

Implementing the Mechanisms to Lessen the Talent Gap in Advanced Manufacturing

ATE Summary | 2020

BACKGROUND

This project aims to meet the growing need for skilled CNC machinists in industry by: 1) developing a new CNC certificate program; 2) acquisition of advanced technology used in today's advanced manufacturing environments; 3) finding ways to award college credit to registered apprentices; and 4) breaking down the myths surrounding manufacturing as a dirty and dangerous career.

FUNDER:

National Science Foundation
Advanced Technological Education Program

TIMEFRAME:

2019-2022

AWARD:

\$685,297

Includes international travel supplement

NEW CERTIFICATE

[CNC Machinist](#) – Effective Fall 2020 – 1-year program

CIM102 – Introduction to CAD/CAM
MTT128 – Mill Applications
MTT129 – Lathe Applications
CIM104 – CNC Machining & Programming I

CIM124 - CNC Machining & Programming II
MTT213 – Machine Tool Applications
MTT131 – Quality Control with GD&T

NEW TECHNOLOGY

2 – TRAK K3 Knee Mill
2 – TRAK 1630 Lathe
1 – Mitutoyo Crysta-Apex S544 Coordinate Measuring Machine
1 – Sinterit Lisa Nylon Sintering 3D Printer

DISSEMINATION

68 – K12 Teachers/Counselors
32 – Community College Faculty
18 – Students
29 – Industry
2 – Community

MYTHS BUSTED AT EXTERNSHIP

6 – High School Counselors
7 – High School Teachers
50 – High School Physics Students



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This material is based upon work supported by the National Science Foundation under Grant No. 1902379. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.