RoboVoTech

120-Hour AI + Robotics Certification Syllabus

Hands-on AI, robotics, automation, and workforce training for Santa Rosa Beach, Walton County, 30A, and Northwest Florida.

Program

RoboVoTech 120-Hour AI + Robotics Certification

Primary outcome

Students build practical skill with AI tools, robotics foundations, sensors, motors, automation workflows, prompting, AI agents, computer vision, no-code / low-code tools, and capstone project delivery.

Audience

Students, career changers, AI and robotics beginners, workers, local workforce partners, employers, parents, schools, sponsors, and community organizations.

Prerequisites

No prior robotics or coding experience required.

Format

120 total hours. Recommended delivery combines online preparation, hands-on labs, project work, coaching, and capstone review.

Modules

1. AI Foundations: Use AI tools responsibly, understand model strengths and limits, and connect AI concepts to robotics and automation work.
2. Robotics Foundations: Learn robot system architecture, motion basics, safety habits, ROS 2 concepts, and practical troubleshooting.
3. Sensors, Motors, and Hardware Basics: Work with cameras, distance sensors, microcontrollers, motor drivers, Raspberry Pi, Arduino, and basic wiring.
4. Automation Workflows: Map repetitive work, design simple automations, connect tools, and evaluate where robots or software agents help.
5. Prompting and AI Agents: Build clear prompts, reusable workflows, tool-using agents, and human-in-the-loop review steps.
6. Computer Vision Basics: Use cameras, lighting, OpenCV, and object-detection workflows

to inspect, count, sort, and guide robot behavior.

7. No-Code / Low-Code AI Tools: Prototype AI dashboards, forms, workflow automations, and data capture without starting from a blank codebase.
8. Real-World Robotics Projects: Build and test small robot systems that sense, decide, move, and report what happened.
9. Capstone Project: Plan, document, demo, and present a practical AI + robotics project for instructors and partners.
10. Career / Business Applications: Translate technical skills into job interviews, local services, employer demos, business process improvements, and portfolios.

Projects

- Sensor-driven robot activity
- Computer vision inspection demo
- Automation workflow
- AI dashboard or reporting prototype
- Robot control exercise
- Capstone prototype and presentation

Cohort date placeholder

Fall 2026.

Tuition placeholder

Tuition is to be announced.

Location

Santa Rosa Beach / Walton County / Northwest Florida. Specific location to be announced by cohort.

Apply

Apply at https://robovotech.com/apply.