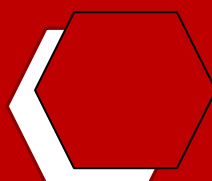# Microcredential and
Digital Badging Guide

TEXAS TECH UNIVERSITY
HEALTH SCIENCES CENTER™

What are Microcredentials?

Microcredentials play a pivotal role in facilitating lifelong learning by offering individuals a flexible and targeted approach to acquiring new skills and knowledge. As the professional landscape continues to evolve, microcredentials provide a means for individuals to continually upskill or reskill in response to changing industry demands without the time commitment of a full degree program. This enables professionals to stay abreast of the latest developments in their field, pursue new career opportunities, and adapt to emerging trends, ultimately supporting their ongoing professional growth and contributing to a culture of lifelong learning.

The integration of microcredentials at TTUHSC is aimed at elevating the visibility and marketability of TTUHSC learners, highlighting their knowledge and skill sets. Concurrently, this initiative seeks to foster increased engagement in campus initiatives and career advancement among learners, faculty, staff, alumni, clinicians, preceptors, and university community partners.

"Microcredentials create an innovative framework of building blocks of continuous learning, empowering individuals to adapt, upskill, and thrive in a rapidly evolving and competitive world. They are not simply "certificates", but rather badges of honor that represent specific skills and the knowledge necessary to succeed in healthcare and beyond. Microcredentials are not endpoints, but rather gateways to broader pathways of learning fostering a culture of continuous growth and development. Embracing microcredentials will help us create excellence in all we do by focusing specifically on the skills and knowledge needed for the tasks we perform. They are the tangible proof of our dedication to continuous growth, empowering us through innovation and collaboration to be the best for those we serve."

Darrin D'Agostino, DO, MPH, MBA
Provost and Chief Academic Officer
Texas Tech University Health Sciences Center

What is a digital badge?

A digital badge is a type of credential issued to candidates for meeting certain criteria. This includes traditional students completing educational courses, employees passing training, individuals signing up for membership or becoming an affiliate of a non-profit or association. Digital badges follow the Open Badge Format and are portable, verifiable, and include detailed context about the represented achievement or affiliation.

Digital badges are versatile in their use and can be issued as a standalone achievement or as part of a 'stacked' micro-credential collection. Stacked badges can be collected in various models:

- **Vertical**: Progressing through levels in a single topic, for example Microsoft Word levels 1, 2, and 3
- **Horizontal**: Building a collection of awards across numerous topics, for example Microsoft Word level 1 and Microsoft Excel level 1
- **Hybrid**: A combination of both vertical and horizontal where the learner builds a personal portfolio of different skills to various levels of competency, for example Microsoft Word levels 1and 2, Microsoft Excel levels 1, 2, and 3, and Microsoft PowerPoint level 1

Microcredentials and Badges

How to use a digital badge: Digital badges are easily shareable, can be added to LinkedIn profiles, embedded on websites, and in email signatures. Encouraging recipients to celebrate their achievements by sharing their digital badge is a great way to increase visibility for the brand and the credential. It also allows recipients to showcase their abilities and professional development for improved employability.

META-Data

Badge Name
Badge Criteria
Badge URL
Issue Date
Issuing Organization
Recipient information
Expiry Date
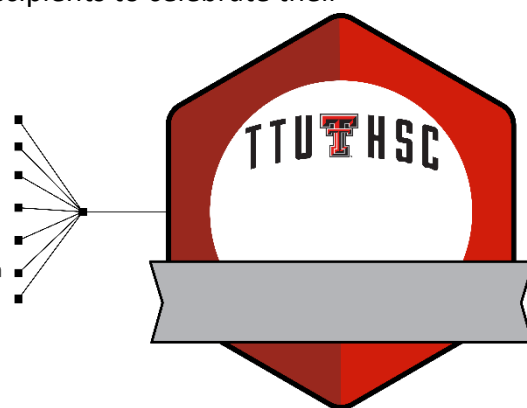
In the pursuit of earning a microcredential/badge, learners may:

- Undergo rigorous training to acquire specialized knowledge and skills
- Engage in hands-on practice of competencies highly valued by employers
- Apply their newly acquired expertise in a real-world work environment
- Receive constructive feedback to enhance their performance and proficiency
- Attain verifiable digital credentials as recognition of their achievement

Approved Badge Designs

Spirit Mark

School/Institute/Office Badge Level

Badge Name

Badges are designed to communicate both who the target audience it is primarily designed for, and display at what level of learning and mastery the badge was earned. Each badge displays the TTUHSC spirit mark, the name of the issuing school, institute, or office, the badge level, and the name of the badge.
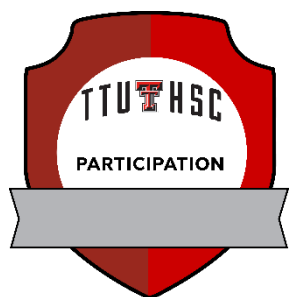
TTUHSC Student: designed for students to offer the opportunity to showcase their specialized skills and knowledge beyond traditional academic qualifications. These digital badges validate expertise in specific areas, making you more attractive to potential employers and graduate programs.

TTUHSC Faculty/Staff: In today's ever evolving professional world, continuous upskilling is crucial for career advancement. Provides professionals with a powerful way to demonstrate their mastery of niche competencies and keep pace with industry demands. These badges serve as verifiable endorsements of expertise, setting you apart in a crowded job market and signaling your commitment to ongoing professional development.
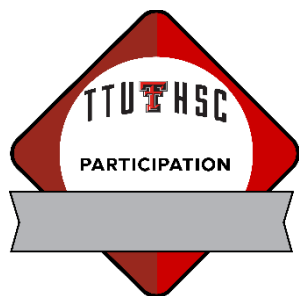
TTUHSC Badge for any learner: Whether you're a lifelong learner, a career changer, or someone passionate about personal growth, these badges offer a flexible and accessible pathway to acquiring new skills and knowledge. These digital badges recognize your accomplishments in short, targeted learning experiences, empowering you to diversify your expertise and adapt to evolving opportunities.

Badge Levels

Red: Participation

The red badge represents the foundational level of exposure to educational content. This badge signifies participation in foundational learning experiences, laying the groundwork for future skill development and knowledge acquisition.

Bronze: Level I

The bronze badge recognizes the foundational level of new knowledge acquisition. Recipients of the bronze badge have demonstrated the ability to recall or recognize specific information, showcasing a solid understanding of key concepts and techniques.

Silver: Level II

The silver badge recognizes a learner's ability to analyze and apply new information. Recipients of the silver badge have demonstrated the ability to explain in own words previously learned information. Learners are able to describe how to do a procedural skill but may not be able to consistently demonstrate the new skill.

Gold: Level III

The gold badge recognizes a learner's ability to synthesize and evaluate. Recipients are able to transfer existing knowledge and skills to new situations, understanding a concept's components and their relationships to each other, and analyze information. Learners are able to show, in an educational setting, how to do what the educational activity intended them to be able to do.
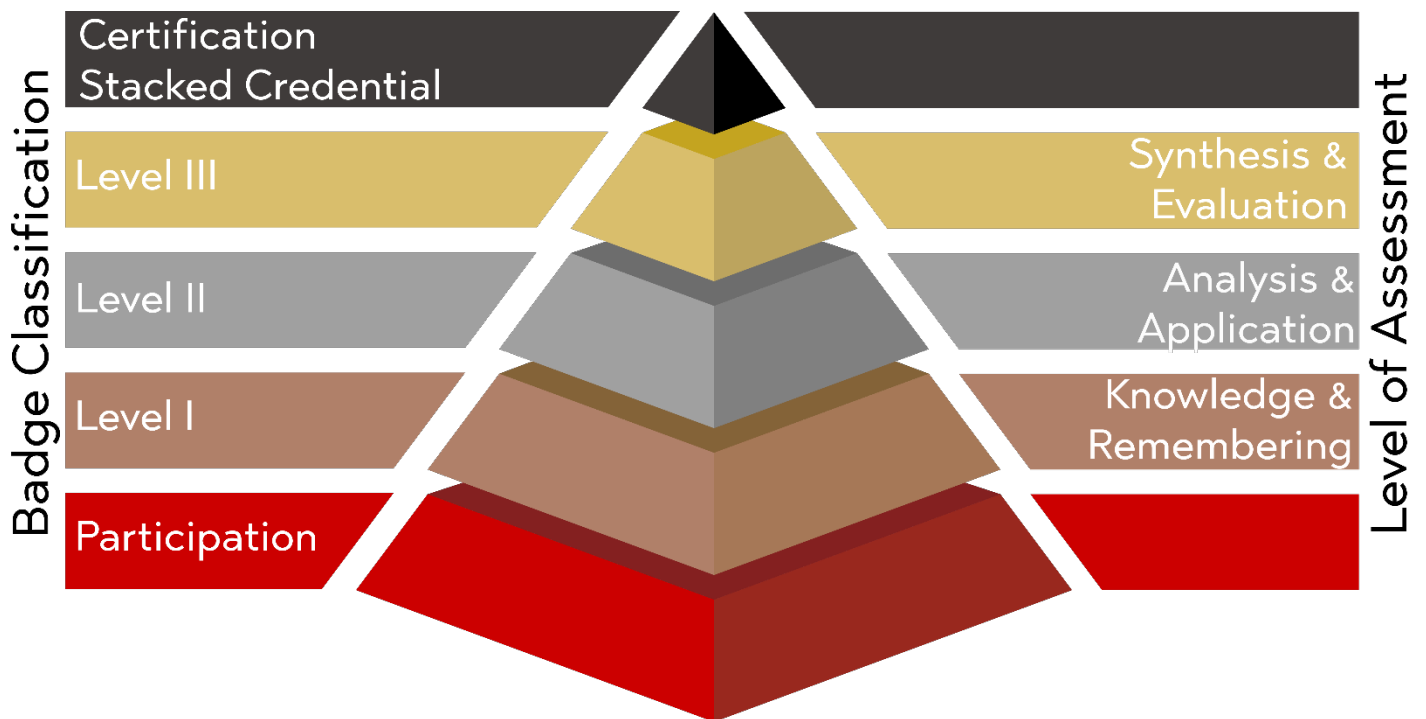
Black: Certificate/Credential

The black badge represents the achievement of a credential or certificate, signifying a learner's ability to integrate and apply multiple skills in real-world scenarios, showcasing their readiness to tackle complex, interdisciplinary tasks in professional or practical environment(s).

Other Badges/External Microcredentials: Some badges will be offered by TTUHSC but in coordination or cooperation with an outside agency or group. These badges may use different iconography and design style that is determined on a case-by-case basis by the office of the Vice Provost for Academic Affairs & Integrated Learning.

Taxonomy Framework

- Microcredentials/badges emphasize the expected learning outcomes that learners are to attain upon completion. Learners are required to demonstrate their achievement of these outcomes through an assessment. Upon successfully reaching the predetermined proficiency level set by the badge provider, the learners are awarded the microcredential.
- Microcredentials/badges are learner-centered and meet industry standards. They enhance existing skills and competencies, addressing specific industry needs and broader skills like communication and leadership.
- Badge providers disseminate a comprehensive set of information upon the publication of microcredentials/badges. Prior to course commencement, learners have access to details including learning outcomes, delivery modes, expected workload, course content, and assessment methods.

	Associated Activity	Level of Assessment	Classification of Badge
	Complete a recognized solution, certification, or track/specialization of courses		Certification Stacked Credential
	Consistently demonstrate desired behavior, ability, or on the job training	Synthesis & Evaluation	Level III
YES	Demonstrate skill or apply skill in some way	Analysis & Application	Level II
	Successfully complete quiz or written assignment	Knowledge & Remembering	Level I
NO	Attend a presentation, webinar, seminar		Participation

Is there an Assessment?

Framework/Taxonomy	Level I	Level II	Level III
Revised Bloom's taxonomy[1]	**Knowledge and remembering**: learner must recall or recognize specific information	**Analysis and application**: learner must understand or be able to explain in own words previously learned information and use new information, rules, methods, concepts, principles, and theories	**Synthesis and evaluation**: transferring existing knowledge and skills to new situations, understanding a concept's components and their relationships to each other, and analyze information
Moore's expanded outcomes framework[2]	**Declarative knowledge**: the acquisition and interpretation of facts	**Procedural knowledge**: participants who possess procedural knowledge can describe how to do something but may not be able to actually do it	**Competence**: participants show in an education setting how to do what the educational activity intended them to be able to do
Miller's pyramid[3]	**Knows**	**Knows how**	**Shows how**
Debriefing for Meaningful Learning[4]	**Right thinking**: this person demonstrates the right 'declarative knowledge' via a quiz.	**Right action**: this person demonstrates the right procedural level "demonstration" of a skill.	**Right Action with Right Thinking**: this person would demonstrate the ability to not only demonstrate the action—but the reasoning behind the action.

Career Readiness Competencies

Adapted for use and reprinted courtesy of the [National Association of Colleges and Employers](#).
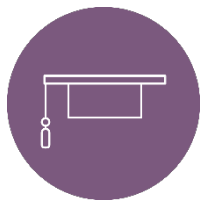
Career & Self-Development

Proactively develop oneself and one's career through continual personal and professional learning, awareness of one's strengths and weaknesses, navigation of career opportunities, and networking to build relationships within and without one's organization.

Sample Behaviors

- Show an awareness of own strengths and areas for development.
- Identify areas for continual growth while pursuing and applying feedback.
- Develop plans and goals for one's future career.
- Professionally advocate for oneself and others.
- Display curiosity; seek out opportunities to learn.
- Assume duties or positions that will help one progress professionally.
- Establish, maintain, and/or leverage relationships with people who can help one professionally.
- Seek and embrace development opportunities.
- Voluntarily participate in further education, training, or other events to support one's career.

Communication

Clearly and effectively exchange information, ideas, facts, and perspectives with persons inside and outside of an organization.

Sample Behaviors

- Understand the importance of and demonstrate verbal, written, and non-verbal/body language, abilities.
- Employ active listening, persuasion, and influencing skills.
- Communicate in a clear and organized manner so that others can effectively understand.
- Frame communication with respect to diversity of learning styles, varied individual communication abilities, and cultural differences.
- Ask appropriate questions for specific information from supervisors, specialists, and others.
- Promptly inform relevant others when needing guidance with assigned tasks.

Critical Thinking

Identify and respond to needs based upon an understanding of situational context and logical analysis of relevant information.

Sample Behaviors

- Make decisions and solve problems using sound, inclusive reasoning and judgment.
- Gather and analyze information from a diverse set of sources and individuals to fully understand a problem.
- Proactively anticipate needs and prioritize action steps.
- Accurately summarize and interpret data with an awareness of personal biases that may impact outcomes.
- Effectively communicate actions and rationale, recognizing the diverse perspectives and lived experiences of stakeholders.
- Multi-task well in a fast-paced environment.

Leadership

Recognize and capitalize on personal and team strengths to achieve organizational goals.

Sample Behaviors

- Inspire, persuade, and motivate self and others under a shared vision.
- Seek out and leverage diverse resources and feedback from others to inform direction.
- Use innovative thinking to go beyond traditional methods.
- Serve as a role model to others by approaching tasks with confidence and a positive attitude.
- Motivate and inspire others by encouraging them and by building mutual trust.
- Plan, initiate, manage, complete and evaluate projects.

Professionalism

Knowing work environments differ greatly, understand and demonstrate effective work habits, and act in the interest of the larger community and workplace.

Sample Behaviors

- Act equitably with integrity and accountability to self, others, and the organization.

- Maintain a positive personal brand in alignment with organization and personal career values.
- Be present and prepared.
- Demonstrate dependability (e.g., report consistently for work or meetings).
- Prioritize and complete tasks to accomplish organizational goals.
- Consistently meet or exceed goals and expectations.
- Have an attention to detail, resulting in few if any errors in their work.
- Show a high level of dedication toward doing a good job.

Teamwork

Build and maintain collaborative relationships to work effectively toward common goals, while appreciating diverse viewpoints and shared responsibilities.

Sample Behaviors

- Listen carefully to others, taking time to understand and ask appropriate questions without interrupting.
- Effectively manage conflict, interact with and respect diverse personalities, and meet ambiguity with resilience.
- Be accountable for individual and team responsibilities and deliverables.
- Employ personal strengths, knowledge, and talents to complement those of others.
- Exercise the ability to compromise and be agile.
- Collaborate with others to achieve common goals.
- Build strong, positive working relationships with supervisor and team members/coworkers.

Technology

Understand and leverage technologies ethically to enhance efficiencies, complete tasks, and accomplish goals.

Sample Behaviors

- Navigate change and be open to learning new technologies.
- Use technology to improve efficiency and productivity of their work.
- Identify appropriate technology for completing specific tasks.
- Manage technology to integrate information to support relevant, effective, and timely decision-making.
- Quickly adapt to new or unfamiliar technologies.
- Manipulate information, construct ideas, and use technology to achieve strategic goals.

Definitions

Learner: An inclusive term that encompasses a variety of target audiences, including those who are taking part in the educational process whether it be a microcredential or a full degree program. TTUHSC welcomes learners to learn new competencies and skills whether they are currently enrolled undergraduate or graduate students, residents, alumni, faculty, staff, preceptors, or individuals in the community who seek opportunities to enhance their current skills to secure future opportunities and advance their careers or advance their knowledge in subject matters.

Competency: Learnable, measurable, and/or observable knowledge and skill sets gained.

Microcredential: Microcredentials are a competency-based form of skills validation that represents a unit of learning. Microcredentials can be awarded in the form of digital badges or digital certificates. A quality microcredential must be based on formative and summative assessment best practices, aligned to industry or post-graduate needs, and culminate in a reflective learning and/or skill development experience. Microcredentials have a clear purpose of preparing recipients for the workforce, helping them stand out to experiential placements and employers, bridging to larger credentials or learning pathways, supporting life-long learning opportunities for professionals, and enhancing professional skills through continuing education. As defined by the National Association of Colleges and Employers (NACE), career readiness is the attainment and demonstration of requisite competencies that broadly prepare graduates for a successful transition into the workplace. Microcredentials serve as assessed pathways of learning, stackable and portable, ensuring their value in future educational endeavors and recognition by industry partners. Each microcredential has a demonstrated relationship to at least one of the career competencies and/or skills.

Digital Badge: Digital badges serve as electronic representations of microcredentials, visually presented online and embedded with metadata providing contextual information about the learning experience. They are easily managed, verified, and shared online, guided by a competency statement, and linked to participant learning outcomes. The design of the digital badge, including shape and color, is standardized by a style guide developed by AAIL. Upon meeting the competencies, the badge is electronically issued and linked to the sponsoring institution and evaluation criteria.

Certificates: Certificates are issued by educational institutions to acknowledge the completion of specialized curricula distinct from degree programs, indicating mastery within a specific area of knowledge or skill set. These programs, whether credit-bearing or non-credit pathways represent a focused domain

of learning tailored to meet industry or academic requirements. Credit-bearing certificates, subject to approval by institutional policies and regulatory standards, typically entail a narrower scope of coursework compared to degree programs but offer academic credits within the issuing institution's degree framework. Conversely, non-credit-bearing certificates represent a dedicated learning pathway culminating in a certification of knowledge and skill attainment, distinct from the institution's degree framework.

Digital Certificates: Digital certificates serve as electronic counterparts to traditional paper certificates, providing a streamlined and secure method of verification. These digital credentials are conferred upon the successful fulfillment of designated learning outcomes within credit-bearing certificate programs or non-credit-bearing certification learning pathways, ensuring alignment with predetermined educational objectives and standards. The format and design specifications for digital certificates adhere to established guidelines outlined in a style guide developed by AAIL.

Microcredential or Digital Badge Proposal: A comprehensive document outlining the conceptualization and criteria for a prospective new badge, necessitating the successful fulfillment of a task or experiential learning endeavor leading to the acquisition of a defined goal, skill, knowledge, or competency. This proposal includes detailed elements such as associated artifacts, reflections, and rubrics, strategically incorporated to validate and showcase the mastery of specific outcomes. Proposals can be submitted to the TTUHSC Microcredential Application for consideration.

External Microcredentials: Credentials designed and administered by external organizations or vendors (e.g., CITI, Lynda badges, Microsoft, Google Certification, and CISCO certification), may be of value to TTUHSC learners and team members and may be made available or required as part of some programs on campus. These are not, in and of themselves, TTUHSC microcredentials and, as such, are not covered by this policy. However, external microcredentials may be incorporated into course requirements or into a microcredential (e.g., while TTUHSC does not award CITI credentials, a research methods course might require learners to demonstrate CITI credentials, or a microcredential might require participants to complete CITI credentials).

References

1. Anderson LW, Krathwohl DR. *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. 1st ed. Longman; 2001.

2. Moore Jr., D. E., Green, J. S., & Gallis, H. A. (2009). Achieving desired results and improved outcomes: integrating planning and assessment throughout learning activities. *Journal of Continuing Education in the Health Professions*, 29(1), 1–15. https://doi.org/10.1002/chp.20001

3. Cruess, Richard L. MD; Cruess, Sylvia R. MD; Steinert, Yvonne PhD. Amending Miller's Pyramid to Include Professional Identity Formation. Academic Medicine 91(2):p 180-185, February 2016. | DOI: 10.1097/ACM.0000000000000913

4. Dreifuerst, K. T. (2015, May). Getting started with debriefing for meaningful learning. Clinical Simulation in Nursing, 11(5), 268-275. http://dx.doi.org/10.1016/j.ecns.2015.01.005.