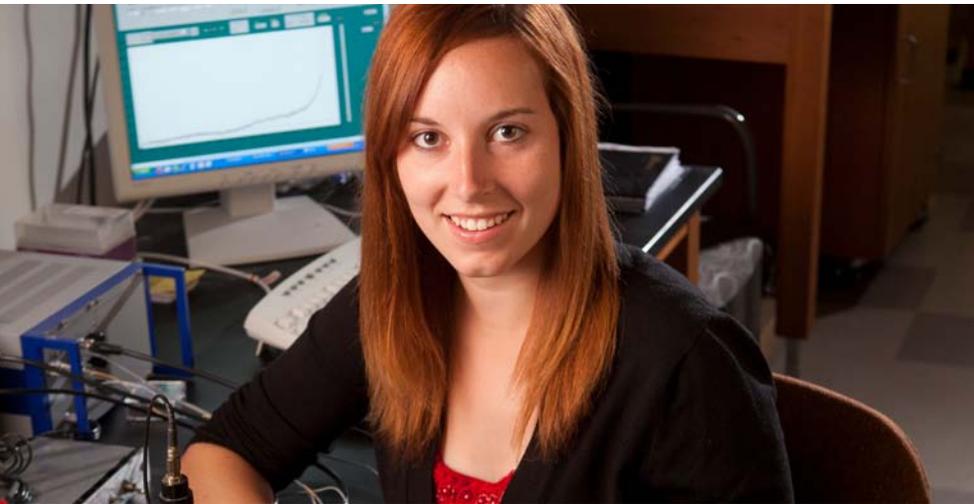


WHY CHOOSE MECHANICAL ENGINEERING?



Mechanical engineering (ME) encompasses the design and development of machines, from bicycles to jetliners to space shuttles. Anything that involves the design and manufacturing of mechanical, thermal, or electronic devices relies on mechanical engineering. Mechanical engineering/materials scientists are involved in developing new materials or improving existing materials for applications such as artificially lubricating joints or super-efficient electrical conducting materials.

Our department works in areas that just might surprise you.

Duke's Mechanical Engineering and Materials Science Department specializes in research areas including aerodynamics; dynamics and controls; fluid mechanics and transport; thermodynamics; solid mechanics; soft materials/biomaterials; and solid materials.

Because mechanical engineers engage in such a great variety of activities, their education must be broadly based. The mechanical engineer's program of study includes mathematics and basic sciences, applications in several engineering sciences, and team-based experience in the process of design. We designed a flexible program so you can pursue your goals—whether through a minor in Energy Engineering or certificates in Aerospace Engineering or Energy & the Environment, or hands-on learning experiences outside the classroom through our robotics, EcoMarathon, sustainable living, and motorsports clubs or groups like Duke Engineers for International Development.

You can do research as an undergraduate.

More than half of Pratt students participate in hands-on, laboratory research for formal class credit. Many apply to become Pratt Research Fellows or NAE Grand Challenge Scholars, or are involved in volunteer, summer, or paid research opportunities. Each ME senior also completes a signature capstone design project that provides an immersive, real-world engineering experience.

Recent projects by ME students:

- Designing and implementing a wireless network for mobile robotics
- Novel wind turbine design to improve efficiency and allow higher turbine density in wind farms
- Fiber-reinforced, high-strength hydrogel systems for cartilage repair
- Innovative noise reduction methods for flight and ground vehicles
- Aeroacoustics of supersonic flow
- Harvesting energy from wave motion

Learn more: mems.duke.edu

AFTER GRADUATION

Our students go places.

Mechanical engineers work in fields ranging from energy to robotics, construction to transportation, automotives to aerospace. They are playing a key role in efforts to develop nano-sized machines and ultimately enable industrial-scale nanomanufacturing. Mechanical engineers frequently work in areas that cross over into other disciplines, particularly biology and medicine. For example, mechanical engineers at Duke are helping to develop artificial tissue and organs, and novel treatments for cancer and biomedical imaging.

Some places our recent graduates have gone:

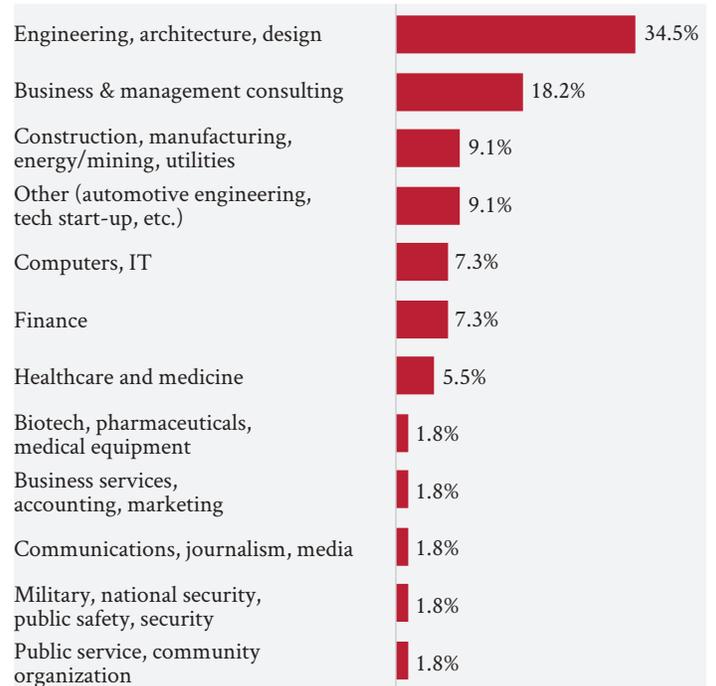
Graduate & Professional Schools:

- Carnegie Mellon University
- Massachusetts Institute of Technology
- Stanford University
- University of Michigan—Ann Arbor

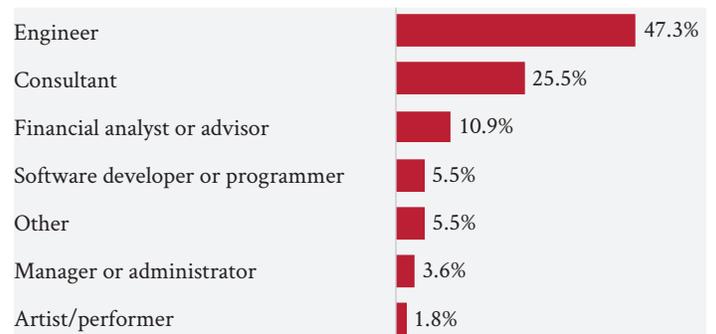
Industry:

- Accenture
- Applied Predictive Technologies
- Boeing
- ExxonMobil
- GE Aviation
- J.P. Morgan
- McKinsey & Company
- Tesla Motors

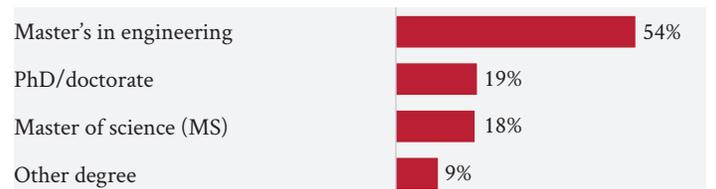
Area of employment for 2014 ME grads entering the workforce:



Type of position:

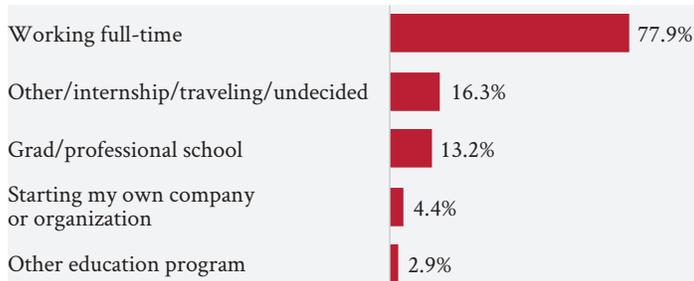


Plans for 2014 ME grads directly entering graduate/professional school:



90% of Duke ME students participate in internships or related work experience before graduation.

After-graduation plans for 2014 ME seniors:



*Some students chose more than one answer.

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