



**USC UNIVERSITY CENTER FOR EXCELLENCE IN DEVELOPMENTAL DISABILITIES
(UCEDD)**

Innovators in Automation and Advanced Manufacturing Apprenticeship:

Building a pathway to employment

**The Interagency Advisory Committee on Apprenticeship
People with Disabilities Subcommittee**

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ARCHITECTURE,
CONSTRUCTION
& ENGINEERING
CHARTER HIGH SCHOOL

USC Viterbi
School of Engineering



siminsights



Plan of talk

- General information about the employment pathway and the apprenticeship
- Sectors the apprenticeship is in
- Populations served
- Successes and challenges

Innovators in Automation and Advanced Manufacturing Apprenticeship

- ❖ An apprenticeship program in **Automation Technician** occupation (O*NET Code 17-3024.01) for trainees with Autism Spectrum Disorder and other opportunity youth learners
- ❖ In the process of registering the apprenticeship with the Division of Apprenticeship Standards (DAS) – standards are being developed by DAS
- ❖ Recruiting employers to provide On The Job training for the apprenticeship, with employment prospects

Apprenticeship Program

Objectives and Training Model

- Between 12 and 24-month apprenticeship program depending whether it's full- of half-time; minimum: 6 months and 1 day
- 2,000 hours of paid on-the-job training (employer-guided)
- Competency-based program
- Employers shape the training and define the competencies and skills needed for their operations
- Related Technical Instruction: Classroom instruction
- 1 day a month, min. 144 hours (estimated 196 hours)
 - Pre-apprenticeship Content Overview (15 hours)
 - Overview of OSHA-Aligned Courses (ToolingU-SME) (27 hours)
 - ToolingU-SME Robotics Content (24 hours)
 - ToolingU-SME CNC/Machining/Manufacturing/Virtual Lab Content (78 hours)
- Soft skills, career readiness, mental health resilience training

Population

- ❖ Youth and young adults with Autism Spectrum Disorder
- ❖ Ages 16 to 24 (during funding period only, will be extended to individuals older than 24 years old)

AB 805:

A proposed Career Apprenticeship Bridge (CAB) Program would allow high school students to complete 300 hours of On the Job Training and 144 hours of Related Technical Instruction

- ❖ Other opportunity youth groups (e.g. veterans)
- ❖ Planned cohort composition:
 - 60% with ASD
 - 40% neurotypical other opportunity youth

Employment pathway supported by:

California Department of Developmental Services (DDS) employment grant:

Uniquely Abled Academy model of training

January 2023 – December 2024

Outcomes:

Piloted robotics programming with 5 adults with ASD for up to 4 sessions at the UCEDD;

- All 5 learned skills and content;

Trained and certified 14 young adults with ASD at College of the Canyon
in Universal Robot programming and SME/Tooling U curricula

- 9 trainees continued on to learn CNC machining;
- 5 were hired in manufacturing
- 2 entered an apprenticeship in manufacturing

Employment pathway supported by (*cont.*):

California Department of Industrial Relations (DIR), Division of Apprenticeship Standards (DAS)

California Opportunity Youth Apprenticeship (COYA) grant program

Inclusive apprenticeship model: 60% with ASD and 40% other opportunity youth participants (e.g. veterans)

- June 2024 – May 2025 – COYA Pre-apprenticeship Planning grant (Round 1)

Outcome: Pre-Apprenticeship registered with DAS May 2025 (DAS File # 101402)

- July 2025 – June 2026 – COYA Apprenticeship Planning grant (Round 2)

Outcome: Apprenticeship developed and currently being submitted to DAS

- July 2026 – June 2028 – COYA Pre-apprenticeship implementation grant (Round 3)

Outcome: Pre-apprenticeship to be launched at ACE Charter High School in September 2026 with 15 trainees (7-8 w/ASD)

in September 2027 with 25 trainees: 15 at ACE Charter (7-8 w/ASD) and 10 at College of the Canyons (5-6 with ASD)

California Apprenticeship Initiative (CAI) program

(LEA / ACE Charter applicant; CHLA UCEDD sub-contractor))

- July 2026 – June 2028 – Pre-apprenticeship implementation grant

Outcome: Pre-apprenticeship to be launched at ACE Charter High School in September 2026 with 15 trainees (7-8 w/ASD);

in 2027 with 25 trainees (12-14 with ASD): 15 at ACE Charter and 10 at College of the Canyons

Preparatory Pre-apprenticeship training before the apprenticeship

Future Innovators in Automation & Advanced Manufacturing *(DAS File #101402)*

- SME/ToolingU Robotics Manufacturing Fundamentals Certification (24 hours)
- Universal Robots (UR) Cobot Certification (96 hours)
- Computer Numeric Control (CNC) Machining Certification (432 hours)
- Career Readiness & Soft Skills Training

Successes and challenges

Related to employer engagement and recruitment

- Successes:

- formed networks with Workforce Development boards, Chambers of Commerce, and industry partners;
- received letters of support from two employers that have been submitted with the DAS apprenticeship registration
- are in negotiations with a third high level employer to receive a letter of support and a commitment for OJT placement

- Challenges:

- Need to be linked to more employers to provide OJT in Los Angeles and Ventura Counties

Thank you!
Q and A