With over 600 students, mechanical engineering is the largest department in the college. Students in this department develop real world skills, using both traditional mechanical engineering approaches as well as the latest computational design and advanced manufacturing techniques.

In the department’s capstone senior design course, some students work with local companies to craft solutions to industrial challenges, while others design all-terrain vehicles or an unmanned, electric-powered, radio controlled aircraft. Still other students learn about control systems and automation by creating robots for space exploration. These skills provide our students with the education and experience they need to work in the manufacturing and business worlds, to pursue careers in the government and military or to start their own businesses.

Faculty in the department are investigating technologies that have the power to change the way we travel, use energy and produce goods. Mechanical engineering faculty are working on the macro to the nano scale to improve materials and systems and to create new products. Faculty research, in areas including design, thermal-fluids, control systems, robotics, advanced materials manufacturing and others, has the potential to impact the fields of energy production and use, transportation, manufacturing, space exploration and more.

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**2019-2020 STUDENT STATISTICS**

<table>
<thead>
<tr>
<th>Category</th>
<th>Undergraduate</th>
<th>Graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>556</td>
<td>56</td>
</tr>
<tr>
<td>Ethnic Minority</td>
<td>12%</td>
<td>16%</td>
</tr>
<tr>
<td>First Generation Undergraduate</td>
<td>26%</td>
<td>74%</td>
</tr>
<tr>
<td>Placement¹</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹Self reported percentage of students graduating in the past two years who were employed as engineers or attending graduate school within three months of graduating.
RESEARCH AREAS

- Aerospace
- Control systems and robotics
- Design of systems and design theory
- Energy systems
- Fluidic systems

• Materials
• Manufacturing
• Mechanics and mechanical systems
• Nano/micro systems
• Tribology

CENTERS

- Center for Advanced Surface Engineering

CHAIRS AND PROFESSORSHIPS

Ajay Malshe
Twenty-First Century Endowed Chair in Materials, Manufacturing and Integrated Systems

Arun Nair
The Twenty-First Century Professorship in Mechanical Engineering I

Darin Nutter
The Twenty-First Century Leadership Chair in Engineering

Steve Tung
The Twenty-First Century Professorship in Mechanical Engineering III

Min Zou
The Twenty-First Century Professorship in Mechanical Engineering II

FELLOWS

- Rick Couvillion: American Society of Mechanical Engineers
- Ajay Malshe: ASM International, American Society of Mechanical Engineers, Institute of Physics (UK), International Academy for Production Engineering, National Academy of Engineers
- Darin Nutter: ASHRAE
- Steve Tung: American Society of Mechanical Engineers
- Min Zou: American Society of Mechanical Engineers, Society of Tribologists and Lubrication Engineers

New Research Awards FY 2019

$3.5M

Last Updated 1/15/2019