FLATE FOCUS
March 2026

Register Now for the Spring 2026 ET Forum

April 16 - 9:00 AM - 5:30 PM
April 17 - 9:00 AM - 1:00 PM

Advanced Technology Center
1770 Technology Blvd
Daytona Beach, FL 32117

Florida ET Faculty: Register Now

ET Forum Pre-Conference Training (FREE)
Implications of Artificial Intelligence for Educators
April 15, 2026 - 9:00 AM - 4:00 PM ET

This workshop equips faculty, staff, counselors, and advisors with the knowledge and tools to integrate AI into teaching and curriculum development. Participants will explore lesson planning, interactive content, dynamic assessments, and ethical AI use. Through hands-on activities and real-world examples, they'll learn to enhance student engagement, streamline tasks, and prepare students for an AI-driven future.

The session also prepares attendees for the Microsoft Azure AI Fundamentals Certification exam (exam cost not included). Space is limited so register early if interested.

Register Now

FLATE Engineering Technology (ET) Faculty Mentorship
March 13, 2026 - 10:00 AM - 11:00 AM ET

Join us for the FLATE Monthly ET Mentorship meeting, designed to help new faculty with questions about curriculum, labs, advisory committees, and much more. We also invite experienced faculty to share their knowledge. **Meetings will be held on the 2nd Friday of the month.** Please share this invitation with colleagues who may be interested.

Register for Mentorship Meetings

Faculty Opportunities

Update the Florida Dept. of Education's Career & Technical Education Programs

The Florida Department of Education invites you to participate in the review and revision of the learning objectives and requirements for career and technical education (CTE) programs offered by Florida public middle schools, high schools, and technical and state colleges. **Modest stipends are available for instructors participating in reviews.** Your contribution to the CTE program review process will help Florida instructors stay current with industry changes, improve student outcomes, expand the pool of highly qualified job candidates available in Florida, and advance the Florida economy!

More info & Sign up

Instructional Coordinator, Engineering Technology Panama City Main Campus

The primary function of this position is to teach courses in the Engineering Technology Program. Courses including Manufacturing Processes, Applied Mechanics, PLCs, Electronics, CNC machining, etc.
As the Instructional Coordinator of the program, you will recruit qualified adjunct instructors and develop an innovative work environment that is team-oriented to work with industry partners to develop a community geared towards an innovative manufacturing industry.

To apply

State Science & Engineering Fair of Florida
March 31 - April 2, 2026

Across Florida, K–12 STEM and science fairs are doing more than showcasing student projects — they are building the future workforce. The state-level competition brings together top student innovators from across the state. **Click here to sign up to judge at the state competition.** There are many manufacturing-related categories. FLATE proudly served as a Special Projects Judge at the K–12 Regional STEM Fairs in Hillsborough County and Pinellas County in February 2026.

Read full article

Chip in Florida: K-12 Semiconductor Education Challenge
Submit Entries by March 13

The Florida Semiconductor Institute (FSI) invites teachers and students across the state to participate in the 2026 Chip in Florida Challenge – a statewide STEM initiative designed to integrate semiconductor learning into classrooms while building early awareness of high-demand career pathways.

After registering, teachers will receive an email with a link to access a curated collection of FSI-approved semiconductor lesson plans organized by grade band. Educators will implement the lessons and then guide students through a required culminating challenge submission aligned to their grade level. All grade levels will answer the essential question: How can semiconductors power a smarter future—and what careers make that future possible?

Learn more & Register

DeRocco Fellowship: Advanced Manufacturing Fellowship for Future Women Leaders

The **DeRocco Fellowship** offers women enrolled in (or recent graduate of) a post-secondary program the opportunity to develop leadership skills through Mentorship, Professional Development, and Community Building. Interested interns self-confirm in the application that they meet the following eligibility:

- Employment or placement in an internship for summer 2026
- Enrolled in a post-secondary program (or completed with the past two years)
- At least one full semester completed
- Are interested in pursuing a leadership career in manufacturing.

Apply by April 30, 2026

Events & Workshops

Industry 4.0 Faculty Workshops - Texas A&M University
March 10, 2026 | Virtual (FREE)

INSPECTION W/AUGMENTED REALITY OVERLAY
DIY Smart Machine Vision System

In this free virtual workshop, you will build an end-to-end smart inspection pipeline that integrates machine vision, AI-based detection, and Programmable Logic Controller (PLC)-driven automation. Machine vision will be used to detect and categorize objects. A monitor will display real-time inspection results. Results will be overlaid on an augmented reality (AR) camera view.

What you will learn:
- How to build a full inspection pipeline that connects camera → vision/AI model → PLC logic → actuator/stack light
- Real-time detection and categorization of various objects
- How to set up a closed-loop system in which AI results trigger PLC decisions and automation responses

TUESDAY, MARCH 10, 2026
10:00 a.m. – noon
Registration: https://u.tamu.edu/DIY-workshop
For more information contact Dr. Tony Hsieh
(979) 845-4985 | hsieh@tamu.edu

Acknowledgement: This material is based upon work supported by the Advanced Technology Education program under National Science Foundation award no. 2202201. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

FANUC Integration with ROS2 and Web Systems
DIY Remote Robotic Control

In this free virtual workshop, you will learn to manage real-time data streaming between industrial hardware and networked devices. You will build a modular remote robotic control system integrating ROS2, FastAPI, and HTML5/JavaScript. This system will replace a traditional teaching pendant with a responsive web interface.

What you will learn:
- A dual-server control architecture that connects web browser → FastAPI/WSL → ROS2 Node → FANUC LR Mate 200iD Robot.
- A "Virtual Teach Pendant" interface featuring real-time joint state visualization, sequence execution, and D-pad jogging.
- A low-latency visual feedback system where synchronized MJPEG streams from multiple USB cameras are integrated into the control dashboard.

TUESDAY, MARCH 10, 2026
1:00 – 3:00 P.M.
Registration: https://u.tamu.edu/DIY-workshop
For more information contact Dr. Tony Hsieh
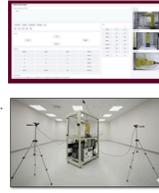(979) 845-4985 | hsieh@tamu.edu

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BUILDING A REAL-TIME DETECTION ASSISTANT
DIY Augmented Reality Troubleshooting

Object detection and augmented reality (AR) can be used to overlay troubleshooting and maintenance info onto physical components using a live camera feed.

In this free virtual workshop, you will learn how to train a YOLO detection model and deploy it in a Python-based AR application. The system can recognize components in real time and dynamically display instructions and schematics.

What you will learn:
- How to set up a Python-based machine learning (ML) development environment
- How to train a state-of-the-art YOLO V11 model for high-speed object detection
- Key ML evaluation metrics
- How to develop a real-time AR interface using OpenCV and Tkinter
- How to combine your trained model with an application to dynamically overlay component data and schematics
- How to deploy and test your intelligent detection system using a webcam

TUESDAY, MARCH 10, 2026
3:00 – 5:00 P.M.
Registration: https://u.tamu.edu/DIY-workshop
For more information contact Dr. Tony Hsieh
(979) 845-4985 | hsieh@tamu.edu

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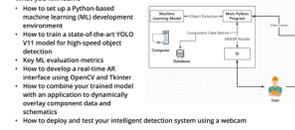

DIY Smart Machine Vision System
March 10 - 10AM - 12PM

What you will learn:
- How to build a full inspection pipeline that connects camera → vision/AI model → PLC logic → actuator/stack light
- Real-time detection and categorization of various objects
- How to set up a closed-loop system in which AI results trigger PLC decisions and automation responses

DIY Remote Robotic Control
March 10 - 1PM - 3PM

What you will learn:
- A dual-server control architecture that connects web browser → FastAPI/WSL → ROS2 Node → FANUC LR Mate 200iD Robot.
- A "Virtual Teach Pendant" interface featuring real-time joint state visualization, sequence execution, and D-pad jogging.
- A low-latency visual feedback system where synchronized MJPEG streams from multiple USB cameras are integrated into the control dashboard.

DIY AI-Powered Troubleshooting
March 10 - 3PM - 5PM

What you will learn:
- How to set up a Python-based machine learning development environment
- How to train a state-of-the-art YOLO V11 model for high-speed object detection
- Key evaluation metrics in machine learning
- How to develop a real-time AR interface using OpenCV and Tkinter
- How to combine your trained model with an application to dynamically overlay component data and schematics
- How to deploy and test your intelligent detection system using a webcam

Register Now

2026 FAME National Conference
May 12-14, 2026 | Jacksonville, FL

FAME is the New American Model of Manufacturing Skills Training. From its inception with Toyota to its evolution into The Manufacturing Institute in 2019, FAME has expanded across the nation, supported by nearly 450 esteemed manufacturers. The program provides an unparalleled apprenticeship-style training program where participants earn while they learn, gaining top-tier technical expertise by integrating core manufacturing competencies, professional practices, and authentic hands-on experience. **There is currently a chapter in Florida at Daytona State College. Considering a chapter in your region? The national conference is an opportunity to learn more and collaborate with leaders from across the FAME network.**

AMTEC Institute for Industry 4.0 Innovation
Training for Post-Secondary & Secondary Educators
Mar 17-18, May 19-20, June 16-17, Oct 6-7 | Owensboro, KY

AMTEC's upcoming sessions, for high school, technical college, and university faculty teaching advanced manufacturing and related courses, offers hands-on training in Industry 4.0 technologies that instructors can bring back to their classrooms. After completing the in-person training, instructors also gain access to monthly virtual Community-of-Practice sessions, featuring peers and industry partners sharing best practices and resources. Click on flyer for full details. **Travel assistance and stipends** are available for instructors who meet program requirements. Those interested can submit their information by **clicking this link**.

For more information

CREATE Energy Educator Institutes (Virtual - FREE!)
STEM Educators - High School & College
April 11, 2026 - May 9, 2026

Funded by the CREATE Energy NSF ATE National Center, these institutes are designed to build educator confidence and content knowledge in solar energy, system performance, and energy careers. Lessons are aligned for classroom use and adaptable across middle school, high school, and introductory college-level STEM courses.

Apply by March 15, 2026. Each selected participant will receive a mailed equipment kit valued at $200, provided at no cost and delivered prior to the start of the institute. This equipment allows participants to actively complete each lesson with guidance from expert facilitators during live, synchronous online sessions.

For details & to apply

STEM Educator Institute at Central Carolina Community College
June 23-25, 2026

The Energy Institute Includes:
- **$575 Stipend** paid to each participant upon completion of the institute
- **Equipment awards valued at up to $1200** available to each participant funded by the CREATE Energy NSF ATE National Center

STEM Educator Solar Institute at Madison Area Technical College
July 7-9, 2026

The Solar Institute Includes:
- **$600 Stipend** paid to each participant upon completion of the institute
- **Equipment awards valued at up to $1200** available to each participant funded by the CREATE Energy NSF ATE National Center

To apply

To apply

Resources

STEM Talent: Education, Training, and Workforce Report Published February 12, 2026

A new report, *STEM Talent: Education, Training, and Workforce*, published on February 12, 2026 by the National Science Board (NSB), provides high quality data to inform decision makers about U.S. STEM education and workforce trends, including how the U.S. compares with other countries. Talent is the bedrock of the nation's science and engineering (S&E) enterprise and a key part of U.S. competitiveness. A globally competitive STEM education system equips Americans with the skills and knowledge needed to participate in the STEM workforce. The report finds that employment in STEM occupations continued to grow, increasing by 26% from 2013 to 2023, with STEM workers experiencing lower unemployment rates and enjoying higher median earnings than those in non-STEM jobs.
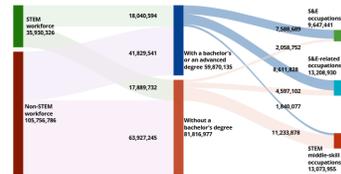
Read full report

FLATE's Manufacturing Matters Dashboard

A tool highlighting manufacturing education, careers, industry, and their impact on Florida's economy. Search for manufacturing education programs across the state, narrow to a particular skill. Students can find a program to enter; Manufacturers can find employees with hands-on training.

Manufacturing Matters Dashboard

FLATE Webinar Series - Watch on Demand

- Insights into the Workforce of the Future (2025)
- AI & Machine Learning Workshops (2025)
- Data Analytics in Manufacturing (2024)
- Necessary Skills Now: Resources for Integrating Employability Skills into Technical Programs (2024)
- Edge Computing: A Feasible & Integrated Approach to Collecting System Data
- A Universal Programming Approach for any make of Programmable Logic Controllers (PLCs)
- Best Practices for your CNC Course or Program
- Overview of AI in Manufacturing
- Overview of Teaching PLCs
- Leveraging an Open Lab to Provide Greater Access for Students in your Manufacturing Program
- Developing Local Articulations to Increase Enrollment in College Programs
- How to Create Work-based Learning Opportunities

- Recruiting Strategies Best Practices
- Robots for AI and Industry 4.0 Training and Demo
- Creating Videos using Classroom Projects and Student Success Stories
- How to Increase Student Diversity in ET Programs
- How to Develop ET Dual Enrollment or Early College Programs
- Cybersecurity for Manufacturing Series (4-part)

View Webinars on Demand

flate.org

FLATE wiki

madeinflorida.org

Florida Department of Education Resources

With Career, Technical and Adult Education (CTAE), you can train for a better career quickly and affordably.

Apprenticeship programs are a proven training method benefiting job seekers and businesses.

Check Out Our Previous Newsletters:

[Jan/Feb 2026 Focus](#) | [Dec 2025 Focus](#) | [Nov 2025 Focus](#) | [Newsletter Archive](#)