An 8-Week Course

# Autonomous Electric Vehicle Bootcamp

June 12 to August 2 on the Purdue University campus in West Lafayette

### **Course Overview**

The course will provide college students and recent grads with a practical introduction to the technologies in autonomous vehicles. The course is designed for engineering and technology students who are ready to expand their skills by designing, making, and testing a fully autonomous electric go-kart while applying the latest industry safety standards. The bootcamp will provide a look into how to manage a real-world working environment, including project management, team interactions, project reporting, and dealing with change. Students who complete this course will be ready to enter the emerging autonomous vehicle industry.



# **Course Highlights**

- Embedded Systems
- Functional Safety ISO 26262 Standard Overview
- Controls Strategy Development using MATLAB/Simulink
- CAN Communications (J1939)
- ISO 26262 Tool classification and Qualification
- MES Embedded Coder Tool
- Moto-Tune Calibration Display Tool



## **Course Timeline**

Week 1	Autonomous Vehicle Technology
	Overview, intro to electric motors,
	and Racios of Simulink

Week 2	Construct, analyze, and decode
	CAN Messages

Week 3 Functional Safety Overview Course

Week 4 Throttle Project using the MES Tool, Embedded Coder, along with the functional safety compliance tool,

Moto-Tune

Weeks 5-7 Use the Embedded Coder to develop

the autonomous features of the Go-Kart

Week 8 Demonstrate autonomous features of

the Go-Kart and lessons learned at a

demonstration day

To learn more: Ihpu.com/kart



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May 1 to June 21 in Columbus, Indiana

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