In the Department of Biological and Agricultural Engineering, faculty and students study and design biosystems that produce and utilize food, water and energy, and they find ways to make these systems more sustainable. They look for better ways to produce food, protect the environment and keep our water supply clean, and they investigate the use of natural resources to produce value-added products.

Students in this department regularly win design competitions, partnering with local businesses to create technology with a global impact. Research in the biological and agricultural engineering department covers many topics, including water quality, agricultural technology, nanoscience and sustainability. In addition to academic research, the Department of Biological and Agricultural Engineering, which is also part of the University of Arkansas System Division of Agriculture, contributes the expertise of its faculty to farmers across the state through the Agricultural Experiment Station and the Cooperative Extension Service.

Faculty in this department are active in efforts to increase food security and water quality across the globe. They collaborate on projects with the United Nations, the American Society of Agricultural and Biological Engineers, the Global Roundtable for Sustainable Beef, the U.S. Poultry and Egg Federation, the United Soybean Board, the Department of Agriculture, the Environmental Protection Agency, the Department of Energy, and many other national and international organizations.

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2018-2019
STUDENT STATISTICS

<table>
<thead>
<tr>
<th></th>
<th>Undergraduate</th>
<th>Graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate Female</td>
<td>43%</td>
<td></td>
</tr>
<tr>
<td>Under Represented Minorities</td>
<td>18%</td>
<td></td>
</tr>
<tr>
<td>First Generation Undergraduate</td>
<td>19%</td>
<td></td>
</tr>
<tr>
<td>Placement¹</td>
<td>72%</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

AGRICULTURAL AND FOOD ENGINEERING
Faculty in this area are developing more efficient and sustainable ways to produce food for a growing population. They are investigating ways to improve practices in several agricultural industries.

BIOTECHNOLOGY ENGINEERING
Faculty in this area design systems to manipulate plant, animal and microbial materials into industrially and medically relevant consumer products for industries including healthcare, pharmaceuticals, energy, agriculture and others.

ECOLOGICAL ENGINEERING AND WATER RESOURCES
Faculty in this area combine the science of ecology with the practice of engineering to solve complex ecosystem problems such as water resource management and water quality.

SUSTAINABILITY AND GREEN ENGINEERING
Sustainability concerns inform all the areas of biological and agricultural engineering. Researchers are using their expertise to improve sustainability in many different areas. They are collaborating with national and international organizations to develop government policies and industry standards and contribute to the global conversation about sustainability.

CENTERS

• Arkansas Water Resources Center

CHAIRS AND PROFESSORSHIPS

Yanbin Li
Tyson Endowed Chair in Biosensing Engineering

FELLOWS

• Jin-Woo Kim: American Institute for Medical and Biological Engineering
• Yanbin Li: American Institute for Medical and Biological Engineering, American Society of Agricultural and Biological Engineers, Institute of Biological Engineering
• Otto Loewer: American Society of Agricultural and Biological Engineers
• Lalit Verma: American Institute for Medical and Biological Engineering, American Society of Agricultural and Biological Engineers, Indian Society of Agricultural Engineers, Institute of Biological Engineering, International Academy of Agricultural and Biosystems Engineering

New Research Awards FY 2018

$1.8M