NSF ATE Grant YEAR 1: Faculty Workshop
Michigan Tech: May 7-8, 8am-4pm

Workshop agenda:

Day 1:

- Survey/Post-Test

- Participants will be introduced to the structure and details of the developed curriculum models for 2 and 4-year institutions (1 hour)

- Topic 1: Safety in Industrial Environment (30 min)

- Topic 2: Overview of LR Mate Fanuc Robot (30 min)

- Topic 3: Robotic Frames (1 hour)

- Participants will tour the Robotic Automation Lab and learn more about both the hardware and software necessary to establish a robotic automation lab at their respective institutions (1 hour).

- Lab 1: Jogging in World and Joint modes (1 hour)

- Lunch Break 12-1

- Topic 4: End-of-Arm Tooling (1 hour)

- Lab 2: Teaching Tool Frame (1 hour)

- Lab 3: Teaching User Frame (1 hour)

Day 2:

- Faculty participants will get familiar with the RobotRun educational training software. The faculty member leading the session will first demonstrate the functionality of the software, after which, participants will be tasked to create several simulation projects (2 hours).

- Topic 5: Robot Programming (1 hour)

- Lab 4: Basic Programming (1 hour)

- Lunch Break 12-1

- Topic 6: Data and Position Register Instructions (1 hour)

- Lab 5: Registers and Position Register Instructions (1 hour)

- Topic 7: Conditional and Unconditional Branching Instructions (1 hour)

- Lab 6: Conditional and Unconditional Instructions (1 hour)

- Survey/Post-Test

- Discussions and Adjourn