Our faculty, staff and students work collaboratively to address some of society’s most complex technological challenges, and we are globally known for our innovative research advances. Our diverse faculty—more than 23% of whom are women—are leaders or affiliates of nine research centers and institutes at UW-Madison. Their innovations make an impact in areas ranging from energy sustainability and advanced materials and design to machine learning in healthcare. And in the past five years alone, ECE faculty have received 142 patents and disclosed nearly 200 inventions.

Students at every stage of their educational career benefit from engaging classroom experiences with exceptional instructors; state-of-the-art instructional, lab and design spaces; and opportunities to conduct research. Our faculty members have earned nearly 30 prestigious honors for their teaching excellence—among them, seven Chancellor’s Distinguished Teaching Awards and four national/international teaching recognitions from IEEE and the Electrical and Computer Engineering Department Heads Association.

As the largest department in the College of Engineering, we have grown an alumni base of over 12,000 ECE Badgers. Whether overseeing Qualcomm’s technical roadmaps for wireless chipsets, creating new technologies that enable deaf and hard-of-hearing people to communicate, serving as the first woman president of the IEEE Engineering in Medicine and Biology Society, or leading as CEO of Rockwell Automation, our alumni have made extraordinary contributions to the lives of people throughout the world.

<table>
<thead>
<tr>
<th>STUDENT ENROLLMENT</th>
<th>DEGREES CONFERRED</th>
<th>NATIONAL PUBLIC RANKING</th>
</tr>
</thead>
<tbody>
<tr>
<td>998 UNDERGRADUATE</td>
<td>203 UNDERGRADUATE</td>
<td>Electrical Engineering 9th UNDERGRADUATE</td>
</tr>
<tr>
<td>349 GRADUATE</td>
<td>117 GRADUATE</td>
<td>Computer Engineering 10th UNDERGRADUATE</td>
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</tbody>
</table>

STUDENT ENROLLMENT
DEGREES CONFERRED
NATIONAL PUBLIC RANKING
### DEGREES OFFERED

<table>
<thead>
<tr>
<th>BS</th>
<th>STARTING SALARIES AND PLACEMENT*</th>
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<tbody>
<tr>
<td>Computer Engineering</td>
<td>$70k+</td>
</tr>
<tr>
<td>Computer Engineering: Machine Learning and Data Science</td>
<td></td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>$84k+</td>
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<tr>
<td>Electrical Engineering: Machine Learning and Data Science</td>
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</table>

### MS

<table>
<thead>
<tr>
<th>Electrical and Computer Engineering: Research</th>
<th>$70k+</th>
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</thead>
<tbody>
<tr>
<td>Electrical and Computer Engineering: Machine Learning and Signal Processing (accelerated 12-16 month program)</td>
<td></td>
</tr>
<tr>
<td>Electrical and Computer Engineering: Professional (accelerated 12-16 month program)</td>
<td></td>
</tr>
<tr>
<td>Electrical and Computer Engineering: Power Engineering (online)</td>
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</tbody>
</table>

### PhD

| Electrical and Computer Engineering | $84k+ |

### AVERAGE ANNUAL RESEARCH FUNDING

$17.5m+

### NATIONAL SCIENCE FOUNDATION CAREER AWARD RECIPIENTS

26

### PRESIDENTIAL EARLY CAREER AWARD FOR SCIENTISTS AND ENGINEERS (PECASE) RECIPIENTS

3

### FELLOWS OF IEEE AND OTHER SOCIETIES

28

### RESEARCH AREAS

- Applied Electromagnetics and Acoustics
- Communications, Networks, Privacy and Security
- Computer Systems and Architecture
- Plasma Science and Fusion Energy
- Machine Learning, Signal Processing, and Information Theory
- Solid-state Electronics and Quantum Technologies
- Optics and Photonics
- Energy Systems
- Optimization and Control

### RESEARCH FACILITIES

- HSX – Helically Symmetric eXperiment
- Materials Research Science and Engineering Center
- Wisconsin Centers for Nanoscale Technology
  - Nanoscale Fabrication Center
  - Soft Materials Characterization Laboratory
  - Nanoscale Imaging and Analysis Center
- Wisconsin Electric Machines and Power Electronics Consortium (WEMPEC)
- Wisconsin Energy Institute
- Wisconsin Institute for Discovery
- Power Systems Engineering Research Center
- Center for High Throughput Computing
- Wide-Bandgap Materials and Devices Lab with III-Nitride MOCVD Reactor

### DEPARTMENT CHAIR

**Susan Hagness**

Philip Dunham Reed Professor

(608) 265-5739

susan.hagness@wisc.edu

**DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING**

**UNIVERSITY OF WISCONSIN-MADISON**