



## IntelliGenesis Cyber Learning Center

### CYBATIWORKS™ CYBER-PHYSICAL SECURITY MINI CAPSTONE TEAM-BASED WORKSHOP

#### Class Description

#### Instructor: Matthew Luallen

Participants explore cyber-physical system logic through the CybatiWorks™ Lens of Build, Break, Secure, and Make. Each participant will work with a team to explore several cyber-physical environments (traffic control, power grid, and manufacturing) using a combination of emulated and real OT devices. The workshop culminates with each team building, breaking, and securing their own cyber-physical model complete with their own industrial IO, communications, HMI, adversarial, and defensive solutions using the CybatiWorks™ Build, Break, Secure, and Make methodology.

#### Class Outline:

- **Day 1**
  - Training Overview with the CybatiWorks™ Traffic Light Mini Kit
  - Exploration of CybatiWorks™ Mission Station Hands-On Labs
- **Day 2**
  - Introduction to the CybatiWorks™ Industrial Edition, Power Grid, and Manufacturing Mini Kits
  - Reversing and Adding to the CybatiWorks™ Mission Station Labs
- **Day 3**
  - Facilitated Build, Break and Secure
    - Explore and build your own cyber-physical systems (sensors, actuators, logic, HMI, and communications)
    - Identify and create security weaknesses and defensive strategies into the design
- **Day 4**
  - Finish development of a build, break and secure cyber-physical example
  - Showcase and record participant team's made maker OT environments

**Class Duration:** 32 hours

**Qualifies for 8 CEUs for these CompTIA certifications:**

