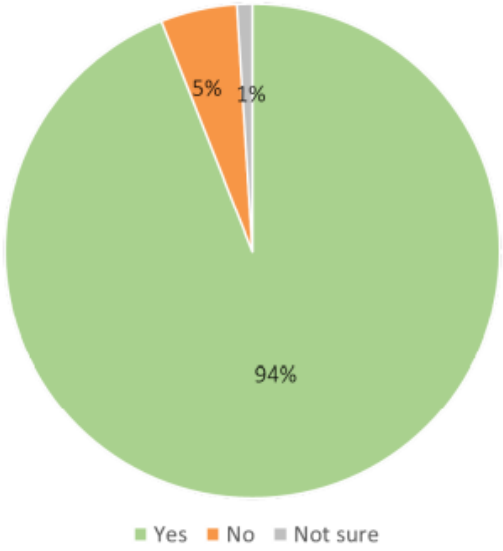
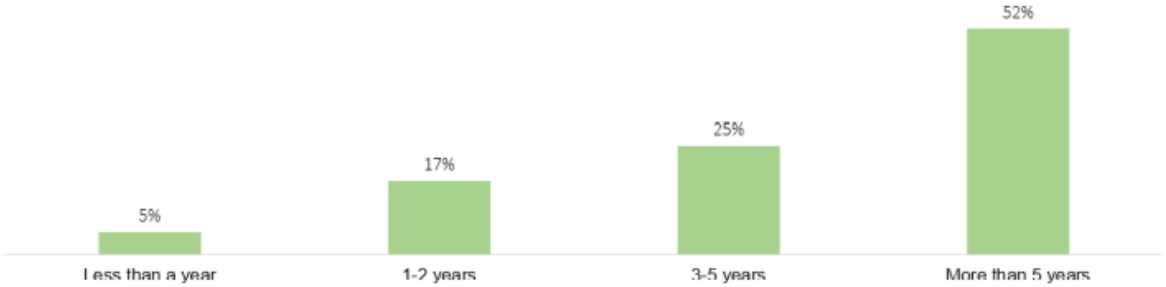



**Figure 10: Which of the following best describes how long your institution has been offering alternative credentials? (n=92)**




*Actionable Insights*

UPCEA states the importance of the strategic priority of alternative credentials within institutions. If alternative credentials have been embraced by senior leadership and included in the strategic plan, they are more likely to have the necessary resources allocated to them. Also, program development should include both employers and corporate partners. Partnerships create buy-in and can cultivate demand.

**What Employers Want Out of Partnerships**

Etter et al. (2024) surveyed more than 500 employers to better understand their perceptions of partnering with higher ed on professional development programs and alternative credentials. The broad understanding is that as our society creeps into a more automated future, non-degree credentials will replace degree requirements for some jobs as well as provide avenues for upskilling and reskilling. This presents an opportunity for higher education to become less

reliant on degree-based education while diversifying its enrollment and revenues through micro-credential offerings.

*Engaging Employers to Advance Higher Education*

The research shows that employers see value in working with colleges and universities and are likely to work with education partners on pricing, assuming that programs are applicable, meet their needs, and are delivered with the learner and employer in mind. For colleges and universities to offset unfavorable demographics and increased competition, employers and learners are going to need a seat at the table (Etter et al., 2024; Fong et al., 2023).

*Partnerships as Innovation Drivers*

Partnerships between higher education institutions and employers have proven to provide long-term benefits to both parties. These collaborations are considered critical drivers of innovation in the education industry as well as the general corporate environment, allowing for further research and development in the workplace.

Research collaboration between employers and universities has increased over the last decade. These external partnerships offer invaluable benefits to both parties as companies turn to universities for early-stage research and recruitment, and universities look to develop attractive corporate relationships. Over the last decade, education hubs such as Greater Boston, which is home to 55 institutions of higher learning, have uniquely attracted a great number of companies in healthcare, technology, and other industries. These partnerships highlight the importance of direct employer collaboration to produce successful long-term relationships and opportunities for four-year colleges and universities.

*Employers and External Partnerships for Professional Development*

Colleges and universities have a unique advantage in their ability to not only shape the workforce through their own student population, but also through employee professional development. Forming strong and sustainable partnerships with employers allows universities to extend their services beyond degree-seeking student populations to the larger audience of working adults.

Etter et al. (2024) found that the percentage of employers partnering with external entities to provide employees training/professional development increased from 54% in 2022 to 68% in 2023. However, four-year colleges and universities are losing ground to private providers.

*Barriers of Employer-Higher Education Partnerships*

Employers responding to the survey identified key barriers to forming partnership with higher education institutions for professional development programs:

| | |
|---|---|
| *Cost* | *No single point of contact at school* |
| *Lack of real-world application* | *Unclear offerings and capabilities* |
| *Cumbersome business processes* | *Lack of course credit* |
| *Slow turnaround time to deliver desired content* | *Unsure how to initiate partnership* |
| *Content is inconsistent in quality* | *Poor employee feedback* |
| *Content is infrequently offered* | *Other* |

A standard cut-and-paste professional development program will no longer suffice in this high-demand market. In this uncertain time for higher education, creating programs catered to employer needs can position institutions to realize the increased enrollments and revenue they hope to achieve.

*How Institutions Can Overcome These Barriers with Employers*

While having clear benefits, higher ed-employer partnerships can be difficult to implement and sustain. When addressing these issues, the overarching message was the importance of clarity in processes and communication and a tight focus on learner-centered programming. Communication between both parties needs to center on the perspective of students, which can include job opportunities, desired academic programs, and financial decisions.

Among employers that do partner with four-year institutions, Etter et al. (2024) found that 98% strongly agree that their organization plans to continue those partnerships to provide training or professional development opportunities for their employees for the foreseeable future. The overwhelming satisfaction of employers in external partnerships demonstrates that institutions can attract and retain employer partners.

**Quality Careers and Employability Support**

Micro-credentials do not, in and of themselves, guarantee career or employment success. Seeking a micro-credential is one *adaptive career behavior* that people might enact in pursuit of their career goals. Similarly, holding a micro-credential is one form of *employability capital* that people might highlight when seeking employment. Micro-credentials should be designed and delivered in a *lifelong learning ecosystem* of educational, employment, and social support systems. Thus, career development practitioners (CDPs) have a crucial role to play in helping learners approach micro-credentials as part of a cohesive career strategy (Healy, 2021).

*Challenges for Micro-Credential Learners*

Many learners lack the information or insight needed to make good decisions surrounding their career, while career information and advice is not always reliable. This may be particularly true for micro-credentials, which are often marketed to beginners. Challenges when selecting micro-credentials and using them in employment include:

- Micro-credentials may not actually be necessary for the learner's particular goals
- Learners may miscalculate the labor market demand for certain skills
- Learners may select micro-credentials that do not meet explicit or implicit requirements for entry into their desired profession
- Reactive or anxious learners may accumulate micro-credentials haphazardly, with little coherent purpose or strategic intent
- Learners may lack the job application skills needed to express the value of their micro-credentials to employers or integrate them into a coherent employability narrative (Martinez-Marroquin & Male, 2021).

*Career Development Support for Learners*

The acts of earning credentials or learning new skills are a central concern in career development research and practice. There is ample evidence that quality career development support positively influences learners' career decision-making, problem-solving, adaptability, and identity formation. To support informed career decision-making, CDPs frequently encourage adaptive career behaviors such as reflection on career interest and values, career exploration, occupational research, and strategic networking. Certain micro-credentials offer a dual advantage to some of these activities, as they present low-cost and low-commitment opportunities for career exploration, in addition to the skill development and credentialing they are designed for.

Recent trends in career development theory and practice have focused on the importance of future-oriented mindsets and meaningful work. CDPs assist their clients in adopting proactive, optimistic, and adaptable attitudes, often by helping them compose, or recompose, meaningful agentic career narratives. A micro-credential is unlikely, in and of itself, to transform such a career narrative without an associated process of personal reflection and reinvention.

Healy (2021) concludes that education providers have a responsibility to ensure that career information and support is actively offered to micro-credential learners, just as it is for students in degree programs.

**Building Stackable Credentials at State and College Level**

*Actions States Are Taking to Scale Stackable Credentials*

All credentials are not equal, so taking the time to define credentials of value is a step some states are engaged in. State frameworks for credential quality tend to emphasize value in the labor market, stackability, and the degree to which a credential conveys a set of knowledge and skills clearly and credibly. State agencies can ensure consistency in which credentials are promoted across the state and may be well positioned to support institutions with labor market analysis and resources on quality credentials (Donadel, 2023; Moodie & Wheelahan, 2021).

Stackable credential programs are commonly developed in fields like health care, engineering technology, and information technology, which require expensive equipment that must be updated as technology advances and draw on a limited pool of qualified faculty. College efforts to link and embed programs, align curricula with industry, and design learner-centered programs can also be costly. To fund these programs, some states are providing institutions with program start-up funding, formula funding (providing colleges with money each time a student earns a certificate), and financial aid programs that provide students with help to cover the costs of tuition for short-term programs, which often aren't covered by federal financial aid.

Florida and Ohio have started streamlining credit for prior learning and now offer common statewide credit for industry credentials. Opportunities for credit from prior learning are often underutilized because the policies are confusing to navigate, often require costly assessments and burdensome paperwork, and policies often differ from institution to institution. Alleviating the problem at the state level is an ongoing process, with Florida and Ohio being first movers (Fain, 2023).

While many students earn multiple credit-bearing credentials, very few make the transition from noncredit to credit programs. To address this, states are aligning reporting requirements across noncredit and credit programs, providing guidance on how to bridge funding across programs, and tying funding and accountability to college enrollment and earning of multiple credentials.

At a time when many are questioning the value of higher education, stackable credentials may offer an opportunity to convey to the public and to industry how colleges and states are being responsive to their concerns about the limitations and costs of the traditional degree system. Stackable credentials can help to rebrand what a college education is and open up the minds of individuals and employers.

*Five Actions Colleges Are Taking to Scale Stackable Credentials*

"Build it and they will come." Students who completed certificates in colleges with more credential options were more likely to re-enroll and stack credentials. Stackable credentials offered within the same institution can ensure seamless movement from one program to the next, and most students stack within the same institution. To ensure that programs offer value, colleges may be subject to state standards around credentials of value.

Embedding short-term credentials into longer-term credential programs. When colleges make the effort to align their programs with industry credentials, it also makes it easier to award credit for prior learning so that individuals who already hold the industry credential get partial credit and can more quickly make progress toward college credentials. In Ohio, 38 percent of health care certificate programs and 63 percent of IT certificate programs reported embedding these shorter-term credentials into degree programs (Gallagher et al., 2023).

Many students who stack credentials stay enrolled continuously, and many work while enrolled, but few are moving in and out of college programs throughout a career. Some institutions have recognized the importance of getting students through quickly and have invested in intensive programs that do just that. More intensive programs may require

individuals to take more time off work, however. Colleges should talk with prospective students and their employers to understand how best to structure programs that meet employed students' needs (D'Agostino, 2023).

Very few individuals understand the full range of options that colleges offer and how different credentials map onto each other. Colleges must take the lead in telling a clear story about what they offer and how these credentials can be stacked to prepare for better jobs and careers. Colleges can also provide proactive advising to students to support informed program selection and re-enrollment when students first enroll and when they are nearing completion.

It is important to ensure that these programs offer comprehensive student supports to cover tuition costs and resources to support basic needs like food, childcare, and housing. Employers may help to shoulder some of these costs through tuition assistance programs. It is also important to ensure that individuals can receive support as they move across different programs and credentials. Studies have shown that many noncredit students like access to basic student services that are commonly afforded to college enrollees.

**Framework for Assessment and Recognition**

Micro-credentials are delivered mostly online, over a shorter period than traditional courses and often to a different audience profile, with a more professional and vocational emphasis. These differences mean that many of the assumptions built into standard assessment and recognition practices are challenged. For instance, there is insufficient time and contact with an educator to establish a relationship which can be used as a basis for verification. Still, ID verification, formal assessment, and recognition of credit are essential to the value proposition of micro-credentials (Iniesto et al., 2022).

| Checklist | Guidelines | Criteria |
|---|---|---|
| (1) Fulfils microcredential definition | (1) Microcredential | (1) Units of study<br>(2) Formal qualifications<br>(3) HEIs |
| | (2) Course | (4) Plan of study<br>(5) Theory and practice<br>(6) National qualification framework |
| | (3) Study-time and Workload | (7) Total study time<br>(8) Number of hours |
| (2) Assessment and recognition | (4) ID verification | (9) Reliable method of ID verification<br>(10) Accessible method |
| | (5) Assessment | (11) Recognition of prior learning<br>(12) Summative assessment<br>(13) Accessible assessment |
| | (6) Accreditation and recognition | (14) Method for recognition<br>(15) Digital format<br>(16) Strategy<br>(17) Standardised |
| | (7) QA framework | (18) Quality assurance process<br>(19) Internal quality assurance |

A 2022 study by Pollard & Vincent indicate three principles to offer certainty for micro-credentials: (1) being embedded in the curriculum, (2) alignment with the university mission, (3) is a critical and reflective pedagogy. Understanding the reasonable criticism of the current offer of micro-credentials and their labor market focus, if micro-credentials are to be recognized for formal university credit, then they need to be subject to equivalent quality requirements regarding assessment as standard offerings.

Micro-credentials need to adopt elements of best practices from both traditional higher education and more informal studies such as MOOCs. Based on how European micro-credential providers have sought to address some of these challenges, this research has identified the following practices. First, to implement reliable verification methods, beyond the 'basic' level. Next, the assessment should be rigorous, involving a mix of computer-graded and teacher-graded methods. Recognition requires that a transcript is provided detailing course content, study hours, and the number of credit points. It is also suggested that a credible industrial employer endorses the relevance of the micro-credential to emphasize its vocational value. This research has detailed how existing practices are attempting to realize this, but it will remain an area that is likely to evolve and adapt as micro-credentials are adapted for new purposes and audiences (Iniesto et al., 2022).

**Recognition of Workplace Learning**

The variability of micro-credentials (units or components within a qualification, MOOCs, upskilling training programs, soft-skills assessments, etc.) makes recognition and portability of them difficult. In response, initiatives to introduce a level of standardization are emerging (Boud & de St. Jorre, 2021; Healy, 2021). This standardization encourages the design of micro-credentials for greater recognition and portability of on-the-job learning.

By designing micro-credentials for alignment with formal qualifications may leave employers' needs unmet and continue the disconnect between employers' and education providers' perceptions on graduates' work-readiness. Higher education providers are moving towards greater integration of professional exposure to prepare students, and contemporary workers need to actively keep up their employability and be prepared to adapt. In this context, the line between workers and students is blurred. This new reality acknowledges the range of ways to engage with learning through professional experience, both for students and workers (Martinez-Marroquin & Male, 2021).

*Background*

Current workforces are largely unprepared for the future of work, and new ways to facilitate on-the-job learning are required. Traditional, formal ways of learning are not flexible and targeted enough to respond to the demand. Most of the learning that occurs in the workplace is largely informal and social, responds to new challenges at work, and the learning process is continuous, self-regulated, and mediated by the individual. This is unlike graduation documentation that testifies the completion only of the formal qualification. Embedding micro-credentials related to professional practice could improve the development and visibility of

students' employability. Likewise, embedding micro-credentials in the workplace could allow for more professional documentation of learning.

*Common Language*

Martinez-Marroquin & Male (2021) advocate for micro-credentials to provide development and recognition of employability developed outside the traditional learning system, through a range of activities such as co-curricular experiences and on-the-job learning, that may occur prior, after, or during formal qualifications. In relation to the connection with higher education, we argue for the use of micro-credentials to better embed workplace learning practices in formal qualifications, not only for credit, but also to enhance work-integrated-learning in the curriculum.

**References**


Boud, D., St Jorre, T (2021). The move to micro-credentials exposes the deficiencies of existing credentials*. The Journal of Teaching and Learning for Graduate Employability* 12(1), 18-20.

D'Agostino, S. (2023). Microcredentials confuse employers, colleges and learners. *Inside Higher Ed*. Retrieved from: https://www.insidehighered.com/news/2023/03/03/microcredentials-confuse-employers-colleges-and-learners.

Daughtery, L., Nguyen, P., Kushner, J., & Bahr, P. (2023). How to Build Stackable Credentials? *Inside Higher Ed.* Retrieved from: https://www.insidehighered.com/opinion/blogs/beyond-transfer/2023/10/05/how-build-stackable-credentials.

Donadel, A. (2023). This major accreditation body is helping legitimize alternative credentials. *University Business Daily.* Retrieved from: https://universitybusiness.com/this-major-accreditation-body-is-helping-legitimize-alternative-credentials/

Etter, B., Fong, J., Sullberg, D., Wang, K. (2024). *Unveiling the Employer's View: An Employer-Centric Approach to Higher Education Partnerships.* Collegis Education & UPCEA.

Fain, P. (2023). Statewide talent marketplaces. *The Job.* Retrieved from: https://the-job.beehiiv.com/p/statewide-talent-marketplace

Fong, J., Ahluwalia, A., & Etter, B. (2021). Shifting Paradigms: Understanding Institutional Perspectives on Microcredentialing – A Needs Assessment Surrounding New Credentials. UPCEA and ModernCampus. Retrieved from: https://moderncampus.com/about/newsroom/new-study-from-modern-campus-and-upcea.html.

Fong, J., Etter, B., & Sullberg, D. (2023). The effect of employer understanding & engagement on non-degree credentials. Collegis Education and UPCEA.

Gallagher, S. R., Leuba, M., Houston, C., & Trieckel, E. (2023). *Digital Credentials and Talent Acquisition Tech: Closing the Data Gap between Learning and Hiring.* Northeastern Center for the Future of Higher Education & Talent Strategy.

Ha Thi Ngoc, N., Spittle, M., Watt, A., & Van Dyke, N. (2022). *A systematic literature review of micro-credentials in higher education: a non-zero-sum game*. Higher Education Research & Development, 1-22. https://doi.org/10.1080/07294360.2022.2146061

Healy, M (2021). Micro-credential learners need quality careers and employability support*. The Journal of Teaching and Learning for Graduate Employability* 12(1), 21-23.

Iniesto, F., Ferguson, R., Weller, M.,Farrow, R., & Pitt, R. (2022). Introducing a reflective framework for the assessment and recognition of micro-credentials. *Open Technology in Education, Society, and Scholarship Association (OTESSA) Journal* 1(1), 1-20.

Kennesaw State University. (2021, October 12). Micro-credential Guide. Kennesaw, GA. Retrieved from: https://cia.kennesaw.edu/initiatives/micro_credentials/Micro-credential%20Guide%20v1.1.pdf

Martinez-Marroquin, E., & Male, S. (2021). Micro-credentials for recognition of workplace learning. *Journal of Teaching and Learning for Graduate Employability*, 12(1), 52-57.

Moodie, G., & Wheelahan, L. (2021). Credentialing micro credentials. Journal of Teaching and Learning for Graduate Employability, 12(1), 58-71.

Pollard, V., & Vincent, A. (2022). Micro-credentials: a postdigital counternarrative. *Postdigital Science and Education*, 4(3), 843-859.

Quigley, J. (2021, January 12). What are stacked credentials? Retrieved December 19, 2022, from https://www.accredible.com/blog/what-are-stacked-credentials

UPCEA (2023). *Alternative Credentials: Business and Program Models*.

# Draft JMU Guidelines on Micro-Credentials

Last updated June 12, 2024

## Introduction

Employers increasingly seek workers who are job-ready and can utilize their skills immediately upon hire. Likewise, employees face growing pressure to increase their independence and desirability in the labor market. Workers increasingly expect training opportunities designed using industry-aligned curriculum and work-focused learning approaches, whose quality is verified by employers.

In response to these trends, higher education institutions worldwide have begun offering micro-credentials; this move has been heralded by advocates as an effective tactic for increasing enrollment and access, growing diversity, and aligning higher education with employer and industry needs. While micro-credentials are seeing renewed and growing interest, their principles (competency-based, short or time-driven experiences, and established standards of quality) have been in use in higher education for decades.

Goal 3, Objective 2 of the Academic Affairs Strategic Plan identifies continuing to develop JMU's online capacity, presence, and expertise as a priority for our division. Higher education institutions, including many R2 universities, are responding quickly to the changing post-COVID economy and workplace expectations. One significant movement is towards micro-credentials as a "new currency of learning," where employers and students expect "demonstrated skills and competencies completed through more stackable pathways of higher education" (Fong et al., 2021).

The Taskforce on Micro-Credentials worked from April 2023-May 2024 to:

- Establish clear goals and vision for JMU's approach to micro-credentials that responds to industry and employer needs while maintaining JMU's institutional identity and brand.
- Make recommendations for both specific topic areas to explore and procedures and guidelines for development, including funding, curricular approval, issuing digital badges, and other institutional policies.

## Purpose

The result of the taskforce was to encourage the JMU community to consider micro-credentials that:

- Encourage and support innovation at the academic unit level, and
- Showcase learning experiences that are unique to JMU, part of what makes this institution special, rather than duplicating existing micro-credentials offered by other institutions, and
- Support our students and alumni in their needs to demonstrate to employers the richness and specificity of the skills they bring, and
- Are responsive to our community and state workforce needs.

**Definition of Micro-Credential**

A singular definition of 'micro-credential' has not been widely agreed upon in higher education. Key characteristics of micro-credentials include:

- Smaller, shorter, and more narrowly-focused units of study (class, workshop, or program) than a 'macro-credential' (e.g. a bachelor's degree)
- Additional, alternative, or complementary to formal qualification
- Require less time to complete than a traditional degree
- Often stackable and can provide pathway to certificate or degree completion

Whether a micro-credential is offered for credit or non-credit is a key question. The answer to this question determines how a program must be approved and by which bodies, curricular processes, budget templates, program evaluation procedures, etc.

**JMU Micro-Credentials - Recommended Procedures**

At JMU, based on the work of the Task Force on Micro-Credentials, we will focus on non-credit micro-credentials. These will not appear on a JMU official transcript as an awarded credential (like a degree or certificate does). JMU micro-credentials can take multiple forms, including non-credit certification programs, curricular and co-curricular experiences, non-credit activities combined with specific credit experiences, etc.

The State Council of Higher Education for Virginia (SCHEV) does not define or approve micro-credentials if they are not offered for credit or recorded as a credential on a JMU transcript. If a JMU micro-credential were offered for credit and recorded as a credential on a JMU transcript, then all SCHEV approvals for certificates (at the graduate or undergraduate level, as appropriate) would apply. (See JMU policies on Undergraduate Certificates and Graduate Certificates.)

Any academic unit, center/institute, or other relevant department at JMU may propose a micro-credential. Proposal forms will be developed and available on the SPCE website.

If an academic unit wants to propose a micro-credential and they want it to appear on a JMU transcript as a "notation" or "milestone," that will require curricular approval through the C&I process because the notation must be documented in the JMU catalog. This applies even though the micro-credential itself is a non-credit program. (Contact the Office of the Registrar for more information.)

All other JMU micro-credentials will not appear on a JMU official transcript, since they are non-credit activities; they will likely award a JMU badge (see below), and will not need to go through a C&I curricular approval.

Most micro-credentials will award a badge, which is a shareable, JMU-branded image that students can include on their LinkedIn or other social media profiles, and which links directly to a rich description of the experiences, skills, and competencies documented upon completion of that badge. All badges at JMU will be coordinated through the School of Professional &

Continuing Education, in order to maintain consistency in visual branding and types of documentation; contact SPCE for more information.

**Financial Models**

There are two proposed financial models for micro-credentials: SPCE-supported, and independent. If a micro-credential is intended for an audience that is not currently part of the JMU community (alumni, corporate employees, community members), then the first budget model is likely to be more appropriate. If a micro-credential is intended for an audience of current JMU students, then the second budget model is likely to be more appropriate. However, these are guidelines, and many possible scenarios exist; SPCE welcomes discussion of all new ideas to determine feasibility and viability, and to explore financial scenarios.

1. SPCE-supported: If a micro-credential requires new resources, then the academic unit should work with SPCE to develop a budget based on the instructional expenses, operating expenses, and proposed revenue generated (similar to SPCE's regular budget process in partnership with academic unit).
2. Independent: if no new resources are required, the academic unit will not need a separate budget for a micro-credential. The academic unit should still reach out to SPCE to make arrangements for the awarding of a badge for the micro-credential.

**Shared responsibilities:**

- Collaboration and communication: regular communication channels shall be used to facilitate the exchange of information, best practices, and lessons learned in microcredentialing across the university.
- Evaluation and continuous improvement: ongoing evaluation and assessment of micro-credentials (at the program level, as well as the overall level of this initiative in offering micro-credentials at JMU) shall be conducted to measure effectiveness, student learning, and program impact. Feedback mechanisms will be implemented to solicit input from students, faculty, employers, and other stakeholders to inform continuous improvement efforts.

**Academic Unit Responsibilities**

- Determine appropriate content, assessment, and advising standards for the micro-credential, tailored to their disciplinary expertise and educational goals.
- Academic units are encouraged to innovate and experiment with new micro-credential offerings, delivery modes, and pedagogical approaches to meet emerging trends and student needs.
- Determine and provide appropriate faculty resources for the micro-credential.
- Ensure their dean and academic unit head are aware of the proposed program.
- Academic units may choose to collaborate with external partners, industry stakeholders, and other academic institutions to enhance the quality and relevance of micro-credential programs.

- Academic units are encouraged to consider micro-credentials that are unique to JMU and leverage JMU's singular strengths and innovation, rather than duplicating existing micro-credentials from other institutions.

**SPCE Responsibilities**

- Act as liaison with industry and help connect industry workforce development needs with academic units as appropriate.
- Partner with academic unit on budget development and administration when needed.
- Provide administrative, fiscal, and logistical support for budget expenses (including paying instructors and operating expenses), program implementation, and other operations assistance.
- Share guidelines and best practices for documentation for badges, so that consistency can be maintained in what a JMU badge means.
- Centralized management of credential issuance, verification, security, documentation, and records on JMU badge platform (currently Badgr, which is owned by Canvas).
- Provide marketing and promotional efforts to enhance the visibility and recognition of JMU micro-credentials.

Documents to include on an SPCE website on micro-credentials:

- This policy/guidelines
- White paper on micro-credentials from Task Force
- Images of sample JMU badges
- Guidelines for the information that should accompany a badge (documentation, competencies, etc.)
- Micro-credential proposal forms
- Chart of types of micro-credentials

**References:**

Fong, J., Ahluwalia, A., & Etter, B. (2021). *Shifting Paradigms: Understanding Institutional Perspectives on Microcredentialing – A Needs Assessment Surrounding New Credentials.* UPCEA and ModernCampus. Retrieved from: https://moderncampus.com/about/newsroom/new-study-from-modern-campus-and-upcea.html.