



The National Center for Next Generation Manufacturing (NCNGM)

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Keywords: manufacturing

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1. Introduction

The National Center for Next Generation Manufacturing (NCNGM) is led by the Connecticut College of Technology (COT) housed at Tunxis Community College, CT, with the following community college partners; College of the Canyons, CA; Central Community College, NE; Columbus State Community College, OH; and Indian River State College, FL. The COT, a seamless career pathway for technician and engineering education, includes all 12 public CT community colleges and 10 universities. It has received National Science Foundation funding, creating the Regional Center for Next Generation Manufacturing (RCNGM) in 2004-2021 and the Next Generation Manufacturing Resource Center in 2018-present. This Resource Center nationally disseminates the best practices of the RCNGM, and other NSF ATE grantees to prepare the future advanced manufacturing workforce.

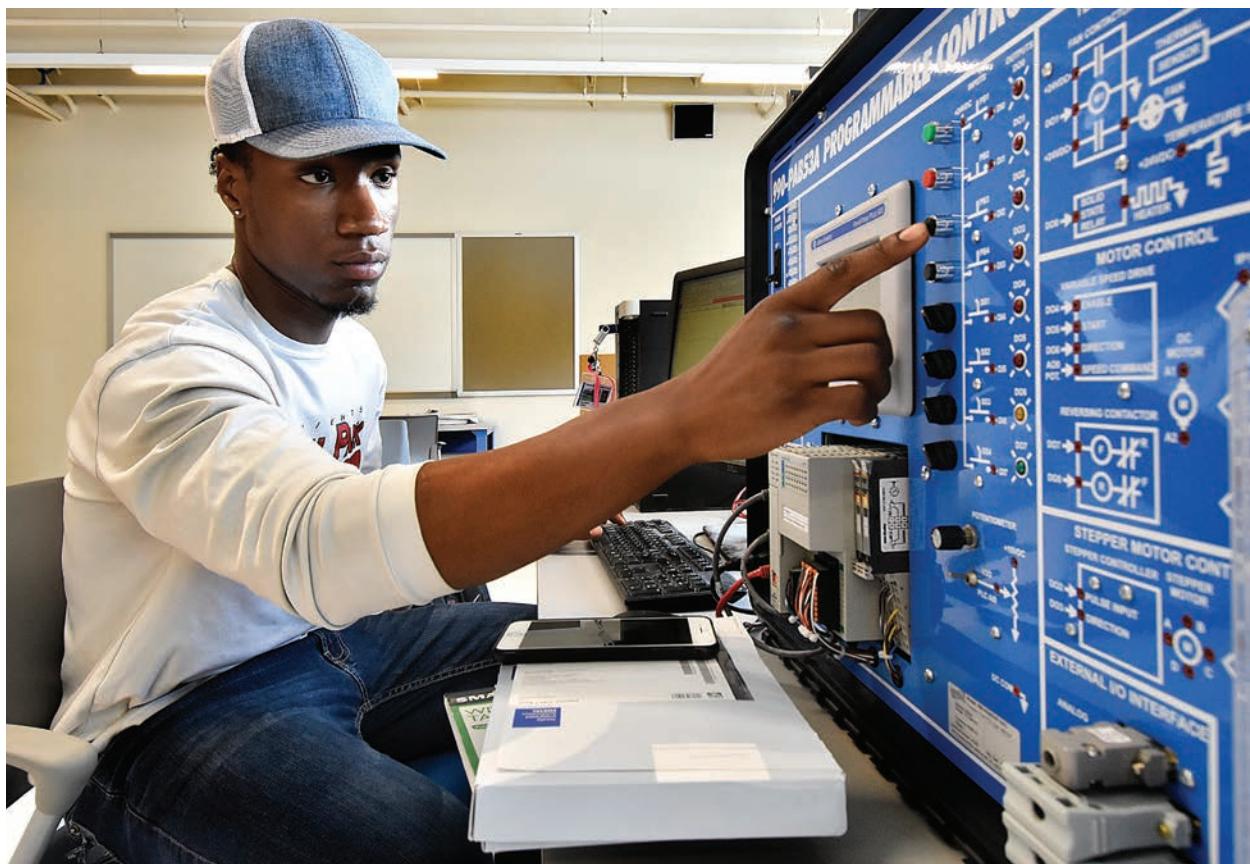


Fig. 1. Manufacturing Technician Student





In 2021, the NCNGM was funded and implemented and includes stakeholders from throughout the United States. The primary goals are to facilitate partnerships between the educational community and industry and disseminate the best practices required to address the need for a more highly-skilled, diverse workforce in the current and future advanced manufacturing environment. The NCNGM provides resources for students and educators in today's high-tech manufacturing companies that address Industry 4.0. The NCNGM also offers access to industry-driven curriculum, professional development, and resources in next-generation manufacturing and career outreach materials that support the recruitment and retention of students in advanced manufacturing programs.



Fig. 2. Manufacturing Technician Student

The NCNGM leadership strongly supports the Journal of Advanced Technological Education (J ATE) and the dissemination of exemplary programs and best practices from our community colleges. The NCNGM will work with the staff of J ATE to help address the need for a journal focused on technician education that will allow educators to publish their findings and seek out best practices discovered by their peers. In addition, the NCNGM stakeholders will feature papers published in J ATE in its own dissemination efforts, such as its website, social media platforms, and newsletter.

We encourage you, our colleagues at community colleges across the United States, to submit articles on how you have created or enhanced advanced manufacturing programs on your campus. The NCNGM leadership team looks forward to learning more about your successful programs.