

BAYLOR ENGINEERING CAPSTONE DESIGN 2018-2019 PROJECT PORTFOLIO

FALL 2018 PROJECTS

- **Brandt Companies:** (ME) Ducting and plumbing systems for commercial real estate project
- **Lockheed Martin:** (ME) Support equipment for installing large modular systems during aircraft production
- **Modern Technology Solutions:** (ME/ECE mix) Deploying communication relays using lighter-than-air transport
- **Baylor SAE Baja:** (ME) Transmission gearbox optimized for off-road competition vehicle

EARLIEST OPPORTUNITY PROJECTS (FALL 2018 OR SPRING 2019 BASED ON INTEREST)

Projects listed below could be potentially offered in either semester of the 2018-2019 academic year at the discretion of our Fall 2018 students, instructors, and corporate sponsors.

- **Bare Bucha:** (ME/ECE mix) Proof-of-concept for kombucha brewing equipment
- **Dycor Manufacturing:** (ME/ECE mix) Motion capture system to assist prosthetics therapy patients
- **Zaragoza Family:** (ME/ECE Mix) Power-assisted swing for special needs child
- **Dr. Alex Yokochi, ME Dept.:** (ME/ECE mix) Device for converting waste methane gas to liquid hydrocarbons
- **Mother Neff State Park*:** (ME/ECE mix) Proof-of-concept for solar-powered park exhibit

SPRING 2019 PROJECTS

- **Alcon:** (ME/ECE mix) Biomedical industry – Project Scope TBD
- **Lockheed Martin:** (ME) Commercializing scrap material from composite part production processes
- **Lockheed Martin:** (ME) Project Scope TBD
- **Texzon:** (ME/ECE mix) Test equipment to support wireless electric power distribution
- **Security Brands:** (ME) *Intrusion-resistant fence gate hinge system*
- **Corporate Project:** (ME/ECE mix) Performing visual inspection using unmanned aircraft
- **Corporate Project:** (ME/ECE mix) Telecommunication industry – *Project Scope TBD*
- **Corporate Project:** (ME) Construction industry supplier – *Project Scope TBD*
- **CASPER:** (ME/ECE mix) Full scale, research-grade capsule for Drop Tower
- **Baylor ECS Research:** (ME/ECE mix) Dr. Seung Kim, Electrical & Computer Engineering – *Project Scope TBD*
- **Baylor ECS Research:** Electrical & Computer Engineering – *Project Scope TBD*
- **BU Organization Project:** (ME/ECE mix) Robotics design competition – *Project Scope TBD*
- **BU Organization Project:** (ME) Low-cost ground vehicle design competition – *Project Scope TBD*
- **Fortenberry Family*:** (ME) Flotation device for special needs child
- **Good Neighbor Waco:** (ME/ECE mix) Solar energy system for community center

Teal italicized projects have not been formally confirmed.

** Projects marked with asterisks require fundraising – Students on these projects will assist at fundraising events.*

This list will be regularly updated.