



Robotics Training Instructor Position Description

LIFT, a National Manufacturing Innovation Institute, is seeking a contract Instructor for the Operation Next hybrid learning program in the LIFT Learning Lab. Operation Next is an innovative, manufacturing-focused training and credentialing initiative designed to provide a blended learning program resulting in the individual earning one or more nationally portable, standards-based, industry recognized credentials.

The Instructor will report directly to the Learning Lab Director and will perform the tasks outlined in the following Scope of Work.

Scope of Work:

Task 1: Robotics Technician Training Preparation

Lead preparations to stand up LIFT Learning Lab Robotics Training equipment and related educational programming. The LIFT Learning Lab is located at 1400 Rosa Parks Blvd, Detroit, MI. Tasks to include:

- Review Operation Next Robotics Technician Training educational materials.
- Determine supplementals needed for pathway to SACA credentials in the Operation Next Robotics Technician Training curriculum.
- Recommend course sequencing for delivery of the curriculum.
- Review required equipment and identify gaps
- Set up the Fundamental Skills Lab to support the Robotics Technician Training, including setup and testing of equipment and layout.
- Develop supplies list identifying consumables, and other tools required for instruction.
- Testing machines.
- Prepping materials (as needed).

Task 2: Robotics Program Instruction

Provide Robotics instruction to students in LIFT Robotics Technician Training Center. Tasks include:

- Instructing courses utilizing Operation Next Robotics Technician Curriculum.
- Plan, develop, and implement appropriate instructional strategies, including alternative delivery strategies when appropriate, including but not limited to hybrid, face-to-face and on-line course delivery.
- Assess student performance in courses taught by the instructor.
- Consult with Learning Lab Director to order equipment and supplies, arrange for delivery and set-up, and maintain all equipment and tools to ensure compliance with national, state and lab safety requirements.



Instructor will instruct students on the following processes and technologies:

- Safety
- Mechanical/ Troubleshooting
- Fluid Power/ Troubleshooting
- Electrical Systems
- Control Logic
- Electrical Control Troubleshooting
- Electronics Troubleshooting
- AC Variable Frequency Drives
- PLC/ Ethernet Troubleshooting
- Robotics

Timeframe: This contract with the instructor is to provide Robotics Program Instruction on a course-by-course basis. LIFT desired to begin its first cohort as soon as possible. LIFT may determine to not run cohorts if sufficient student enrollment is not reached. LIFT will notify the instructor on a mutually agreed upon timeframe in advance if a cohort will not run.

LIFT anticipates approximately 500 hours to complete the tasks outlined above for a single cohort.

Qualifications:

Successful candidates must have:

- Robotics teaching experience
- Experience as a robotics technician or similar role in a manufacturing setting strongly preferred
- Availability to teach evenings and weekends
- Smart Automation Certification Alliance (SACA) credentials (or ability to earn them)
- Submit to background check