

SCCRC K16 Pathway Development

CLP | Career
Ladders
Project



Career Ladders Project Team



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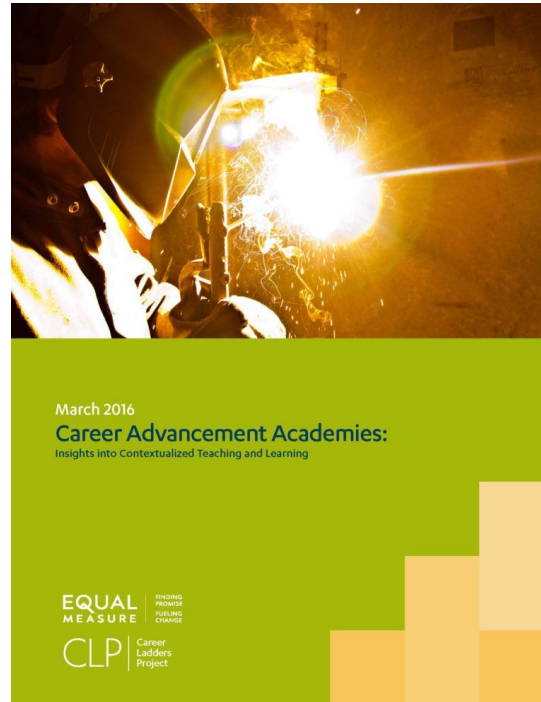
Director
Career Ladders Project



Eder Flores

Program Associate
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CLP's K16 Pathway Development





SCCRC Pathway Development

- Train-the-Trainer- Mapping and Aligning K16 Pathways
- Develop Pathway Coordinators Capacity to align pathways
- Capacity Building for College and High School Counseling Faculty



INDUSTRY CERTIFICATIONS

ADVANCED LEVEL

-NIMS Level 2

MID LEVEL

-NIMS
-American
Welding Solcity
AWS EG 3.0

ENTRY LEVEL

-NIMS
-FMA - Precision
Sheet Metal
Operator
(PSMO)
-PMP(project
management)

WORK BASED LEARNING

ADVANCED LEVEL

MID LEVEL

ENTRY LEVEL

BA/BS Degree/Transfer

B.S. Mechanical Engineering

B.S. Electrical Engineering

B.S. Industrial Engineering

AA/J.A.S Degree/Transfer

AS - Welding Technology - Pipe Welding (30 units)

WELD-101A Introduction to Shielded Metal Arc Welding (2.5 units)
WELD-101B Intermediate Shielded Metal Arc Welding (2.5 units)
WELD-101C Advanced Shielded Metal Arc Welding (2.5 units)
WELD-104 Introduction to Gas Tungsten Arc Welding (2 units)
WELD-105 Advanced Gas Tungsten Arc Welding (2 units)
WELD-165 Pipe Welding Fundamentals (3 units)
CWE-188WELD Cooperative Work Experience Education (1 - 4 units)

AS - Welding Technology - Metal Fabricator/Welder (30 units)

WELD-092 Introduction to Metal Fabrication (2 units)
WELD-093 Intermediate Metal Fabrication (2 units)
WELD-094 Advanced Metal Fabrication (2 units)
WELD-101A Introduction to Shielded Metal Arc Welding (2.5 units)
WELD-104 Introduction to Gas Tungsten Arc Welding (2 units)
WELD-105 Advanced Gas Tungsten Arc Welding (2 units)
CWE-188WELD Cooperative Work Experience Education (1 - 4 units)

AS - Welding Technology - Industrial Welder (30 units)

WELD-120 Industrial Welding I (5 units)
WELD-122 Industrial Welding II (5 units)
WELD-124 Industrial Welding III (5 units)
WELD-114A Introduction to Robotic Welding Automation (2.5 units)
WELD-114B Intermediate Robotic Welding Automation (2.5 units)
WELD-114C Advanced Robotic Welding Automation (2.5 units)

AS - Welding Technology - Laddered Specialization (30 units)

WELD-101A Introduction to Shielded Metal Arc Welding (2.5 units)
WELD-101B Intermediate Shielded Metal Arc Welding (2.5 units)
WELD-101C Advanced Shielded Metal Arc Welding (2.5 units)
WELD-114A Introduction to Robotic Welding Automation (2.5 units)
WELD-114B Intermediate Robotic Welding Automation (2.5 units)
WELD-114C Advanced Robotic Welding Automation (2.5 units)
Required Electives:
WELD-080 Non-Destructive Testing (3 units)
WELD-130 Welding Metallurgy (3 units)
WELD-132 Blueprint Reading for Welders and Fabricators (3 units)
MGT-090 Measurements and Computations (3 units)
ENGL-094 Introduction to Technical Reading and Writing (3 units)
OR
ENGL-204 Technical Report Writing (3 units)
Recommended Electives:
WELD-096 Welding Certification and License Preparation (3 units)

General Education

Mid Level Certificate

Certificate of Specialization - Manufacturing Technology - Automated Machining (12 units)

MFGT-121 CNC 1: Operation and Manual Programming (3 units)
MFGT-122 CNC 2: Concepts and Programming (3 units)
MFGT-131 CAD/CAM I (3 units)
MFGT-132 CAD/CAM II (3 units)

Community and Contract Education Opportunities:
Project Management
Softworks
Welding

Certificate of Specialization - Welding Technology - Robotic Welding Automation (16.5 units)

WELD-114A Introduction to Robotic Welding Automation (2.5 units)
WELD-114B Intermediate Robotic Welding Automation (2.5 units)
WELD-114C Advanced Robotic Welding Automation (2.5 units)
Required Electives:
WELD-080 Non-Destructive Testing (3 units)
WELD-130 Welding Metallurgy (3 units)
WELD-132 Blueprint Reading for Welders and Fabricators (3 units)

Entry Level Certificate

Certificate of Specialization- Manufacturing Technology - CATIA (6 units)

MFGT 141 CATIA I (3 units)
MFGT 142 CATIA II (3 units)

Certificate of Specialization - Manufacturing Technology - CAD/CAM (6 units)

MFGT 131 CAD/CAM I (3 units)
MFGT 132 CAD/CAM II (3 units)

Certificate of Specialization - Manufacturing Technology - Machining/CNC (6 units)

MFGT 121-CNC 1 Operation/Manual Programming (3 units)
MFGT 122-CNC 2 Concepts and Programming (3 units)

Certificate of Specialization- Mechanical Drafting (9 units)

ENGR 110 - Intro to AutoCAD (3 units)
ENGR 114 - Solids Modeling for Mechanical Drafting (3 units)

PLUS 3 Units from the following:
MFGT 121 - CNC 1: Operation/Manual Programming (3 units)
MFGT 131 - CAD/CAM I (3 units)

Community and Contract Education Opportunities:
Project Management
Softworks
Welding

Certificate of Specialization - Welding Technology - Shielded Metal Arc Welding (16.5 units)

WELD-101A Introduction to Shielded Metal Arc Welding (2.5 units)
WELD-101B Intermediate Shielded Metal Arc Welding (2.5 units)
WELD-101C Advanced Shielded Metal Arc Welding (2.5 units)
Required Electives:
WELD-080 Non-Destructive Testing (3 units)
WELD-130 Welding Metallurgy (3 units)
WELD-132 Blueprint Reading for Welders and Fabricators (3 units)

Bridge:

Nuts and Bolts and Thingamajigs

STUDENT SUPPORTS

ADVANCED LEVEL

ADVANCED LEVEL

-Welding Inspector,
-Welding
Technician/Fitter,
\$14.84-25.13/hr
-Pipe Fitter,
\$18.92-35.73/hr
-Metal Fabricator,
\$14.03-24.24/hr

MID LEVEL

-Career Center &
Industry +
-Application Interview
Prep*
- Counselor and
Academic Advisors
specialized to Pathway
-Student Success
Teams

MID LEVEL

-Welder,
\$14.84-25.13/hr
-Mechanical Drafter,
\$20.97-35.28/hr

automotive,
aerospace, and
manufacturing entry
level designer or
drafter

ENTRY LEVEL

-Integrate Support
Services*
-Tutoring TLC*
-Friendly Face*
-Student Success Team*
-Career Coach
-Counselor
-Student

ENTRY LEVEL

-Mechanical Drafter
(CAD/CAM),
\$20.97-35.28/hr
-Woodworking
Machine Setters,
Operators and
Tenders, May
operate CNC
equipment,
\$10.51-16.85/hr
-CNC Lathe
Operator,
\$13.06-21.75/hr
-CNC/production
machinist \$19.49



Industry Certifications

Work Based Learning

[illegible]

Jobs and Wages

Student Supports

[illegible]

Bridge Programs

Work Based Learning

Courses	WBL	Project/Student Support
-Mentoring -OLIC Unit 090		-CoC Career Coach -CoC Application -Early assessment -CoC Faculty -Career Coaches -Navigator

Student Supports

High School Courses

MAPPING CLP			Pathway(s): Advanced Manufacturing High School(s): Saugus, Valencia, Canyon High			LEGEND		
			Early College Credit Opportunities Aspirational					
Saugus High School			Valencia High School			Canyon High School		
Courses	WBL	Project/Student Support	Courses	WBL	Project/Student Support	Courses	WBL	Project/Student Support
- Manufacturing 121 CNC	Design Competitions Summer Internship	COC Career Coach COC Application & Interviewing COC Faculty Visits Career Coaches - Summer Bridge Program Professional Student only or alumni - Bridge to Alumni & Professions	- Innovation Design & Manufacturing (g credit) AB AND/OR - Manufacturing 131 - 132 CAD (A or B)	-Internships -Senior Projects -Mentoring	-COC Career Coach COC Application Early assessment COC Faculty Visits Career Coaches -Naviance	- Welding 101C - Manufacturing 900	Mentoring	COC Career Coach COC Application Early assessment COC Faculty Visits Career Coaches -Naviance
- Manufacturing 121 CNC	Hands-on lab Experience Industry Visits Real-world Projects	Career Coaches -Naviance	- The Art of Engineering Design with Solidworks A/B (1 year course, g credit)	-Mentoring	Career Coaches -Naviance	- Welding 101 A/B	Mentoring	Career Coaches -Naviance
- Manufacturing 127 CNC						OR - Advanced Manufacturing & Engineering AB		
- Computer Integrated Manufacturing A/B	-Hands-on lab Experience Industry Visits Real-world Projects -TIPS/MFG day	Career Coaches -Naviance	- Engineering Design & Technology A/B (1 year course, g credit)	-Mentoring -Speakers -Tours AKKA MFG Day	Career Coaches -Naviance	- Intro to Manufacturing A/B	Mentoring -Speakers -Tours AKKA MFG Day	Career Coaches w/ COC Pathfinder Brochure -2.5 GPA - 3.0 GPA only funded CTE Initial -Naviance
-Intro to Engineering Design A/B (PTWC)	Industry Speakers National MFG Day	Career Coaches -Naviance -Freshman Summer Messaging to Parents: Where does this lead? 8th grade summer bridge camp?	-Intro to Engineering (1 Year Course, g credit) Intro to Engineering Design A/B	-Mentoring	Career Coaches -Naviance -Freshman Seminar with Pathway teachers present Assign Pathway personnel	- Computer Aided Drafting & Design Intro to Engineering Design A/B	Mentoring	Career Coaches -Naviance -Freshman Summer Personality Assessment, Lifestyle Assessment, Informational Interview





Pathway Mapping Objectives

- Develop a **shared understanding** of current and desired pathway elements
- Map current pathway program elements and **identify gaps and priority areas** for collaborative development
- Develop a **cross-organizational sector specific community of practice** with self-identified priorities and work plans



Timeline

- October-January: Train-the-trainer convenings for pathway coordinators
- Feb-April: Counseling faculty capacity building
- May-June: Align and refine maps

thank you

careerladdersproject.org

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