Program Structure

- Due to current COVID 19 issues, the program will be designed for an intensive and highly interactive <u>online</u> experience – Zoom log-in provided

- 3 days (1 day of independent study between 2 days of instruction) – format is flexible in order to accommodate multiple shifts.

- 4th day (date TBD) to focus on deep dive into Premier Skill development with Dr. Mike Dunphy

- Practical labs and discussion panels with industry IoT consultants

- Examples and applications direct from participants' work experience or job sites

- Participants to take a pre-program survey and post-program survey and assessments to gauge proficiency

- Participants successfully completing the course will receive a Certificate of Completion

- Certificates of Completion to be provided to OGS for submission to TechCred for tuition reimbursement

Learning Outcomes

On completion of the course, participants should be able to:

- understand data sources and formats

- understand and visualize data for better decision making

- comprehend data foundations for analytics

- identify how to collect, store and analyze relevant data to measure success

- appreciate the role of big data, cloud computing and data analytics in a typical IoT system

- explain the definition and usage of the term "Internet of Things" in the context of your industry and future trends

- understand the key components that make up an IoT system

- find and use simple IoT concepts and tools to improve business efficiency and profitability in your job

- create and present key ideas for using IoT in your business setting

- work collaboratively with teams to create solutions to complex problems relevant to improving business success

- communicate business problems & formulate solutions

- use Whiteboarding techniques for collaborative problem solving

- present proposed technical solutions to non-technical team members

Program Outline

Day-One Agenda: Tuesday (date TBD)

7:30-8:00 AM   Online tech check, verification of participation, introductions (Dunphy)

8:00-8:30 AM   _**The Art of the Possible**_: Frame-up and take the class through Whiteboard exercise to define purpose and value of the training, learning outcomes, what to expect and operating parameters (Dunphy)

8:30-9:30 AM   _**Demystifying the Internet of Things (IoT)**_: What is IoT and why does it matter to you and your business in terms of metrics, analytics and the economy of the future? (Quillen)

9:30-10:30 AM   _**The Fuel of the Business Engine**_: Basics of data, metrics, and analytics relevant to business and organizational efficiencies and performance (Lensman)

10:30-10:45 AM   **Bio Break**

10:45 – 11:45AM   _**Huh? – Talking Each Other's Language**_: The power of effective communication in organizations, employee/supervisor relationships, tools and tactics for best practices (Dunphy)

11:45 to 12:30   **Lunch on your own**

12:30-1:45 PM   _**There's an IoT App for That**_: How to apply IoT principles in your life and to your place of business. Discussing practical applications, opportunities for application and general principles involved (Barr and Ayoub)

1:45-2:15 PM   _**Change Starts from Within - Principles of Self-Leadership**_: Working collaboratively to solve complex problems in any organization (Dunphy)

2:15-3:00 PM   _**This isn't the Raspberry Pi that Grandma Used to Make**_: IoT technology, vocabulary, and constructs (Barr)

3:00-3:15 PM   **Bio Break**

3:15-4:45 PM   _**It's Okay, You Can Do It**_: IoT Technology Exercises (Barr, Ayoub)

4:45-5:00 PM   _**Day One Debrief**_: Setting expectations for days two and three, discuss homework, day 1 program closure (Dunphy)

Day Two Agenda: Wednesday (date TBD)

The second day is an integrated experience of applying the first day concepts to work-related challenges in real time while at work. The goal is to have participants immediately, and with access to the program instructors, identify opportunities at work to create value using the ideas and tools from the day one program content. Participants will be given consultation and guidance from program instructors. Ask the professional consultants how to approach solutions you would like to see implemented in your workplace. There will be a take home quiz including 3-5 questions related to applications of the learning to work-related challenges

Day Three Agenda: Thursday (date TBD)

7:45-8:00 AM	Tech check, attendance and verification of group readiness
8:00-8:45 AM	***Review of Day 1 Learning***: Facilitated discussion of Day 2 activities, (whole team, Dunphy facilitate)
8:45-10:30 AM	***Now You Got It!:*** IoT Technology Exercises continued (Barr, Ayoub)
10:30-10:45 AM	**Bio Break**
10:45AM to Noon	***How to Swim in the Ocean of Data***: A deeper "dive" into metrics, data analysis and analytics (Ayoub, Lensman)
12:00-12:30	**Lunch on your own**
12:30-1:30 PM	***A Novel Approach to a Traditional Exercise***: Introduction to sketchpad, whiteboarding and storyboarding for effective analysis and implementation of ideas (Ayoub)
1:30-2:30 PM	***Business Analytics Case Studies***: Case studies in manufacturing, integration with modern IoT concepts and possibilities (Lensman, Ayoub)
2:30-3:00 PM	***A Look into the Future***: An overview of Artificial Intelligence, Machine Learning and IoT (Ayoub)
3:00-3:15 PM	**Bio Break**
3:15-4:00 PM	***Panel Discussion***: How can the concepts be integrated into your business? – ask the experts (Whole team, Dunphy facilitate)
4:00-4:30 PM	***Facilitated Discussion***: Discuss all concepts and skills learned and how to create action plans to execute immediately at work (Whole team, Dunphy facilitate)
4:30-5:00 PM	***Wrap Up***: Collect evaluations, distribute certificates and closing formalities (Dunphy and Ayoub)