

# **Mechanical Engineering**

- 1. Brown & Prescott Remodel Concepts
- 2. Intelligent Ground Vehicle Comp 1
- 3. JetCat Teststand
- 4. IEEE Robot Comp
- 5. JetCat Vectored Thrust
- 6. Wiring Harness 2
- 7. JetCat Variable Nozzle Area

- 8. Wiring Harness 2
- 9. Intelligent Ground Vehicle Comp 2
- 10. Wood Floor Vibration
- 11. Knee Joint Motion System
- 12. Induction Heating
- 13. Pep Truck Suspension
- 14. Electric Element Surface
- Temperature

- 15. Optimized Line Geomtery
- 16. Heat Pump Defrost System
- 17. Energy Useage Dashboard
- 18. Control Panel Thermal
- **Inspection Trainer**
- **19. JetCat Instrumentation**
- 20. Wire Connector Feed System
- 21. Drop Testing System
- 22. Wiring Harness 2

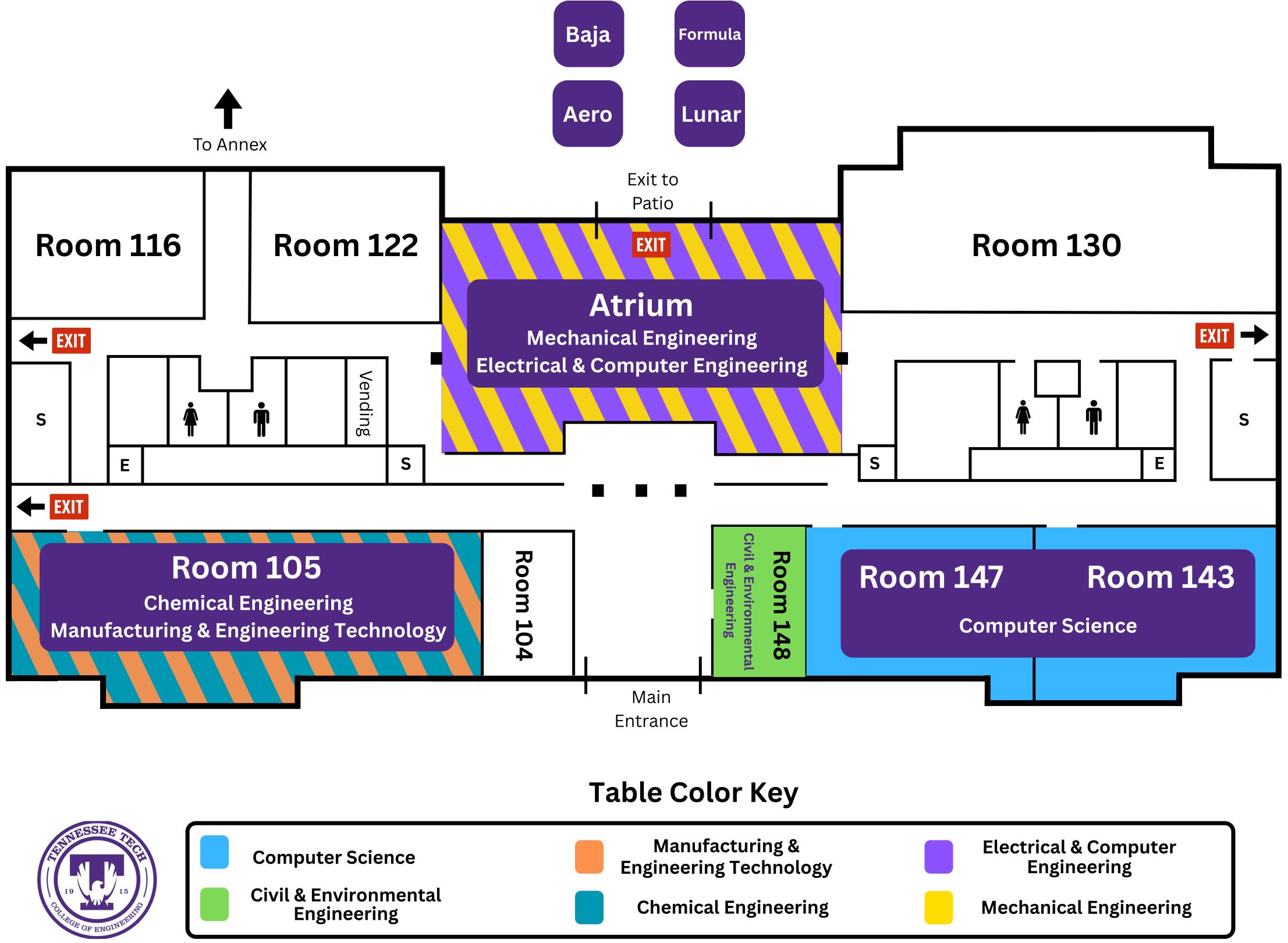
# **Electrical & Computer Engineering**

- 1. IEEE SoutheastCON
- Competition
- 2. Formula SAE Electric Car
- 3. Tennis Ball Collector
- 4. IGVC Competition
- 5. DARPA Challenge Drone
- 6. Automated Cable Assembly
- 7. Lochinvar Fan Simulator



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# **Manufacturing & Engineering Technology**

**1. Implement to Improve Safety** and Ergonomics when Loading **Iron into an Induction Furnace 2. Accessible Needs Braille Campus Map** 3. Optimizing Work-In-Progress **Cart Design for Automotive** Manufacturing Space Efficiency

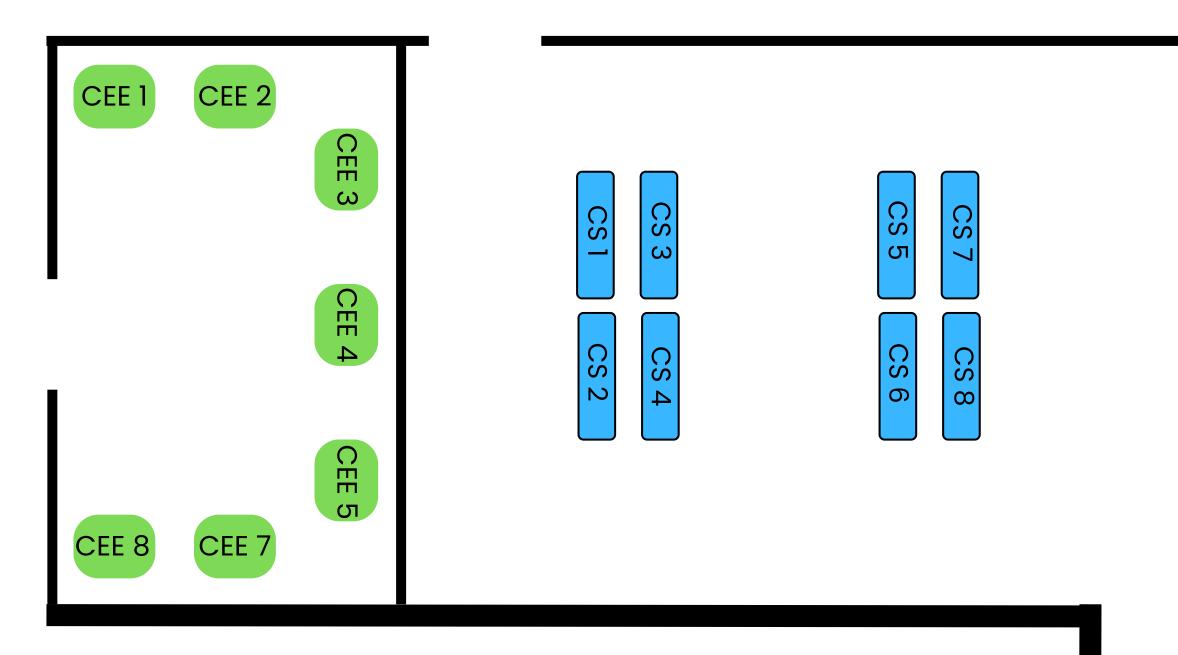
**4. DC Voltmeter Broadcast** via Wi-Fi (Arduino Based) 5. Wifi Enabled Voltmeter Allowing Remote Access using a Raspberry Pl 6. Conversion of Traditional Foundry to Smart Foundry **Using Low-Cost IoT Devices** 

## **Chemical Engineering**

- 1. "Blue" Vegetable Oil Biodiesel **Process**
- 2. Renewable Diesel
- **3. Acetaminophen Production**
- **4. Physical Solvent Acid-Gas**
- **Carbon Capture**
- 5. Development & Optimization of an Industrial Effluent
- **Treatment Plant**
- 6. Methanol to Olefins
- Conversion

7. Supercritical Water Coal Gasification 8. Biofermentation of Corn to Ethanol 9. Dynamic Modeling of an **Artificial Pancreas** 10. Simulation of Whiskey Distillation **11. SMR Hydrogen Production** with Carbon Capture 12. Steam Methane Reformation and CO2 Capture





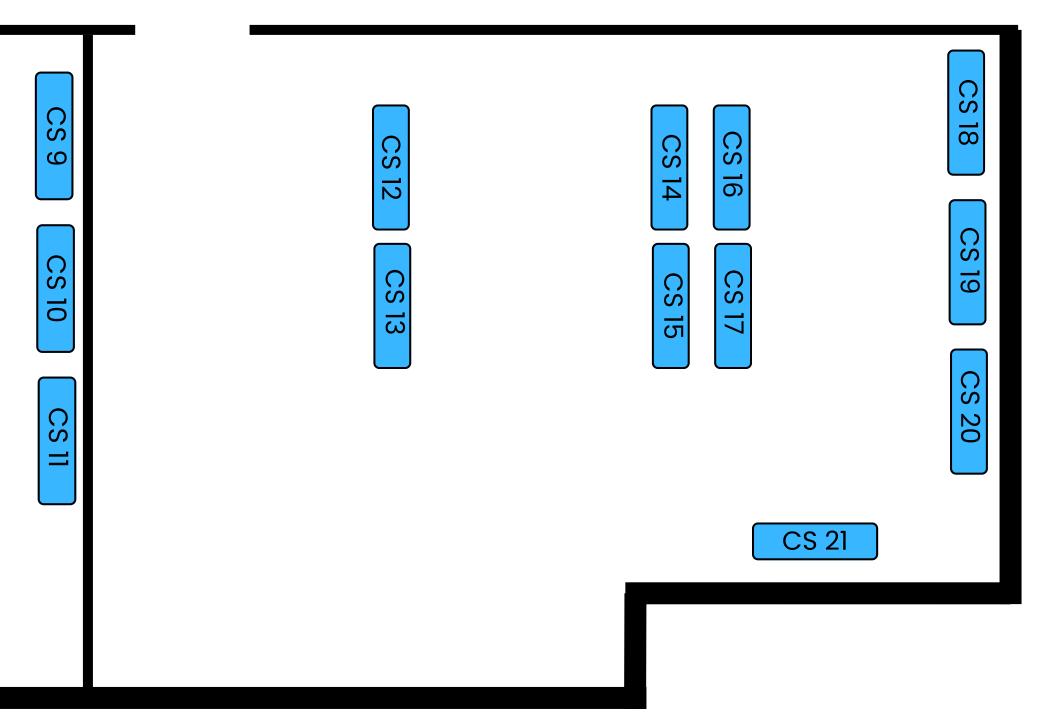
# **Civil & Environmental Engineering**

- 1. Benesch
- 2. Collier Engineering
- 3. HMB Professional Engineers
- 4. Jack Southard LLC and
- StructurePoint

- **5. LBYD Engineers**
- 6. Mattern & Craig -
- **Engineers and Surveyors**
- 7. Tennessee Department of
- Transportation



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# **Computer Science**

- Time Tracker and Analytics
   Rental Deposit Refunder
   TN State Chatbot
   Murderous Matches -Mobile Game App
   ML Utility Bill Reader
   Image Training
   Duck Data - Waterfowl
   Migration
   Wooly World
   Grocery Store Assistive
   Chatbot
   Social Services Network and Management
- 11. Law Enforcement
- **Management System**
- **12. Customer Leads**
- 13. Digital Wallet ID
- 14. Employee Project Tracking
- **15. EV Sales Dashboard**
- 16. Logistics Management Dashboard
- **17. Mobile Device Inventory**
- 18. Lubricant Product
- Configurator
- **19. Sports Mobile Application**
- 20. Unmanned Vessel
- Simulation
- **21. Web Harness**

# Spring 2025 Senior Design Project by Department

### Manufacturing & Engineering Technology

 Implement to Improve Safety and Ergonomics when Loading Iron into an Induction Furnace
 Accessible Needs Braille
 Campus Map

3. Optimizing Work-In-Progress Cart Design for Automotive Manufacturing Space Efficiency 4. DC Voltmeter Broadcast
via Wi-Fi (Arduino Based)
5. Wifi Enabled Voltmeter
Allowing Remote Access
using a Raspberry PI
6. Conversion of Traditional
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Using Low-Cost IoT Devices

### **Computer Science**

 Time Tracker and Analytics
 Rental Deposit Refunder
 TN State Chatbot
 Murderous Matches Mobile Game App
 ML Utility Bill Reader
 Image Training
 Duck Data - Waterfowl
 Migration
 Wooly World
 Grocery Store Assistive
 Chatbot
 Social Services Network
 and Management 11. Law Enforcement
Management System
12. Customer Leads
13. Digital Wallet ID
14. Employee Project Tracking
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### **Chemical Engineering**

- 1. Blue Team
- 2. Team HM2S
- 3. Team OBS
- 4. Team JAMS
- 5. Team CEKTR
- 6. Methanol to Olefins
- Conversion

- 7. Process Pioneers
- 8. Team BHMN
- 9. The Ohmies
- **10. TEAM SARG**
- 11. The Real Kidders
- 12. The CH4 Heads

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