Welcome to the First-Year Engineering Program

ENGR 1181
Class 1 – Part 1
Today's Learning Objectives

- After today’s class, students will be able to:
  - Identify the instructional team
  - Understand ENGR 1181 Goals & Focus
  - Grasp the “How, what, when, who, why” of Engineering
Teaching Team Introduction

- Faculty Leader
- Graduate Teaching Associate - GTA
- Undergraduate Teaching Associates - UTA

Get to know us, we’re here to help you be successful!
Goals

- Prepare you for advanced engineering courses
- Expose you to a wide range of engineering careers
- Prepare you to be productive as working engineers
Fundamentals of Engineering

- **ENGR 1181**
  - Problem Solving with Engineering Tools
  - Computer Programming
  - Hands-on Labs
  - Technical Communications
  - Teamwork

- **ENGR 1182**
  - Graphics and CAD
  - Design and Build Projects
  - Technical Communications
  - Teamwork
Questions you may ask yourself

- **How** can I impact the world as an engineer?
- **What** is engineering?
- **When** did engineering begin?
- **Who** can become an engineer and what does it take?
- **Why** become an OSU engineer?
How can I impact the world?

- You can help “make the world go round” by providing solutions to everyday needs & problems
Power

Majors:
- Nuclear
- Mechanical
- Materials
- Electrical
- Environmental
- Computer
Structures

Majors:
- Civil
- Mechanical
- Welding
- Materials
Health & Medicine

Majors:
- Biomedical
- Mechanical
- Materials
Transportation

Majors:
- Aerospace
- Mechanical
- Materials
- Electrical
- Industrial
- Computer
Communication

Majors:
- Computer
- Electrical
- Mechanical
- Materials
Defense

Majors:
- Mechanical
- Electrical
- Materials
Humanitarian

Majors:
- Mechanical
- Civil
- Environmental
- Electrical
- Industrial
Call to Action (Humanitarian)

- President Kennedy and USAID [video]
- USAID Development Innovation Venture [video]
What is Engineering?

- Engineering is about using natural materials and forces for the good of mankind.
1st Century Engineering
9th Century Engineering
20th Century Engineering
21st Century Engineering
Engineering Since Our Lifetime

1995 Lincoln Town Car
8 cylinder luxury car

2014 Lincoln Town Car
hybrid
Engineering Since Our Lifetime

1995 Motorola flip phone

2014 iPhone 5
Summary

- **How** can you impact the world as an engineer?
- **What** is engineering?
- **When** did engineering begin?
- **Who** can become an engineer and what does it take?
- **You** can become an OSU engineer!
OSU Engineering!