



## Integrating Industry Recognized Credentials into Four-Year Degree Programs Manufacturing Convening

December 10, 2019  
12:00–5:00 p.m. EST

Georgia Tech University Global Learning Center  
84 5<sup>th</sup> Street, NW  
Room 334/335  
Atlanta, Georgia 30308-1031

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| <p><b>LUNCH AND WELCOME</b><br/>(12:00–1:00 p.m.)</p> <p>Members of the project team, and Nelson Baker of the Georgia Institute of Technology, will welcome attendees to the convening, provide a brief overview of the project and the convening objectives, preview the agenda, and facilitate introductions.</p>       | <p><b>Nelson Baker</b><br/>Dean of Professional Education and Professor in the School of Civil and Environmental Engineering, Georgia Institute of Technology, and President of UPCEA</p> <p><b>Robert Hansen</b><br/>Chief Executive Officer, UPCEA</p> <p><b>Julie Uranis</b><br/>Vice President for Online and Strategic Initiatives, UPCEA</p> |
| <p><b>LEVEL SETTING DISCUSSION</b><br/>(1:00–1:30 p.m.)</p> <p>Roy Swift will facilitate a discussion about the definitions of credentials and the variations that exist. In addition, attendees will consider a set of guiding questions that are projected on the screen.</p>   | <p><b>Roy Swift</b><br/>Executive Director, Workcred</p>   |
| <p><b>KEYNOTE AND DISCUSSION</b><br/>(1:30–2:15 p.m.)</p> <p>William Bonvillian will provide an overview of the current state of manufacturing in the United States. He will share his insights about new models that are being developed to prepare the future manufacturing workforce and the role of universities.</p> | <p><b>William Bonvillian</b><br/>Lecturer in the Science Technology and Society and Political Science Departments, and Senior Director, Special Projects, Office of Digital Learning, Massachusetts Institute of Technology</p>  |
| <p><b>BREAK</b><br/>(2:15–2:30 p.m.)</p>  |  |
| <p><b>UNIVERSITY MODELS AND GROUP DISCUSSION: CLEMSON UNIVERSITY AND OHIO UNIVERSITY</b><br/>(2:30–3:30 p.m.)</p> <p>As manufacturing jobs begin to require greater levels of education, universities are exploring ways to strengthen engineering education by incorporating pathways for</p>                            | <p><b>Moderator: Shalin Jyotishi</b><br/>Assistant Director, Economic Development and Community Engagement, APLU</p>   |

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| <p>students to earn industry-recognized certifications, certificates, and participate in various work-and-learn opportunities. In this session, we will explore how two institutions are addressing regional manufacturing workforce development needs by leveraging industry-recognized credentials and learning opportunities. This will be followed by a group discussion.</p>  | <p><b>Mark Johnson</b><br/>Thomas F. Hash Endowed Chair in Sustainable Development and Director of the Center for Advanced Manufacturing, Clemson University</p> <p><b>Todd Myers</b><br/>Professor and Department Chair, Engineering Technology and Management, Ohio University</p> |
| <p><b>MAKING TOMORROW’S WORKFORCE FIT FOR THE FUTURE OF INDUSTRY: COORDINATING NON-DEGREE CREDENTIALS INTO BACCALAUREATE PROGRAMS</b><br/>(3:30–4:15 p.m.)</p> <p>Corporations such as Siemens, Google, AWS, and IBM have developed non-degree credentialing programs that assess whether individuals have the necessary skills. Learn how Siemens is working with universities to prepare students for career opportunities involving mechatronics.</p> | <p><b>Gail Norris</b><br/>Director, SITRAIN Digital Industry Academy, Siemens</p> <p><b>Amanda Beaton</b><br/>U.S. Program Manager, Siemens Cooperates with Education, Siemens</p>   |
| <p><b>TABLE DISCUSSIONS: BARRIERS TO ALIGNING NON-DEGREE CREDENTIALS WITH DEGREES</b><br/>(4:15–4:45 p.m.)</p> <p>Participants will discuss what they have heard during the day and identify perceived barriers and solutions to implementing pathways that align non-degree credentials (e.g., certificates and certifications) and degrees.</p>  | <p><b>Sheila Martin</b><br/>Vice President, Economic Development and Community Engagement, APLU</p> <p><b>All</b></p>  |
| <p><b>TAKEAWAYS, WRAP UP, AND CLOSING REMARKS</b><br/>(4:45–5:00 p.m.)</p> <p>Participants will complete an online survey that asks for one takeaway and one question from today’s session. Participants are asked to share their thoughts with the group. Other takeaways and questions will be highlighted during tomorrow’s session.</p>  | <p><b>Andréa Rodriguez</b><br/>Assistant Director for Urban Initiatives/USU, APLU</p>  |
| <p><b>ADJOURNMENT</b><br/>(5:00 p.m.)</p>  |  |
| <p><b>RECEPTION</b><br/>(5:30–7:00 p.m.)</p> <p>Renaissance Atlanta Midtown Hotel<br/>866 West Peachtree Street, NW<br/>Atlanta, GA 30308</p>  | <p><b>All</b></p>  |



Coalition of  
Urban Serving Universities



## Integrating Industry Recognized Credentials into Four-Year Degree Programs Manufacturing Convening

December 11, 2019  
8:00 a.m.–12:00 p.m. EST

Georgia Tech University Global Learning Center  
84 5<sup>th</sup> Street, NW  
Room 334/335  
Atlanta, Georgia 30308-1031

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| <b>BREAKFAST</b><br>(8:00–8:30 a.m.)  |   |
| <b>WELCOME AND REFLECTIONS</b><br>(8:30–8:45 a.m.)<br><br>The convening will begin with a recap of the discussions from yesterday’s session.  | <b>Shalin Jyotishi and Andréa Rodriguez</b>   |
| <b>INTERACTIVE ACTIVITY</b><br>(8:45–9:15 a.m.)<br><br>Attendees will work in small groups to discuss and respond to a series of prompts.   | <b>Andréa Rodriguez</b>   |
| <b>MODEL AND DISCUSSION: DEVELOPING AN ADVANCED MANUFACTURING CERTIFICATE PROGRAM AT FOUR-YEAR UNIVERSITIES</b><br>(9:15–10:00 a.m.)<br><br>Julie Diop will share an example of how a new modular curriculum can be designed to offer technician certificates at four-year universities in the skills needed by advanced manufacturers.   | <b>Julie Diop</b><br>Program Manager,<br>AIM Photonics Academy Program,<br>Department of Materials Science<br>and Engineering,<br>Massachusetts Institute of<br>Technology  |
| <b>BREAK</b><br>(10:00–10:15 a.m.)  |   |
| <b>MODEL AND GROUP DISCUSSION: INSTITUTE FOR ENERGY MANAGEMENT PROFESSIONALS</b><br>(10:15–11:00 a.m.)<br><br>This session will explore how the Institute for Energy Management Professionals, originally established at Georgia Institute of Technology, provides personnel certification services. Frank Faulk and Bill Meffert will discuss the relationship between the certification body and the university, and opportunities for others to develop a similar model. | <b>Frank Faulk</b><br>Certification Director, Institute for<br>Energy Management Professionals<br>(IEnMP)<br><br><b>Bill Meffert,</b><br>Group Manager,<br>Georgia Manufacturing Extension<br>Partnership,<br>Enterprise Innovation Institute,<br>Georgia Institute of Technology |
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| <p><b>TABLE DISCUSSIONS</b><br/>(11:00–11:20 a.m.)</p> <p>Participants will discuss what support they would need to adopt one of the models they have learned about at the convening.</p>  | <p><b>Sheila Martin</b></p> <p><b>All</b></p> |
| <p><b>GROUP DISCUSSION: MOVING FORWARD</b><br/>(11:20–11:40 a.m.)</p> <p>Participants are asked to think about and discuss what type of support and technical assistance are needed to implement pathways that incorporate both degrees and industry-recognized non-degree credentials (e.g., certifications, certificates). In addition, the project team will share plans to use the information gathered during the convenings.</p> | <p><b>Roy Swift</b></p> <p><b>All</b></p>     |
| <p><b>WRAP UP, FINAL TAKEAWAYS, AND CLOSING REMARKS</b><br/>(11:40 a.m.–12:00 p.m.)</p> <p>Participants will complete an online post-convening survey. Data gathered from the survey will help design a roadmap for this ongoing project. Final findings and learnings will be shared with the group upon completion of the project.</p>   | <p><b>Andréa Rodriguez</b></p>                |
| <p><b>ADJOURNMENT</b><br/>(12:00 p.m.)</p>   |   |