# Deans Council

San Diego & Imperial Center of Excellence

# LMI REPORTS COMPLETED - SEPTEMBER 2025

SOC Code	Occupation, Skill or Topic	TOP or CIP Code*	TOP Title	College	Month Requested	New Program Recommendation	Supply Gap	Living Wage
19-4071	Forest and Conservation Technicians		Forestry	Palomar	08/2025	Proceed	Yes	Yes
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	0114.00						
33-2011	Firefighters							
13-1041	Compliance Officers							
33-2021	Fire Inspectors and Investigators							
17-3026	Industrial Engineering Technologists and Technicians	0054.00	Manufacturing and Industrial Technology	San Diego City	8/2025	Proceed	Yes	Yes
17-3027	Mechanical Engineering Technologists and Technicians	0956.00						

# LMI REPORTS REQUESTED - SEPTEMBER 2025

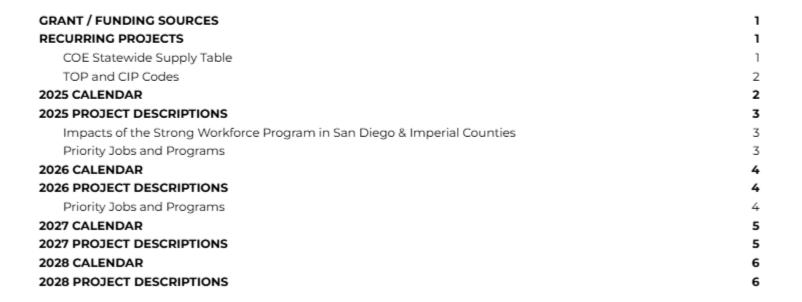
SOC Code	Occupation, Skill or Topic	TOP or CIP Code*	TOP Title	College	Month Requested
51-9082	Medical Appliance Technicians	1214.00	Orthopedic Assistant	Grossmont	9/2025
17-3023	Electrical and Electronic Engineering Technologists and Technicians				
17-3024	Electro-Mechanical and Mechatronics Technologists and Technicians				
51-9162	Computer Numerically Controlled Tool Programmers	0956.00	Manufacturing and Industrial Technology	Palomar	9/2025
49-9041	Industrial Machinery Mechanics				
17-3026	Industrial Engineering Technologists and Technicians				
13-2011	Accountants and Auditors				
43-3031	Bookkeeping, Accounting, and Auditing Clerks	N/A	N/A	MiraCosta	9/2025

# **NEW RESOURCE!**

# SPECIAL PROJECTS









#### **GRANT / FUNDING SOURCES**

- CAI California Apprenticeship Initiative
- EWD Economic and Workforce Development
- IDRC Industry Driven Regional Collaboratives
- LA COE Los Angeles Center of Excellence
- SDWP San Diego Workforce Partnership
- SWC Southwestern College
- SWP Strong Workforce Program

# SEPTEMBER 2025

# Projects:

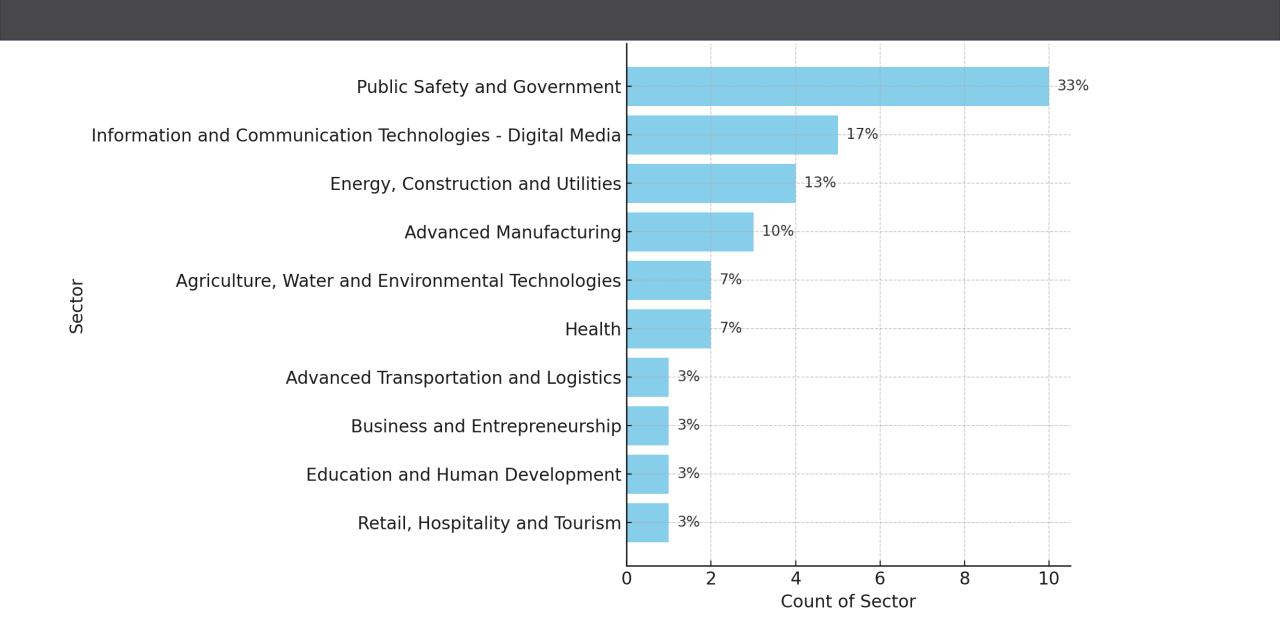
- Palomar Career Education Community Forum (September 11)
- Southwestern Career Education Community Forum (September 24)
- Military-to-Civilian Employment Workshop at MiraCosta (September 18)
- <u>Imperial Community College District Profile</u> and <u>Dashboard</u> (SWP, RSWP)
- MiraCosta Community College District Profile and Dashboard (SWP, EWD)
- Palomar Community College District Profile and Dashboard (SWP, EWD)
- San Diego Community College District Profile and Dashboard (SWP, EWD)
- Southwestern Community College District Profile and Dashboard (SWP, EWD)
- Otay Mesa Profile (SWCCD)

# OCTOBER 2025

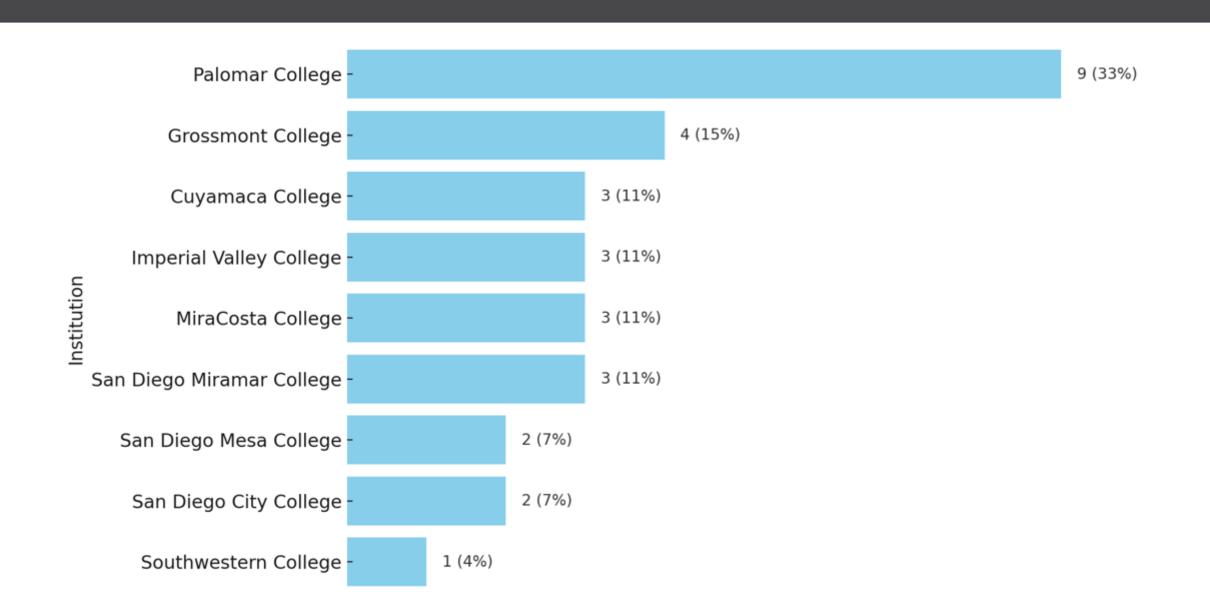
## Projects:

- IVROP Keynote Presentation (October 3)
- UCSD Extended Studies Showcase Co-Presentation (October 6)
- California Assisted Living Association (CALA) Virtual Workforce Symposium on Senior Care (October 14)
- Counselor Institute 2.0 Kickoff Event (October 17)
- CCCAOE Fall Conference (October 22-24)
- GCCCD Profile and Dashboard (SWP, EWD)
- Adult Learners Report (SWP)
- SDIV Regional Research Group Fall 2025 Meeting (October 30)

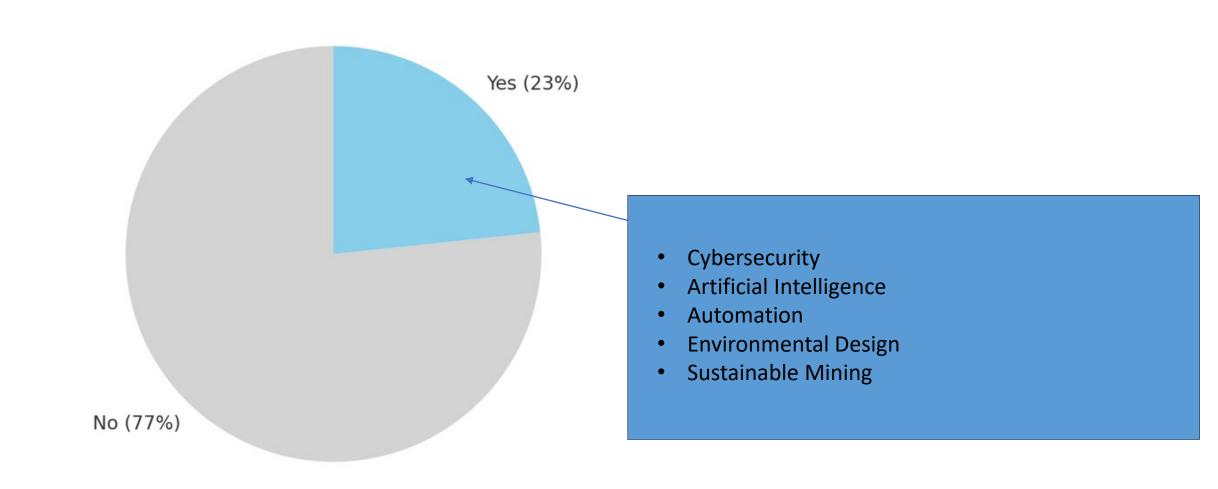
# DISTRIBUTION OF PROGRAMS BY SECTOR



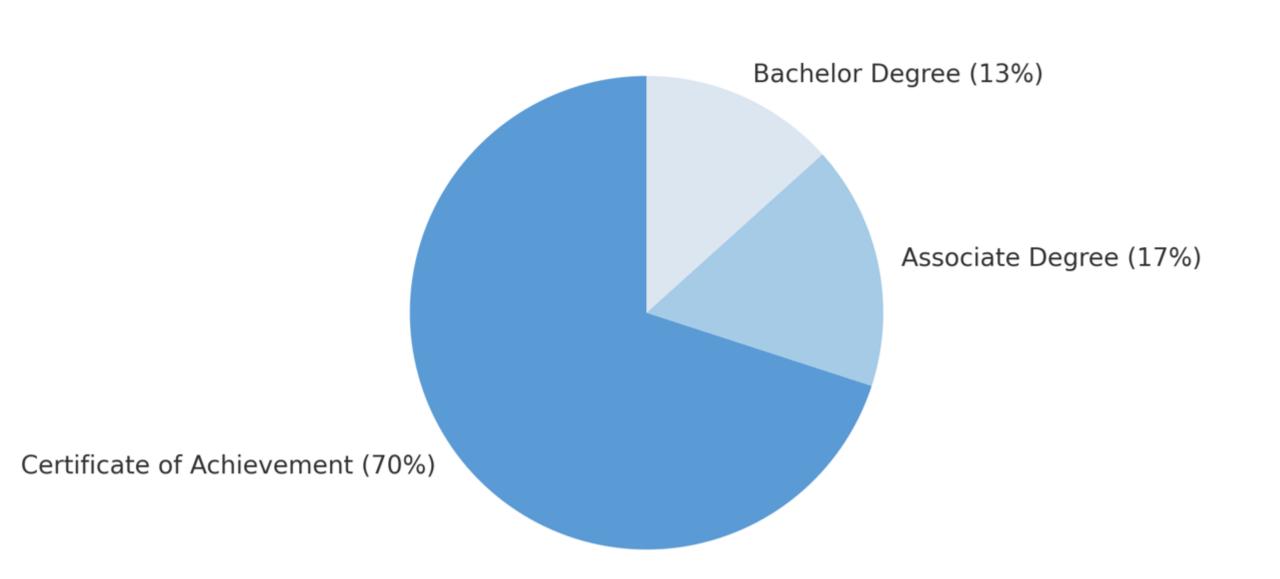
# SUBMISSIONS BY INSTITUTION



# **EMERGING PROGRAMS DISTRIBUTION**

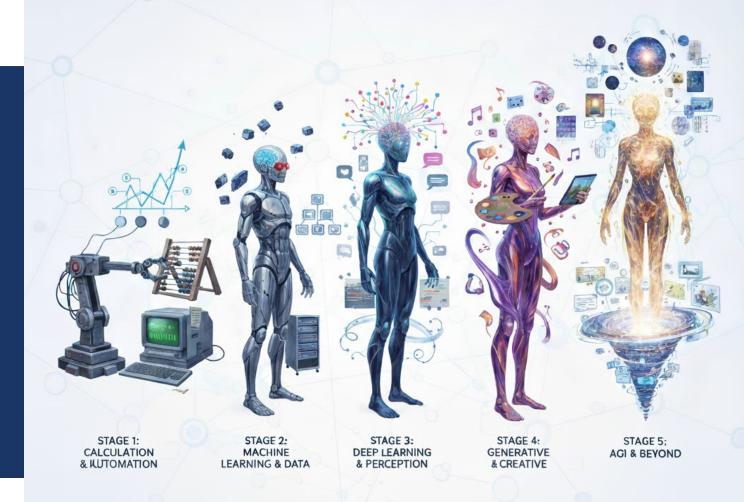


# PROGRAMS BY AWARD LEVEL



# Al and the Workforce: Emerging Insights & Impacts

# **Evolution of Al**





# News

# Teen Wins \$250K for Using AI to Discover 1.5 Million Hidden Objects in Space

BY ANN MOTRUNICH, CALIFORNIA INSTITUTE OF TECHNOLOGY - APRIL 15, 2025



Banned By Columbia, Backed By Millions: 21-Year-Old's Al Startup Cluely Lets You Cheat On Exams, Interviews, And Sales Calls

Paula Tudoran April 27, 2025

# Finance worker pays out \$25 million after video call with deepfake 'chief financial officer'



# Why AI & Workforce Impacts Matter Now

 Generative AI use at work reached 40–46% in 2024–2025

• Al capabilities are advancing rapidly (e.g., Software Engineering-bench accuracy rose from 4% to 71%)

Key question: Is AI automating, augmenting, or transforming work?





# TOP 10 MOST AI-EXPOSED OCCUPATIONS

# Task exposure ≠ full job replacement

- Data Entry & Clerical Workers Very high repetition, structured tasks, predictable inputs → easy to automate with software, scriptable workflows
- Telemarketers & Call Center Agents Dialogue scripts, lead qualification, call handling are increasingly handled by Al/voice agents
- 3. Customer Service Representatives Al chatbots, virtual assistants, and NLP systems can handle first-line queries and support today
- 4. Administrative Assistants Email drafting, scheduling, correspondence, information management are increasingly assisted by Al
- 5. Bookkeeping & Accounting Clerks Many tasks (invoicing, reconciliation, record-keeping) are rule-based and already supported by accounting software & RPA

- Legal Assistants / Paralegals Document review, contract drafting, e-discovery, legal research are being augmented or replaced by Al tools
- 7. Report Writers / Journalists / Editors Content generation by LLMs
- 8. Financial Analysts Many task elements (e.g. reconciliation, forecasting, data aggregation, reporting) show high exposure.
- 9. Web Developers / UX Designers Front-end coding & design tasks are automatable
- 10. Junior Software Developers Routine code writing and debugging by LLMs



# TOP 10 LEAST AI-EXPOSED OCCUPATIONS

# **Least Exposed ≠ Immune**

- Nannies / Childcare Workers

   Tasks like caring for children, emotional judgment, supervision, unpredictable behavior
- 2. Firefighters Requires physical risk taking, real-time decision making under uncertainty, adaptation to unique emergencies
- 3. Nursing Assistants / Personal Care Aides High degree of human touch, empathy, physical care, and responsiveness to changing conditions
- 4. Janitors / Cleaners / Housekeeping Staff Many cleaning tasks are unstructured, in diverse environments, and require adaptability
- Dishwasher / Kitchen Helpers Food service support roles involve varied physical tasks in messy, dynamic settings

- Landscaping / Grounds Maintenance Workers Work outdoors, varied terrain, improvisation needed (weather, terrain, obstacles)
- Construction Helpers / Skilled Trades Assistants –
   Physical dexterity, handling materials, working in variable conditions, on unpredictable sites
- 8. Health / Social Work with High Human Contact (e.g. home health aides, counselors) Emotional intelligence, human judgment, social interaction, trust
- 9. Emergency Responders (e.g. paramedics, EMTs) While certain decision support could be automated, the handson, unpredictable, field nature gives them resilience vs full automation
- 10. Animal Care / Veterinary Assistants Working with living creatures, reading behavior, adjusting to unexpected reactions



# THE EVOLUTION OF AI FROM PLANNING TO PERFORMING MANUAL WORK

- Phase 1: Digital Automation of Manual Labor Planning Al systems begin to simulate and plan manual labor tasks in digital environments (e.g., CAD, physics simulators).
- Phase 2: Al-Assisted Robotic Execution (Static Tasks) Al-controlled robots begin to execute mechanical tasks under controlled conditions.
- Phase 3: Al-Designed Custom Machines for Physical Labor Al autonomously designs tools or robotic systems for specific manual jobs—like creating a robot to change oil in a variety of car models.
- Phase 4: Generalized Adaptive Labor Systems Al-powered machines learn from each other and adapt to various environments without human intervention.
- Phase 5: Co-Evolution of Al & Machines (Autonomous Labor Ecosystem) - Al not only designs tools but manages supply chains, maintenance, and task scheduling for all physical labor.
  - Al builds a robot
  - That robot requests parts from a nearby 3D printer
  - It autonomously schedules your car's oil change
  - It updates your service history, processes payment, and books your next appointment



# COUNSELOR INSTITUTE 2.0

## Kick-off event:

- Friday, October 17<sup>th</sup>
- San Diego Miramar College L-105 Auditorium
- Parking: Lot 2
- Program starts at 8:30 am

Anticipated number of cohort participants:

~106 across seven participating colleges

Agenda Item			
Check-in and Breakfast			
Welcome and Keynote Speaker			
College Breakout Sessions			
Lunch			
Alumni Talk			
Wrap-up and Networking			
Adjourn			

# COLLEGE BREAKOUT SESSIONS

Project leads and researchers will review the following with their cohort:

- Counselor Institute overview
- Stipend payment structure
- Intake & Commitment Form
- Monthly meetings
- Canvas assignments
- Establishment of norms & grounding principles
- Data dive & dashboard overview

# ORIENTATION FOR FACILITATORS

#### Imperial Valley College

Marissa Harmon
\*Jose Carrillo

#### MiraCosta College

Golnoosh Behrouzian

#### San Diego Mesa College

Hai Hoang

\*Nellie Dougherty

\*Nabressa Lilly

#### San Diego Miramar College

\*Jennifer Peña

## San Diego City College

Hideaki Asto

\*Cristina Carrillo

#### San Diego College of Continuing Education

Denise Muñoz

Michael Gracia

#### Southwestern College

Jennifer Vo

Valerie Ky

Vicky Chhi

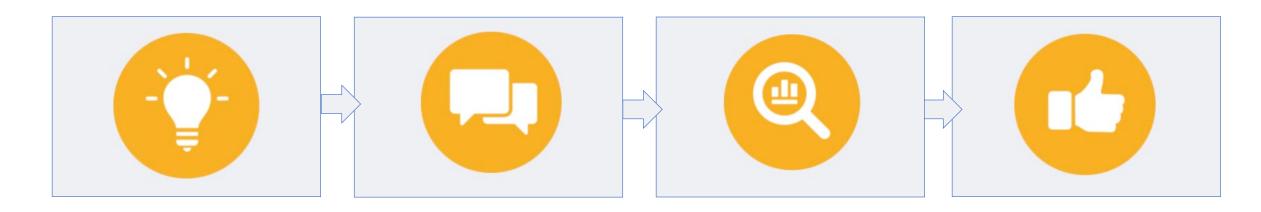
# ACTIVITIES REQUIRED TO RECEIVE STIPENDS

Complete in-person professional learning events

Kick-off: October 17 Wrap-up: May TBD, 2026 Participate in monthly meetings with college cohort

Complete
assignments in
Canvas and develop
action plan by
May TBD, 2026

Continue to collaborate with college cohort to implement action plans



# **QUESTIONS?**

