

# **The George W. Woodruff School of Mechanical Engineering at Georgia Tech**

**What is ME?**

**What jobs can I do as an ME?**

# Mechanical Engineering Is...

- Finding creative solutions to problems!
- Perhaps the broadest of all the engineering disciplines.
- Working with motion, energy, forces, and heat.
- Concerned with analysis, design, manufacture and operation of:

**“Scientists discover the world that exists; engineers create the world that never was.”**  
**-Theodore Von Karman**



**Energy**



**Defense & Aerospace**



**Manufacturing**



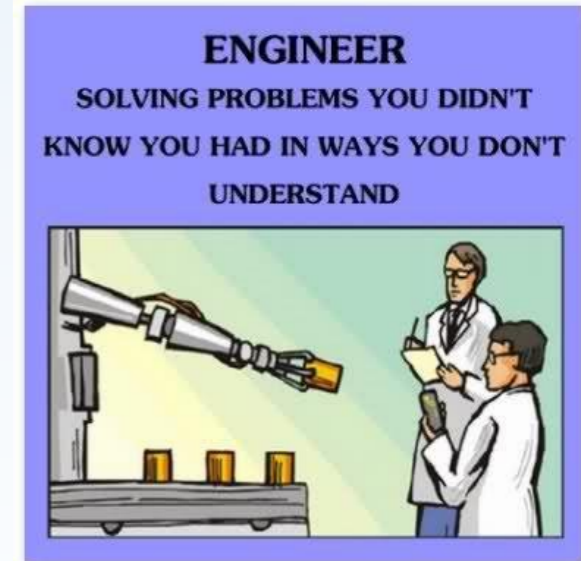
**Environment**



**Health & Bio**



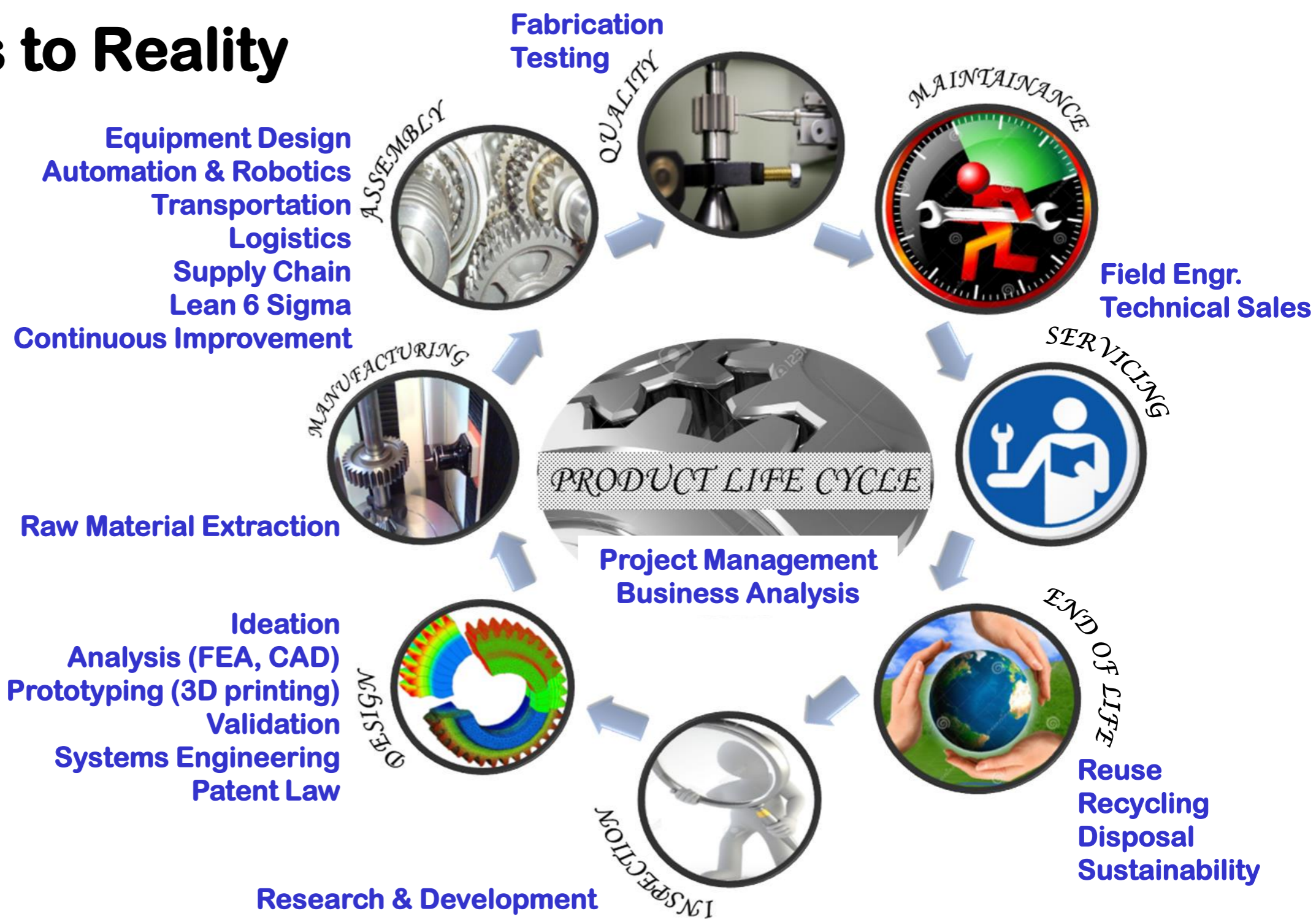
**Transportation**



# ME: Ideas to Reality

## Examples of Design

- Machines that manufacture and package all varieties of products
- Sports equipment
- Consumer products (napkins to roller coasters)
- Automation - conveyors, robots, production lines
- Cars, trucks, heavy equipment, buses, aircraft, ships
- Construction equip.
- Oil well drilling and extraction equipment
- Electronics
- Nearly every man made object has been worked on by a Mechanical Eng.



# What Industries Hire ME's?



**Aerospace & Defense**



**Automotive, Rail, Ships, etc**



**Food & Beverage**



**Renewable Energy**



**Oil & Gas**



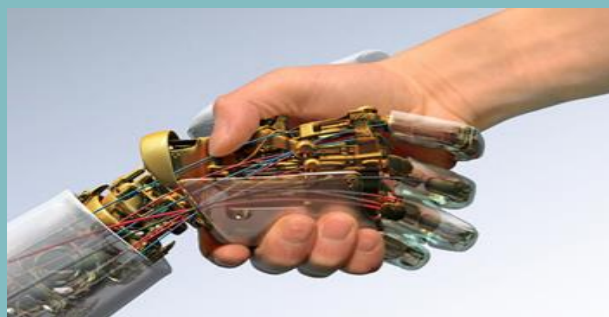
**Consulting**



**Toy Design & Manufacturing**



**Construction & Equipment**



**Automation & Robotics**



**Power Generation**



**Biomedical**

**And many more...**

- HVAC & Refrigeration
- Electronics, telecom
- Consumer products
- Chemical, pharmaceutical
- National laboratories
- Military

# Our Recent Graduates Are At:

- **Automotive**

Ford, GM, Toyota, BMW, KIA, Honda, Mercedes, Bosch, Michelin, Tesla, Porsche,

- **Energy, Oil & Gas**

BP, Citgo, Baker Hughes, Schlumberger, Georgia Power, Southern Company, General Electric, Shell, Suez Energy, Chevron, Scana, Westinghouse, Atlanta Gas & Light, Exxon-Mobil, Conoco, Apache, Phillips 66, Bechtel, Baker Hughes

- **Commercial & Consumer Products**

Cooper Lighting, General Mills, Clorox, Frito Lay, Mattel, Coke, International Paper, Lexmark, Proctor & Gamble, Snap-On, 3M, National Instruments, Texas Instruments, Kimberly Clark, Kids II, Apple, Southwire, Colgate, Russell Athletic, Steelcase, Georgia Pacific, AGCO

- **Transportation & Construction**

John Deere, Caterpillar, Kubota Tractor Corporation, Norfolk Southern, CSX, Parsons, Club Car, EZ Go

- **Aerospace & Defense**

NASA, Bell Helicopter, Lockheed Martin, Gulfstream Aerospace Corp, Rolls Royce, Northrop Grumman, Harris Corp, Boeing, NAVSEA, Boeing, Advanced Armament Corp, NAVAIR, Pratt & Whitney, SpaceX, L3 Technologies

- **Business**

Ernst & Young, Bank of America, CarMax, Deloitte, Capital One, Accenture, Pinnacle

- **Automation and Robotics**

Innotec Automation, Rockwell Automation, IPA, Advanced Automation, Factory Automation

- **Engineering Services & Consulting:**

Dean Oliver International, CH2M, Patterson & Dewar, McKenney's Mech. Contractors, Jordan & Skala, Accenture, Babcock & Wilcox, Turner Construction, Slingshot, Pinnacle, Deloitte

- **HVAC**

Trane, Underwood Air Systems, Carrier

- **Chemicals**

Air Products, Air Liquide, Dow Chemical, Eastman Chemical Company

- **Medical & Pharmaceutical**

Medtronic, GE Healthcare, Abbott Labs, CibaVision, Eli Lilly, Johnson & Johnson

- **Military & Government**

Air Force, Navy, Marines, Army, CIA, FBI

# ME Full-Time Hiring (2012-2014)

## Top Hiring Companies 2011-2013

Boeing	3.9%
Deloitte Consulting	2.4%
General Electric	2.4%
Schlumberger	2.4%
Southern Company	2.4%
Dow Chemical	2.0%
ExxonMobil	2.0%
Pratt & Whitney	2.0%
Siemens	2.0%
United States Air Force	2.0%
Air Products & Chemicals	1.5%
Caterpillar	1.5%
Eaton Corporation	1.5%
International Paper	1.5%
Lockheed Martin	1.5%
Mitsubishi	1.5%
Shell Oil Company	1.5%

Spring 2017 Salary Data:  
85% of BSME students  
had job offers with a  
median salary of \$68,000

## Top States 2012-2014

GA	45.2%
TX	17.1%
SC	5.3%
MI	4.8%
CA	3.1%
FL	2.6%
NY	2.2%
NC	1.8%
AZ	1.3%
IL	1.3%
IN	1.3%
PA	1.3%

## Top Hiring Companies 2012-2014

General Electric	3.4%
General Motors	3.0%
Boeing	2.6%
Schlumberger	2.6%
ExxonMobil	2.1%
Eaton Corporation	1.7%
Enercon	1.7%
Lockheed Martin	1.7%
AirWatch	1.3%
AT&T	1.3%
Caterpillar Inc	1.3%
Chevron	1.3%
Dennis Group	1.3%
Ford Motor Company	1.3%
Georgia Tech Research Inst.	1.3%
McKenney's Inc	1.3%
PricewaterhouseCoopers	1.3%
Shell Oil	1.3%
Textron	1.3%