

# SCHOOL OF ENGINEERING AND APPLIED SCIENCE

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Penn's School of Engineering is unlike any other. Traditionally untraditional. Pioneers in interdisciplinary education and research. Theory linked with real-world practice. The path for students who want to shape the future. With the pace of innovation and technological advancement accelerating ever faster, engineers hold the keys to the next generation's routine wonders.

For more information, visit <http://www.seas.upenn.edu/>.

## Mission and Philosophy

Penn Engineering seeks an optimal balance between the creation and integration of knowledge through scholarly research, entrepreneurship and innovation in translating the products of our research into practice, and the dissemination of knowledge to our students on the Penn campus and beyond. Accordingly, our mission has two facets:

- The creation, integration and dissemination of knowledge in both the fundamentals and their application in order to be an international center of engineering excellence and a catalyst for technological innovation; and
- The design and delivery of an engineering education known for its rigor, breadth and relevance to prepare students to become global leaders in technology-based fields.

The doctoral program is the hallmark of Penn Engineering's educational programs. Attracting, educating and mentoring outstanding doctoral students are priorities of the school. Penn Engineering doctoral graduates should be educated, trained and mentored for leadership positions, not only in academia, but also in industry and government. The education that we provide our doctoral candidates must embrace the challenges of the 21<sup>st</sup> century. The barrier to entry in the field of engineering is being lowered, and some technologies are becoming commoditized, even as new disruptive technologies are being developed. The gap between industry research and development and academic research is narrowing. It is important to strike the right balance between training in basic, curiosity-driven research while ensuring that our students are able to innovate and become leaders in today's quickly evolving disciplines.

## Research

Our interdisciplinary research centers and institutes span across all departments in Penn Engineering and foster collaborations across different schools throughout the University. The physical connectivity of engineering buildings and the proximity to each of the other schools enables exciting collaborations with faculty, students and postdocs.

Research at Penn is constantly pushing back the frontiers of science and using innovative methods of thinking to approach problems and find solutions across many fields. If it hasn't yet been solved, chances are someone at Penn Engineering is working to come up with the solution.