

Advanced Manufacturing Sector Strategic Plan

1. Attract, grow, and connect tomorrow's manufacturing workforce. Increase the awareness and appreciation of manufacturing careers and programs amongst students, parents, faculty, counselors, administrators, and businesses.

1.1.1. Organize programs at the Community Colleges for high school students e.g. summer camps, summer institutes, skills competitions, Dream-it-Do-it networks, Skills USA, etc.

1.2. Broaden and enhance career exploration and work-based learning opportunities for middle school, high school, and Community College students.

1.2.1. Assist colleges in developing internships and work-based learning opportunities for Community College

1.2.2. Organize Entree to Employment dinners at colleges

1.2.3. Develop industry sponsored Project Based Learning (PBL) opportunities for Community College Students

1.2.4. Explore the creation of a statewide solution to subsidize internships for Community Colleges students

1.3. Improve access to manufacturing programs for both students and industry.

1.3.1. Grow colleges' capacity to offer new courses/programs to meet unmet workforce demand

1.3.2. Support the development of articulation agreements between high schools, Community Colleges, and 4-year universities

1.3.3. Increase online course offerings for manufacturing programs

2. Update, expand, and align K-16 career educational pathways to improve student success. Align K-16 curriculum with industry needs.

2.1.1. Provide professional development for Community Colleges and High Schools faculty e.g. externships, technical training, industry tours, sabbaticals, etc.

2.1.2. Integrate soft-skills and life-skills into existing manufacturing programs e.g. New World of Work

2.1.3. Convene regional industry advisory meetings

2.1.4. Assist Community Colleges to strengthen curriculum to ensure program relevance to students, business, and industry

2.1.5. Assist high schools in developing manufacturing programs aligned with Community College programs and industry needs

2.1.6. Develop Skills Standards for Manufacturing Occupations

2.2. Develop solutions to increase the pool of qualified faculty.

2.2.1. Host training workshops for current or potential instructors

2.2.2. Develop mentoring programs at colleges to recruit future faculty from current student population

2.2.3. Offer scholarships to encourage more students to complete the Associate Degree

2.3. Develop cross-sector pathways to improve student success.

2.3.1. In collaboration with other industry sectors develop new courses/programs to meet industry needs

2.3.2. Develop Biotech & Manufacturing cross-sector pathways supporting manufacturing divisions

2.4. Develop Information & Communication Technology and Manufacturing cross sector pathways supporting manufacturing

2.4.1. Develop Entrepreneurship and Manufacturing cross-sector programs supporting manufacturing.

2.4.2. Develop Construction (ECU) and Manufacturing cross-sector pathways supporting manufacturing

2.4.3. Develop Agriculture and Manufacturing cross-sector pathways supporting manufacturing

2.4.4. Conduct needs analysis of skills that are common across multiple industry sectors by conducting joint advisories and/or labor market research.

3. Increase Upward Mobility for Californian's by Upskilling and Reskilling

3.1. Assist regions and colleges to provide training for in-demand skills within their local communities. *

3.1.1. Develop training programs for in-demand skills that are not already being covered by existing "for-credit" offerings.

3.1.2. Create a network of colleges/centers that provide fee-based, short-term customized training

3.1.3. Leverage and partner with Community Colleges and other regional organizations to provide non-credit, short-term training course for individuals and businesses.

3.2. Increase the use of ETP funds by Community Colleges and industry for incumbent worker training.

- 3.2.1. Increase and expand utilization of ETP funds by Community Colleges and industry to up-skill incumbent workers
- 3.2.2. Partner with Community Based Organizations to provide skills training.

4. Improve access to industry-recognized credentials and apprenticeships.

4.1. Assist Community Colleges to adopt industry-recognized credentials.

- 4.1.1. Assist colleges to obtain third party accreditations for their manufacturing programs
- 4.1.2. Integrate third party industry recognized credential assessments into the curriculum
- 4.1.3. Increase the number of NIMS trained and certified faculty.
- 4.1.4. Integrate Industry Recognized Credentials (i.e., National Career Readiness Certificate,) into manufacturing programs

4.2. Increase awareness and development of pre-apprenticeship and apprenticeship programs.

- 4.2.1. Create and/or promote apprenticeship programs
- 4.2.2. Create pre-apprenticeship programs aligned with established apprenticeship programs.

5. Improve collaboration across the state to ensure manufacturing remains a priority sector in every region of California

Build sustainable partnerships between community colleges, K-16, industry, labor, and other regional workforce development partners.

- 5.1.1. Develop regional and statewide advisory board for the Advanced Manufacturing Sector.
- 5.1.2. Organize Manufacturing/Industrial Summits in the region to improve partnerships among community colleges and stakeholders.
- 5.1.3. Create Next Generation Sector Partnerships across all regions. Host "State of the Manufacturing" events for Community College Administrators and Business Leaders.

5.2. Develop a statewide unified marketing and communication plan/platform. *

- 5.2.1. Use the CACT.org and/or MakingItInCalifornia.com website to promote the AM Sector.
- 5.2.2. Participate in the development of cross-regional marketing materials.
- 5.2.3. Participate in the development of cross-sector marketing materials.

6. Accelerate the adoption of emerging industrial technologies to increase student employability and global competitiveness of businesses.

Conduct primary research to identify emerging skills and labor market trends to assist Community Colleges in developing and updating curriculum.

- 6.1.1. Partner with Centers of Excellence (CoE) and other organizations to conduct primary research on emerging technologies and their Impact on Manufacturing Workforce.
- 6.1.2. Provide professional development for faculty on new and emerging technologies shaping the future of Manufacturing.
- 6.1.3. Develop curriculum recommendations for faculty to review and adopt.

6.2. Educate businesses on advanced technologies.

- 6.2.1. Conduct workshops, manufacturing summits, and seminars for industry.
 - 6.2.2. Provide businesses with latest research and connect them with resources.
 - 6.2.3. Support and participate in industry-focused technology forums, conferences, expositions.
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