



Clarkson University

University/Industry Partnerships to Develop Your Workforce

Presenters

Duncan Adamson

Assistant Dean of Professional & Continuing Ed
Clarkson Alumnus--BS '92, MBA '93



Justin Mason

Assistant Director of Learning Experience
aka "The Micro-Credentials Guy"



Phil Barker

Power Engineering Program Coordinator
Clarkson Alumnus—BS '85, MS '86



Agenda

- Clarkson University Overview
- Clarkson's Professional Graduate Programs
- Micro-credentials Overview
- Industry Partnership Example – National Grid
- Q&A / Discussion

Clarkson University Overview

- Private, national research university founded in 1896
- Based in Potsdam, additional facilities in Schenectady and Beacon
- More than 90 programs of study in engineering, business, arts, education, sciences and health professions.
- Enrollment: Approx. 2,900 Undergraduates and 1,100 Graduate Students
- One in five Clarkson alumni leads as a CEO, president, owner or senior executive of a company.
- Clarkson grads earn salaries that are among the top 2% nationwide.

100% Online Master's Degree Programs:

- Instructor-led
- Blend of asynchronous and synchronous online learning
- Small class sizes
- Flexible program pace
- Tech/Business MS Degrees:
 - MS in Applied Data Science
 - MS in Computer Science
 - MS in Business of Energy
 - MS in EE – Power Engineering
 - MBA



Hybrid Master's Degree Programs:

- Mostly online, with several residency weekends
- Blend of asynchronous & synchronous online learning and in-person learning
- Cohort-based, small class size
- Tech/Business MS Degrees:
 - MS in Engineering Management
 - MS in Construction Engineering Management



In-Person, Evening Master's Degree Programs:

- Based at our Capital Region Campus in Schenectady, NY
- Blend of evening, in-person classes and online coursework
- Ideal for students living and working in the Capital Region
- Tech/Business MS Degrees:
 - MS in Electrical Engineering
 - MS in Mechanical Engineering

NOTE: THESE PROGRAMS WILL BE AVAILABLE ONLINE SOON!



Example: MS in Engineering Management (MSEM) – 30 Credits

- Hybrid format is designed to accommodate working professionals
- Blend of online classes and on-site weekend residencies
- Live online classes in the evenings outside of work hours
- Six on-site, weekend residencies in Schenectady, NY
- Collaborate with classmates and faculty to share best practices
- Develop a deep and lasting professional network
- Most in-person and online sessions are recorded, archived, and available anytime
- 94% retention rate; 85% of students complete the program within three years

MS in Engineering Management Curriculum

Core Classes (all 7):

- Cost Mgmt & Financial Analysis
- Decision Analysis & Risk Mgmt
- Operations Strategy & International Competitiveness
- Negotiations & Relationship Management
- Quality Management & Process Improvement
- Strategic Project Management
- Capstone Project

Sample Electives (select 3):

- Operations Mgmt & Factory Physics
- Leading & Managing Organizations
- Enterprise Sustainability
- Advanced Topics in Supply Chain Management
- Law for Engineers
- Intro. to Digital Transformation
- Analytics for Decision Making
- Data Visualization
- Geospatial Systems



Micro-Credentials

What Are Micro-Credentials?

Microcredentials are stackable digital credentials that are endorsed by Clarkson University and that represent earners' verified knowledge, skills, and experiences.

**PROJECT
MANAGEMENT
FOR LEADERS**

KNOWLEDGE

Clarkson

Value of Micro-credentials for all Stakeholders

Value for Higher Education

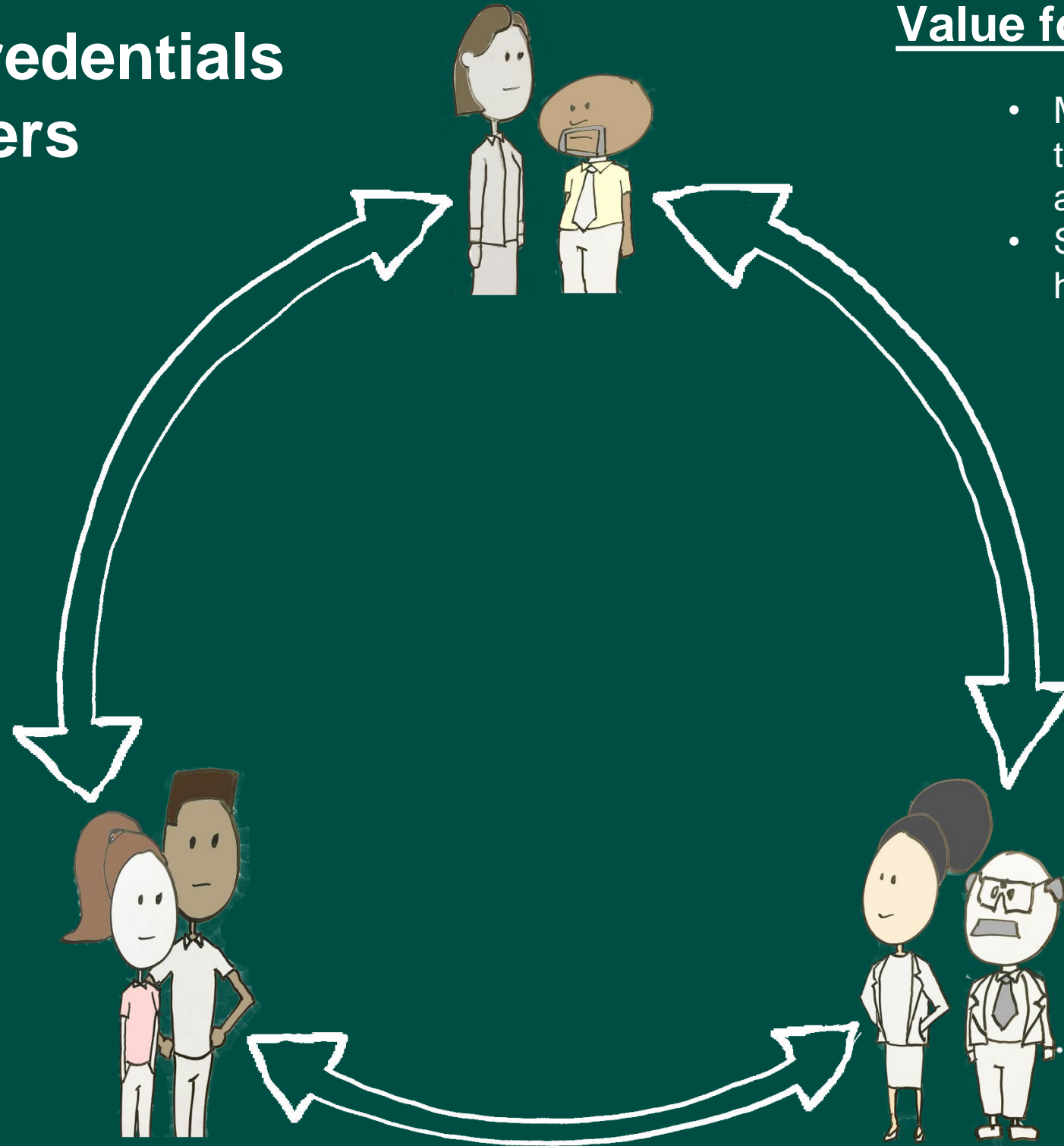
- Micro-credentials: low-cost training that reaches wider audience
- Step toward “skills-based hiring”

Value for Learners and Employees

- Recognition for knowledge, skills, and experiences acquired on job
- Micro-credentials help define employee paths to role progression & change

Value for Employers

- Custom employee training & development
- Identify & track internal talent and interests
- Find new & verified talent
- Retain employees



Clarkson Micro-credential Examples

Construction

INTERMEDIATE
CONSTRUCTION SITE PLANNING
Clarkson
— SKILLS —
Turner

FOUNDATIONAL
CONSTRUCTION TRADES AND LABOR RELATIONS
Clarkson
— KNOWLEDGE —
Turner

FOUNDATIONAL
•••
CONSTRUCTION DOCUMENTS
— SKILLS —
Clarkson

FOUNDATIONAL
Introduction to Major Building Systems
Clarkson
— KNOWLEDGE —
Turner

Project Management

ADVANCED PROJECT MANAGEMENT TOOLS & TECHNIQUES
— KNOWLEDGE —
Clarkson

PROJECT MANAGEMENT TOPICS FOR LEADERS
— KNOWLEDGE —
Clarkson

MANAGING PROJECT RISKS
— KNOWLEDGE —
Clarkson

STRATEGIC PROJECT MANAGEMENT METHODOLOGIES
— KNOWLEDGE —
Clarkson



Industry Partnership Example

Master of Science Degree Distance Learning Cohort Program in Power Engineering



Phil Barker
Coordinator Power Engineering MSEE Cohorts Program

Clarkson
UNIVERSITY

defy convention

Wallace H. Coulter
School of Engineering



Cohort MSEE Program with Concentration in Electric Power

- Industry Based Learning Cohorts (with utility companies and other energy industry based organizations)
- Cohort students get an advanced degree while working for their employer
- 100% Distance learning programs are structured at a pace suitable for work, life, student career balance
- Students learn with their peers/coworkers
- Employer Reimbursement programs welcome, reduced group tuition rates available
- Participating students gain marketability within the industry and gain expertise useful for employers

Typical Cohort MSEE Power Engineering Program

Structured on a quarter schedule, and takes 2.5 years (10 quarters) to achieve the required 30 credit-hours to graduate. On graduation, students receive a Master's of Science degree in Electrical Engineering, and an Advanced Certificate in Power Engineering:

- 6 required courses
- 3 elective courses
- 2 credits of seminars
- 1 credit design/research project



Power Cohort Contacts:

Philip Barker
Coordinator, Power Engineering Cohorts Program
email: pbarker@clarkson.edu
Phone: 518-631-9863
Website: <https://corporate.clarkson.edu/electric-power/>



Thomas H. Ortmeyer
Director, Center for Electric Power System Research
Website: <https://www.clarkson.edu/cepsr>
Phone: 315-268-4035
Email: tortmeyer@clarkson.edu





Questions?



Clarkson FOUNDED 1896 125™