

UCI SMART ITAC Updates

Chelsea Choudhary
CalPlug/ITAC Workshop

ccchoudh@uci.edu
04/22/2025



**Industrial
Training and
Assessment
Centers**

U.S. DEPARTMENT OF ENERGY

UCI SMART Industrial
Assessment Center

CSUN

CALIFORNIA
STATE UNIVERSITY
NORTHRIIDGE

Cypress  College

UCI SMART ITAC

Sustainable Manufacturing Alliance for Research and Training
Industrial Training and Assessment Center



**Industrial
Training and
Assessment
Centers**
U.S. DEPARTMENT OF ENERGY



UCI SMART ITAC Energy Assessments



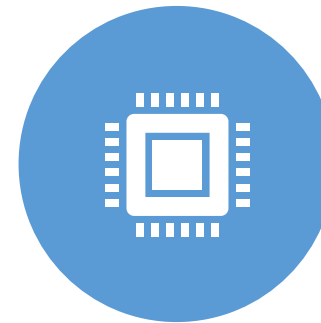
Tour facility, brainstorm ideas, collect data → develop report



Energy efficiency, waste reduction, and productivity enhancements



Energy techniques: lighting, air compressors, motors, furnaces, ovens, boilers, HVAC, chillers, water treatment systems, renewables, and much more!



Bringing **SMART** into our ITAC: smart manufacturing, cybersecurity, life-cycle analysis, hydrogen blending, etc.

ITAC Website Snapshot



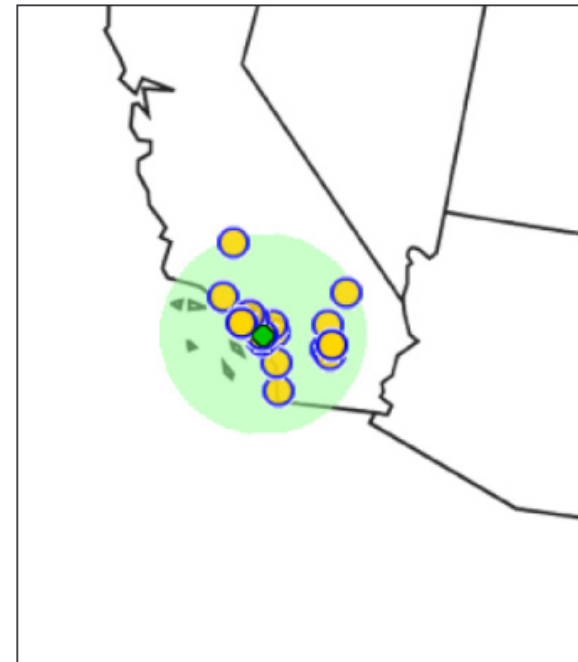
University of California, Irvine

Student Research Award Winner: 2022

The University of California, Irvine Industrial Assessment Center (CI-IAC) provides **free energy, productivity, and waste assessments** to small and medium-sized industrial facilities through funding provided by the US Department of Energy.

as of 04/17/2025

<https://iac.university/center/CI>



46 Assessments

374 Recommendations

0.58 Tbtu Energy Saving*

\$9.82 million Cost Savings*

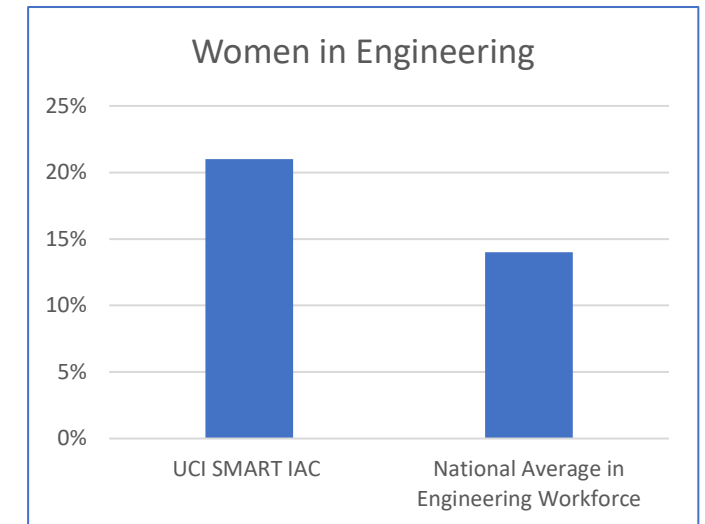
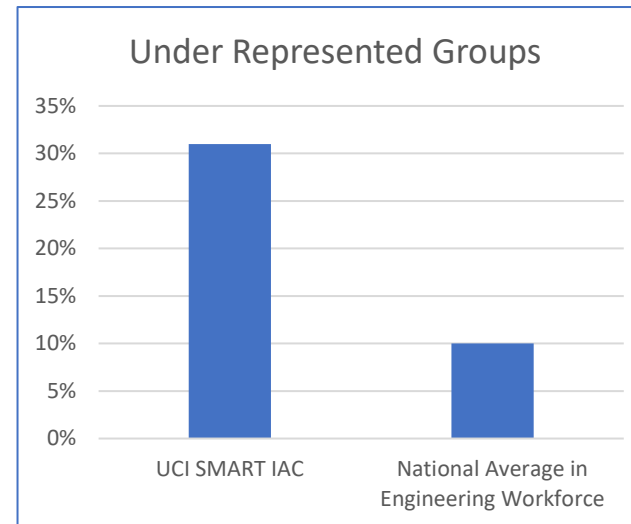
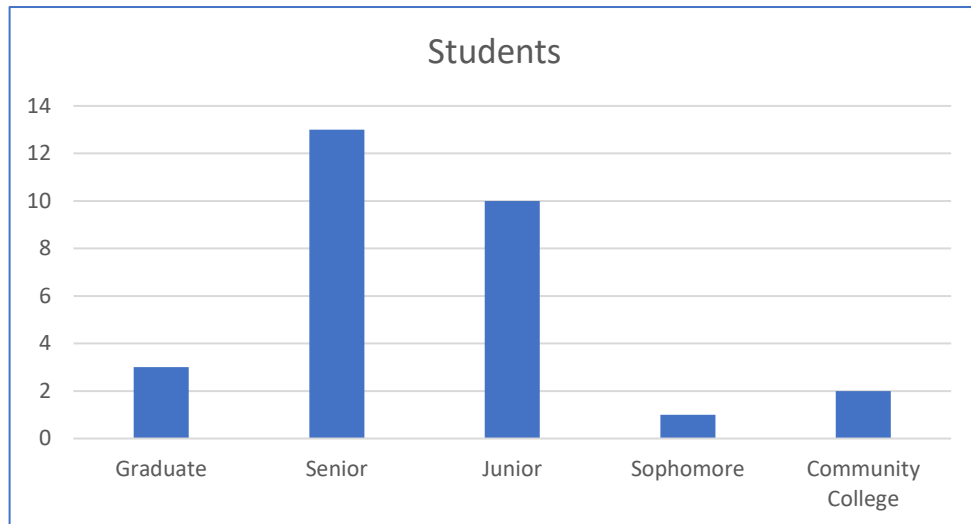
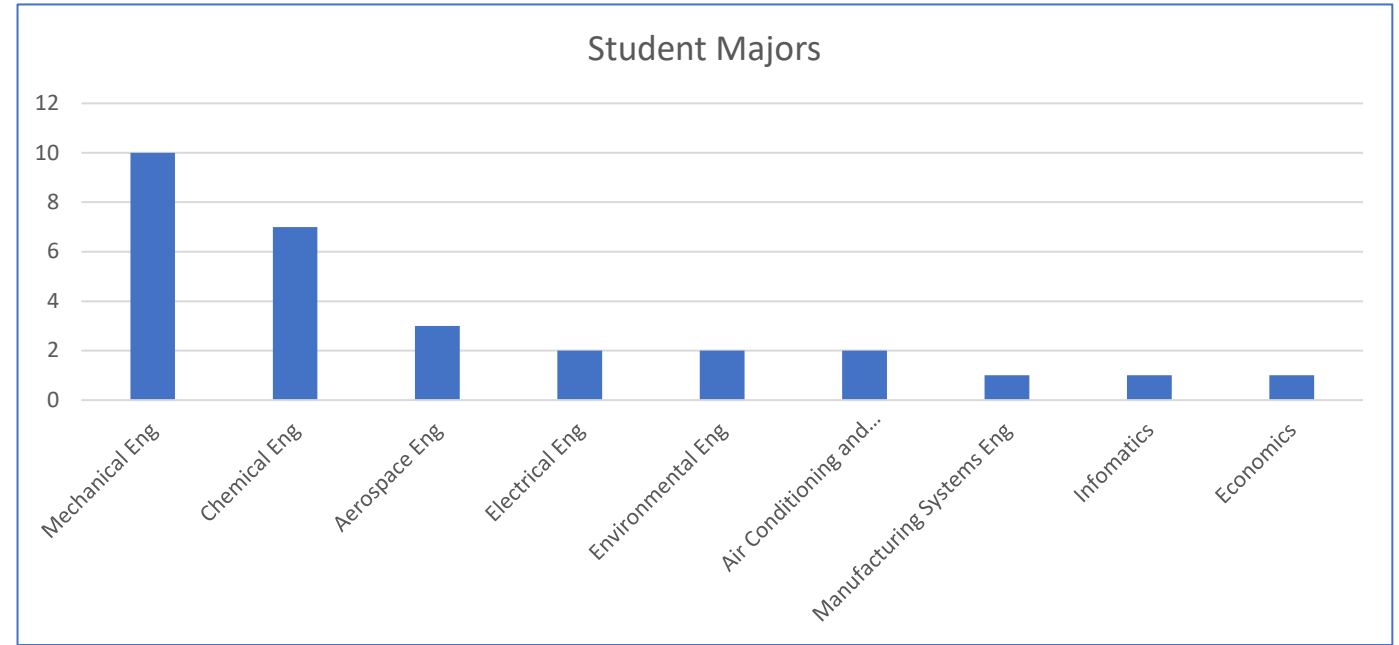
56 Students Trained **

**Recommended Savings*

**14 students have also been awarded ITAC student certificates for exceptional participation

Student Team

- UCI: 25 Students
- CSUN: 2 Students
- Cypress: 2 Students



Energy Assessments Performed

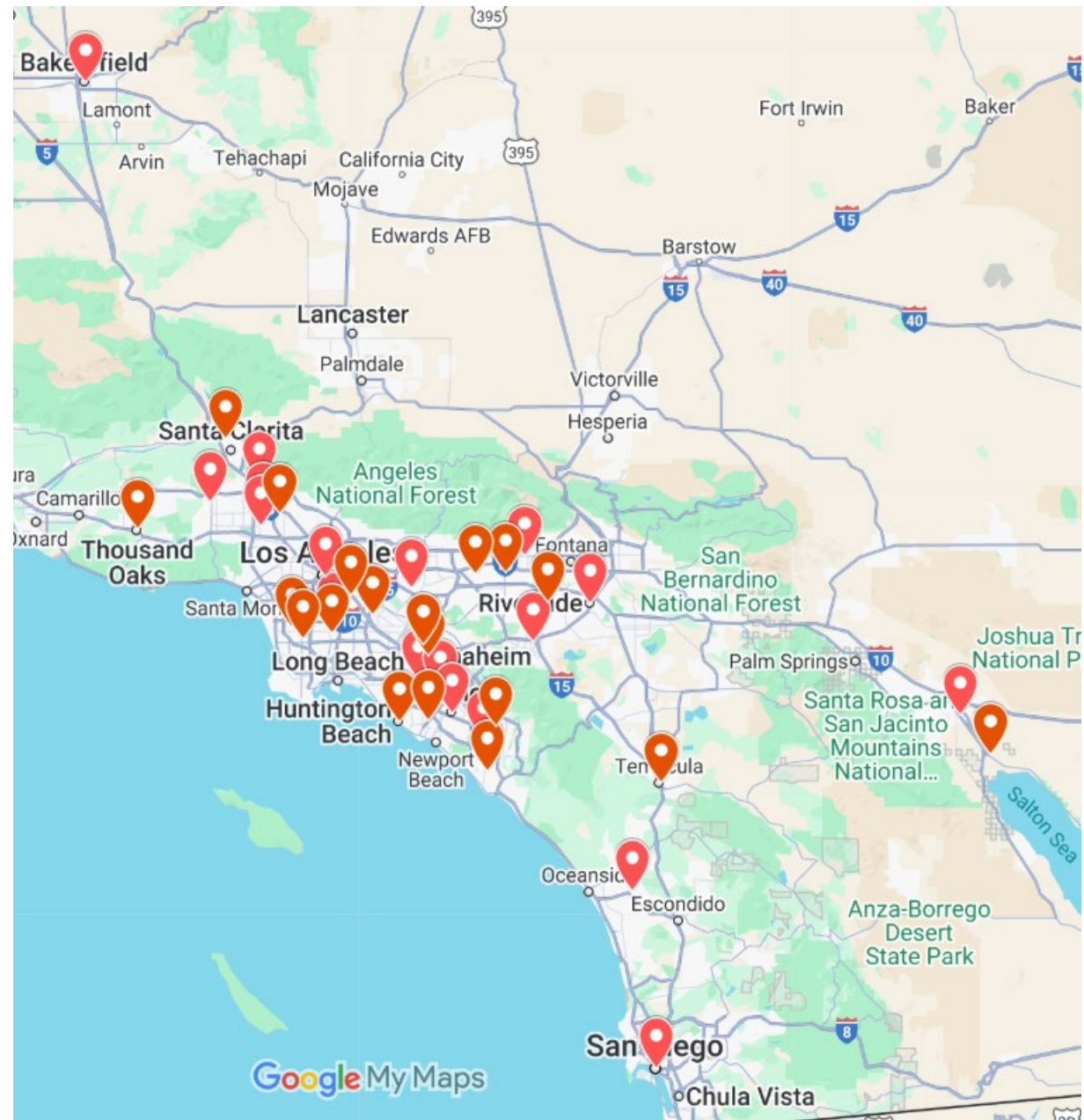
39 industrial energy assessments



12 commercial energy assessments



Energy Assessments Performed



DOE Implementation Grant Program

DOE is offering **grants of up to \$300,000** (per project) with one-to-one matching from the client to help implement recommendations from ITAC assessments

Supporting projects that are meant **to improve energy and material efficiency**, enhance cybersecurity, increase productivity, deploy smart and advanced manufacturing technologies, and reduce waste and pollution at SMM facilities

Encouraging our clients to apply, giving grant program updates to eligible clients, and **providing technical assistance** with application submissions

To learn more about the ITAC Implementation Grant program – including FAQs – and to apply, visit: <https://www.energywerx.org/opportunities/iacimplementationgrants>

Enhanced Student Training

- ITAC Chats speaker series January – May 2025
- Interactive sessions with industry personnel
- Students get a chance to ask questions and get advice







Enhanced Student Training

- Career Ready Sessions
 - Resume help from local recruiting firm
 - Career sessions on various topics in collaboration with the UCI Career Center



CALIT2 UPCOMING Career Pathways



	<p>Thursday, 2:00 pm</p> <p>Salary Negotiations</p> <p><i>Guest Speaker: Caroline Chiang</i></p> <p>Caroline Chiang, a Penn State graduate, has supported students at Brown, Boston University, and UCI after starting her career at Johnson & Johnson.</p> <p>Zoom</p>	<p>Jan</p> <p>30</p> <p>2025</p>
	<p>Wednesday, 12:00 pm</p> <p>Networking</p> <p><i>Guest Speaker: Allison Keller</i></p> <p>Allison Keller, Director of Career Education, has over 15 years of experience in career services. She leads programs at UCI to help students achieve their career goals.</p> <p>Calit2 4500</p>	<p>Feb</p> <p>26</p> <p>2025</p>
	<p>Monday, 2:00 pm</p> <p>Job Ready</p> <p><i>Guest Speaker: Allison Keller</i></p> <p>Allison Keller, Director of Career Education, has over 15 years of experience in career services. She leads programs at UCI to help students achieve their career goals.</p> <p>Hybrid</p>	<p>Apr</p> <p>7</p> <p>2025</p>

LAST DAY TO REGISTER 2/19

LAST DAY TO REGISTER 3/31

UC Irvine SMART Industrial Training and Assessment Center

UCI CALIT2 California Institute for Telecommunications and Information Technology

UCI Division of Career Pathways

Enhanced Student Training

- UCI Nuclear Reactor Tour
 - Scheduled for May 2025
- UCI Central Plant Tour
 - Scheduled for May 2025



Summer Internships - 2025

- Lineage Logistics
 - Data Science Internship
 - Aniruddha Chaki
- Georg Fischer
 - Sustainability Internship
 - Focus on Life-Cycle Analysis
 - Selection in process
- Irvine Ranch Water District
 - Programming Internship
 - Selection in process



UCI SMART ITAC and Kern Community College District

- Kern Community College District – new Central California ITAC
- This project will contribute to America's manufacturing and clean energy competitiveness in a high-unemployment, highly agricultural, oil-and-gas-transitioning, and largely underserved part of California
- UCI SMART ITAC has partnered with KCCD to help establish their new ITAC and train their staff to support the mission of the ITAC program



UCI SMART ITAC and Kern Community College District



Hands-on training day hosted by UCI in January 2025

- Equipment training
- Mock Assessment in Calit2 (roof, air compressor room, pump room, cyber makerspace, office spaces)
- Tour of UCI Central Plant



Student Testimonial

Gordon Ko

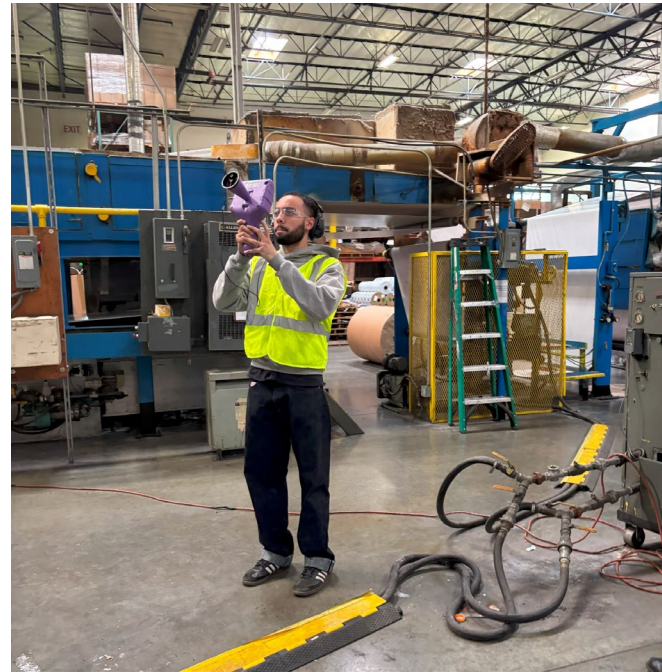
- Senior
- Chemical Engineering
- Safety Lead and Training Expert

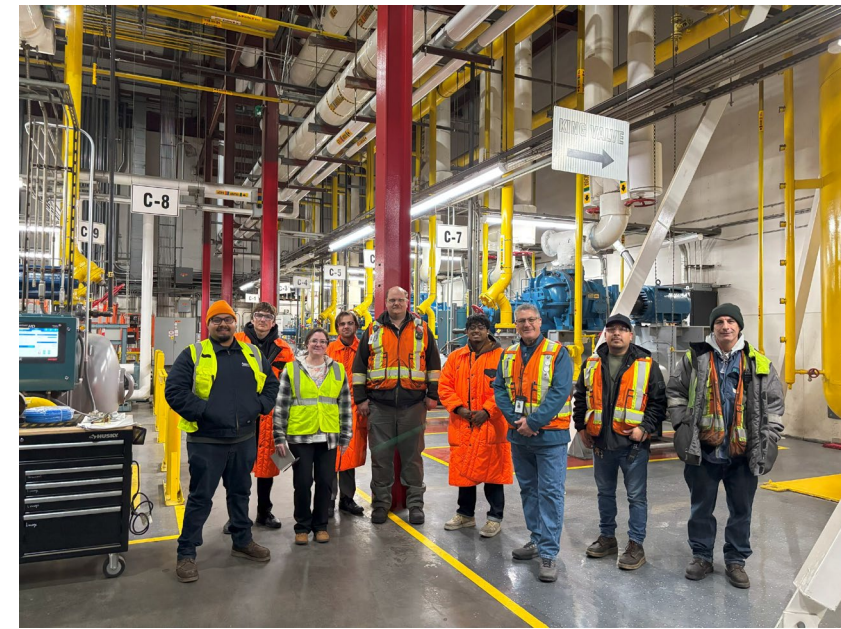


Student Testimonial

Taleeb Weaver

- Junior
- Environmental Engineering
- Equipment Committee





Questions?

