



Stevens Institute of Technology

Since 1870

Jean Zu
Lore E. Feiler Dean, School of Engineering and Science

Nov. 2024





Legacy of Innovation

The Stevens Family: The First Family of American Inventors

Established first college of Mechanical Engineering in the U.S.

Designed the steam ferry, T-rail and the first American-built steamboat locomotive

Built and operated the first United States commercial railroad

Instrumental in developing United States patent law

Created the America's Cup racing series and designed and sailed the yacht *America*, the first winner of the Cup



Pioneering Innovation

Stevens alumni have followed in the footsteps of the university's founding family to become modern-day game-changers.

Created the field of scientific management

Invented the Gantt Chart

Co-founded GM and Texas Instruments

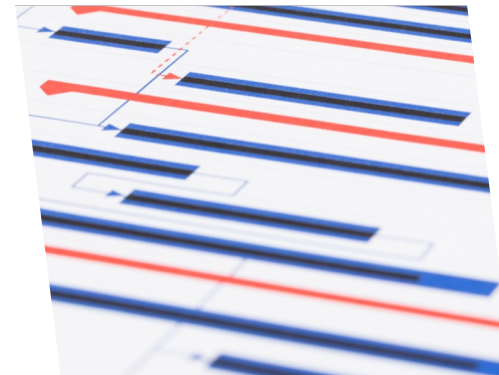
Won a Nobel Prize for discovering the neutrino

Created the art form known as the mobile

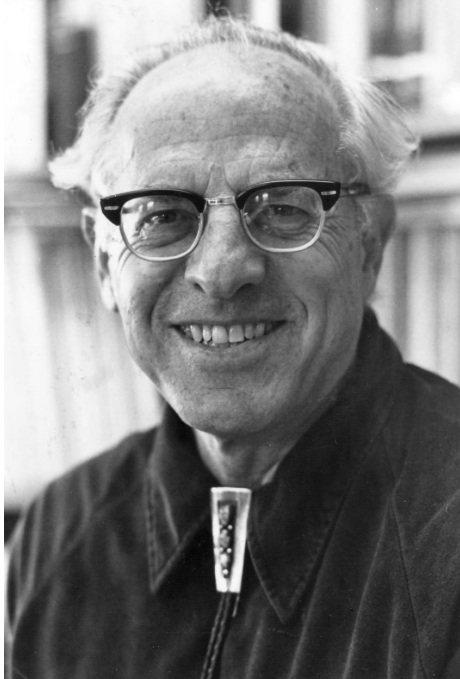
Directed command, service and lunar module design for NASA's Apollo moon missions

Invented the IMAP email protocol

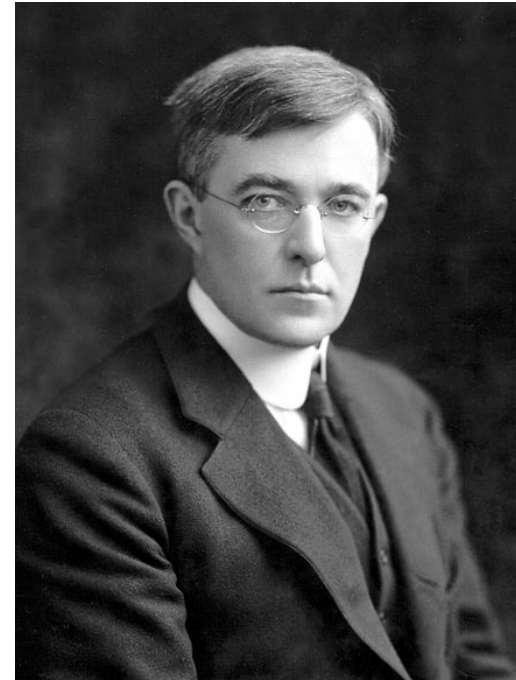
Invented bubble wrap



Nobel Prize Winners



Frederick Reines '39 M.S. '41
Hon.D.Eng. '84
Recipient of the Nobel Prize in Physics
in 1995 for the discovery of the
neutrino



Irving Langmuir, Professor of Chemistry at
Stevens Institute of Technology until 1906
Recipient of the Nobel Prize in Chemistry in
1932 for his work in surface chemistry

Accomplished Chinese Alumni

- Haoliang Xu M.S. '92, United Nations Under-Secretary-General
- Dr. Ye Ouyang Ph.D. '12, Chief Technology Officer and Senior Vice President, Asiainfo, Beijing/USA
- Kai “Chris” Han M.Eng. '09, CTO, Mighytech, Beijing
- Yaguang Deng M.Eng. '15, Vice General Manager of Shanghai Hehe Information Technology Co., Ltd., Shanghai
- Wenting Zhao M.S. '15, Deputy Director of Products of Zheshang Bank, Beijing
- Haoyu Zhang M.S. '16, Project Manager of Wailianfa Business Consulting Co., Ltd.
- Xinyue Wang M.Eng. '15, Product Development Manager at Morgan Stanley, Shanghai
- Yi Zhang M.S. '10, Marketing Director, Shanghai Yufang Information Technology Co., Ltd.
- Ke Song M.S. '16, Investment Manager at Northeast Securities, Beijing

National Rankings and Recognition

#36

College Ranking

2024 Wall Street Journal
College Pulse Ranking



#25

Most Innovative Colleges

2022 U.S. News & World Report's
ranking of National Universities



#76

College Ranking

2024 U.S. News & World Report's
ranking of National Universities



#12

Career Placement

Best Value Colleges, 2024



**Among
America's Top Colleges**

Forbes, 2024

Forbes

#19

Return on Investment

2022 ranking among 4,500 colleges on
ROI 40 years after enrolment



#18

Best Value College

College ROI Report



#14

For Return on Investment

20-year net return on investment,
College ROI Report



#4

Top Earnings

Ranked among the 25 U.S. "colleges
where students go on to earn the
most money," 2018



Wall Street Journal Ranking

- The Wall Street Journal, September 6, 2023



THE WALL STREET JOURNAL.													
	Latest	World	Business	U.S.	Politics	Economy	Tech	Finance	Opinion	Arts & Culture	Lifestyle	Real Estate	Personal Finance
28	University of Michigan - Ann Arbor			Public	MI	81.6	▼						
29	Florida International University			Public	FL	81.3	▼						
30	Davidson College			Private	NC	81.2	▼						
31	Williams College			Private	MA	81.2	▼						
32	University of Notre Dame			Private	IN	81.1	▼						
33	University of La Verne			Private	CA	80.9	▼						
34	Rensselaer Polytechnic Institute			Private	NY	80.4	▼						
35	University of Illinois Urbana - Champaign			Public	IL	80.3	▼						
36	Stevens Institute of Technology			Private	NJ	80.1	▼						
37	The University of Chicago			Private	IL	80	▼						
38	Texas A & M University - College Station			Public	TX	79.9	▼						
39	Georgia Institute of Technology - Main Campus			Public	GA	79.7	▼						
40	Colgate University			Private	NY	79.6	▼						

New York Times Ranking

- New York Times (March 27, 2023) College Ranking [Build Your Own College Rankings](#)



YOUR PRIORITIES

Academic profile	34%
High earnings	21%
Economic mobility	18%
Campus safety	8%
Athletics	7%
Racial diversity	6%
Economic diversity	5%
Low net price	1%
Low sticker price	0%
Party scene	0%

High earnings
Median income 10 years after attendance

Low sticker price
Listed price of tuition, fees and housing

Academic profile
Graduation rate, SAT/ACT scores and student-faculty ratio

Party scene

Racially diverse

Economic mobility
More students start low-income and end up high-income

Low net price
Average price for students with financial aid and grants

Athletics
Student surveys, team performance and revenue

Campus safety

Economically diverse

YOUR RANKINGS

Size Location Filters Search

- 1 **Massachusetts Institute of Technology**
- 2 **Harvey Mudd College**
- 3 **Stanford University**
- 4 **California Institute of Technology**
- 5 **Stevens Institute of Technology**
- 6 **University of California, Los Angeles**
- 7 **University of Southern California**
- 8 **CUNY Bernard M Baruch College**
- 9 **Cornell University**
- 10 **University of California, Irvine**

CAREER OUTCOMES

Accenture

AIG

Alcatel-Lucent

American Express

Amgen

AT&T

Aventis

Bank of America

Barclays

BAE

BASF

BMW

Boeing

Cisco

Coca-Cola

Colgate-Palmolive

Credit Suisse

Deloitte

DHL

E-Trade

EMC2

Ericsson

FedEx

Fujitsu

GE

GM

Goldman Sachs

Google

GSK

Hertz

Hewlett-Packard

Honeywell

HSBC

IBM

Infosys

Intel

JPMorgan

Microsoft

Motorola

Nokia

Nvidia

Pfizer PSEG

Qualcomm

Siemens

UPS

Verizon

Columbia University

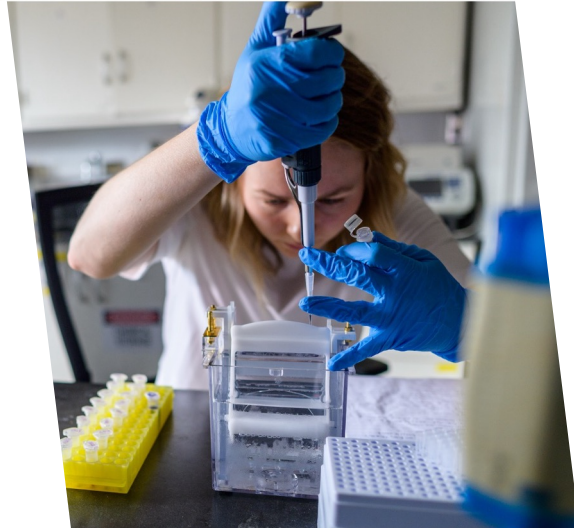
Princeton University

Rutgers University

Stony Brook University

University of Illinois

Three Technology-Focused Schools



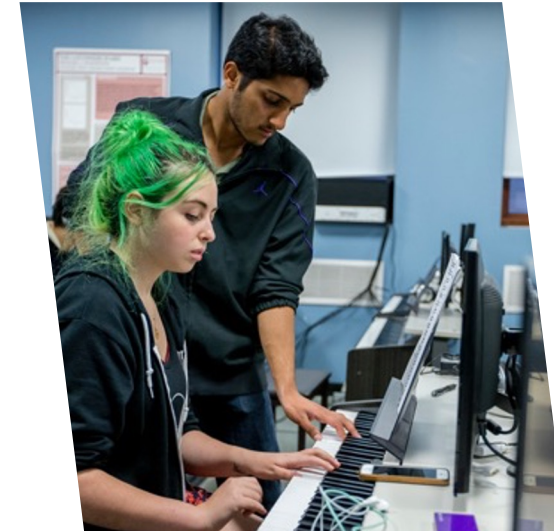
Charles V. Schaefer, Jr. School of Engineering and Science

*Advancing scientific knowledge to
create groundbreaking solutions
to 21st century challenges*



School of Business

*Leading innovation in business
management and finance,
across industries and around
the globe*



School of Humanities, Arts and Social Sciences

*Uniting humanities, arts,
science and technology to
inspire and inform change
and innovation*

School of Engineering and Science

3,124

Undergraduate Students

2,352

Master's Students

456

Ph.D. Students

5,932

Total Students

234

Full-Time Faculty

872

Courses

9

Research Centers

94%

First-Year Retention Rate

90%

Six-Year Graduation Rate

\$56.9M

Research funding

School of Engineering and Science

SES Facts and Figures at a Glance

74%

of UG Students
are SES

67%

of Masters Students
are SES

86%

of Ph.D. Students
are SES

65%

of Stevens faculty are SES

72%

of Total Stevens Students are SES

98%

of Stevens Research Enterprise

10 Departments

Department of Biomedical Engineering

Department of Chemical Engineering and Materials Science

Department of Chemistry and Chemical Biology

Department of Civil, Environmental and Ocean Engineering

Department of Computer Science

Department of Electrical and Computer Engineering

Department of Mathematical Sciences

Department of Mechanical Engineering

Department of Physics

Department of Systems and Enterprises

18 Undergraduate Programs

Engineering

- Biomedical Engineering
- Chemical Engineering
- Civil Engineering
- Computer Engineering
- Electrical Engineering
- Engineering Management
- Environmental Engineering
- Industrial and Systems Engineering
- Mechanical Engineering
- Engineering – Naval Engineering
- Engineering – Optical Engineering
- Software Engineering

Science

- Biology
- Chemistry
- Chemical Biology
- Computer Science
- Cybersecurity
- Mathematics
- Physics

33 Master's Programs

Actuarial Mathematics & Quantitative Risk
Applied Artificial Intelligence
Applied Mathematics
Biomedical Engineering
Chemical Biology
Chemical Engineering
Chemistry
Civil Engineering
Computer Engineering
Computer Science
Construction Engineering & Management
Cybersecurity
Data Science
Electrical Engineering
Engineering Management
Environmental Engineering

Integrated Product Development
Interdisciplinary
Machine Learning
Materials Science & Engineering
Mathematics
Mechanical Engineering
Media Broadcast Engineering
Ocean Engineering
Pharmaceutical Manufacturing
Physics
Quantum Engineering
Robotics
Software Engineering
Space Systems Engineering
Sustainability Management
Systems Analytics
Systems Engineering

19 Ph.D. Programs

Biomedical Engineering

Chemical Biology

Chemical Engineering

Chemistry

Civil Engineering

Computer Engineering

Computer Science

Data Science

Electrical Engineering

Engineering Management

Environmental Engineering

Interdisciplinary

Materials Science & Engineering

Mathematics

Mechanical Engineering

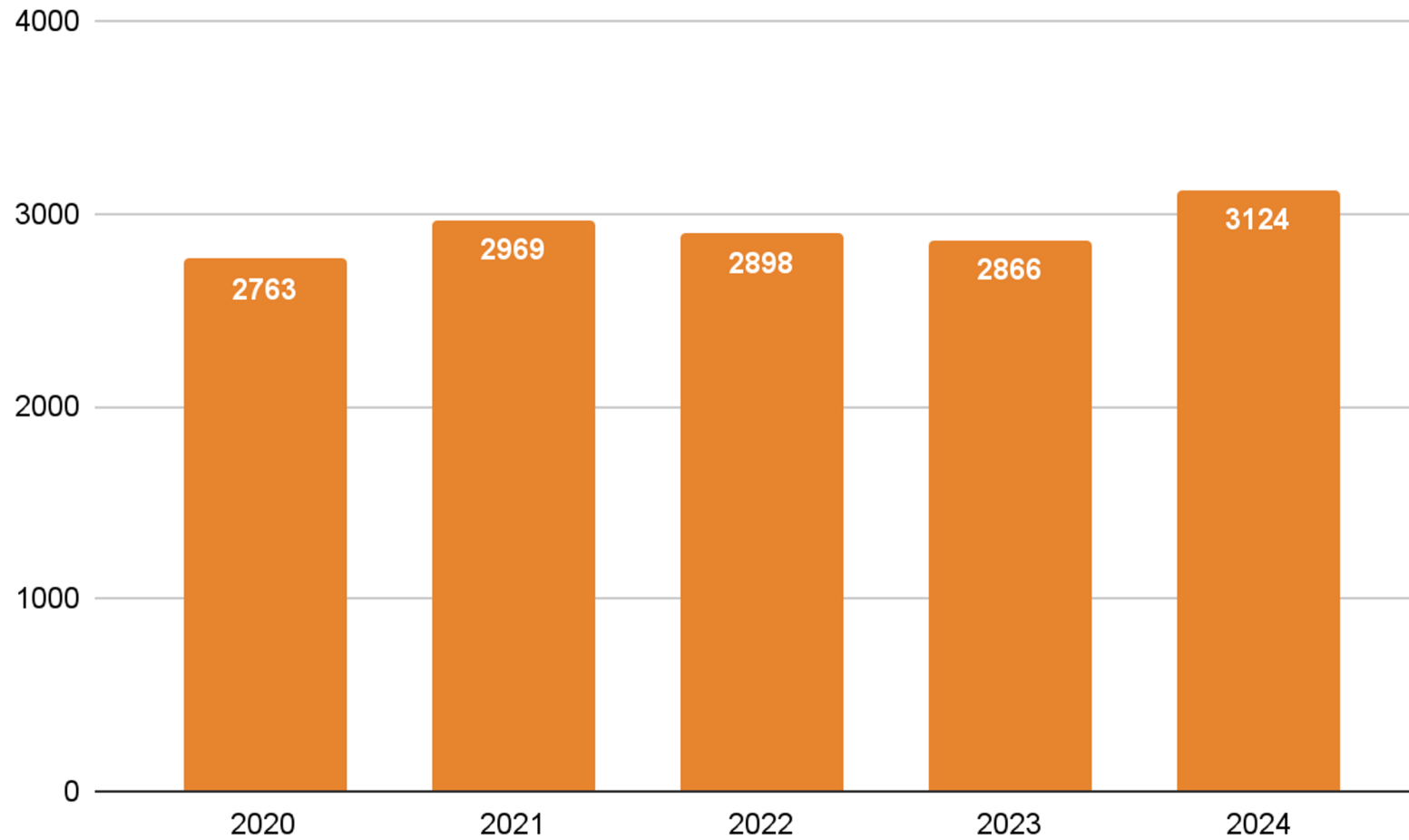
Ocean Engineering

Physics

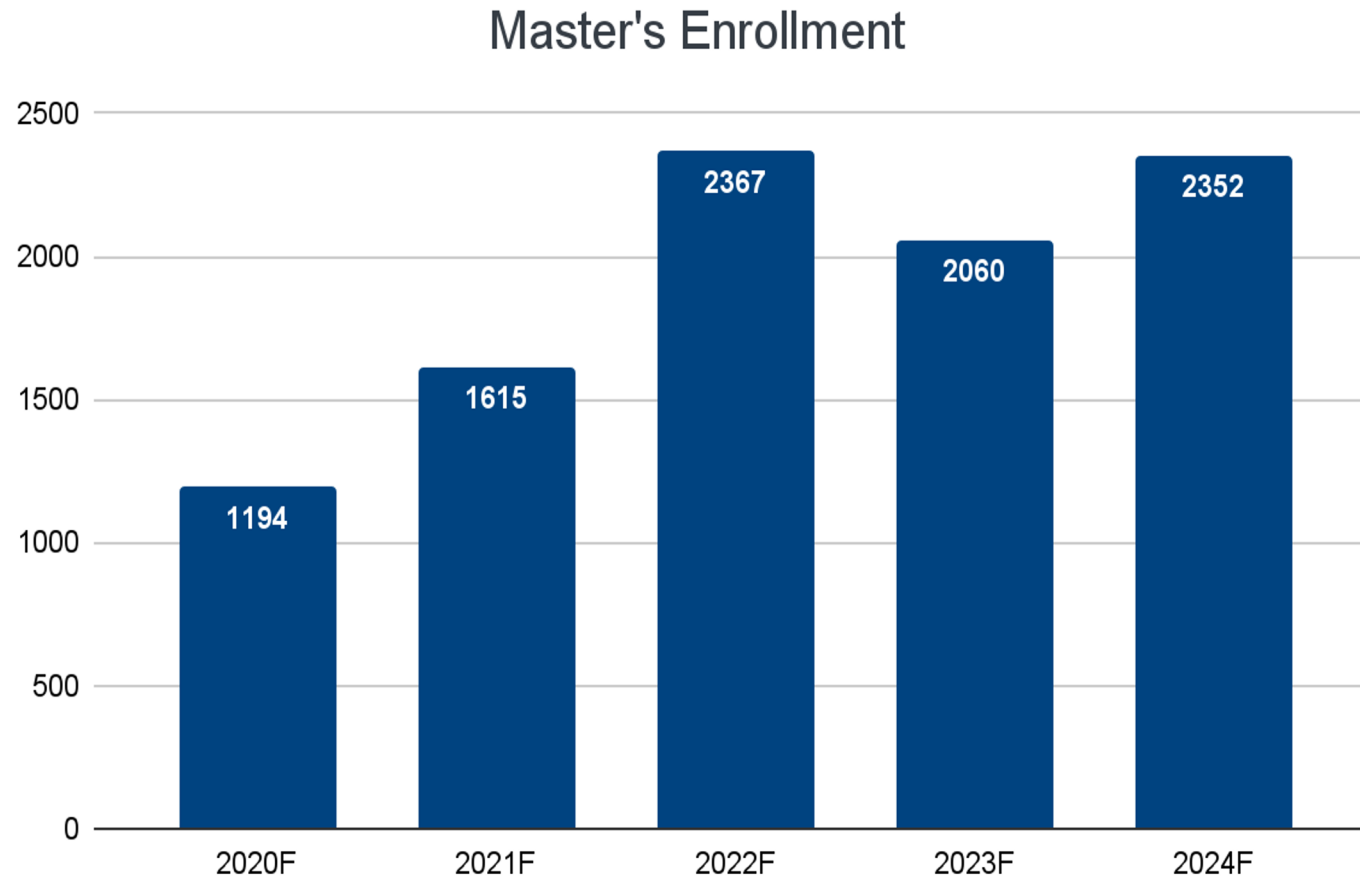
Systems Engineering

Socio-Technical Engineering

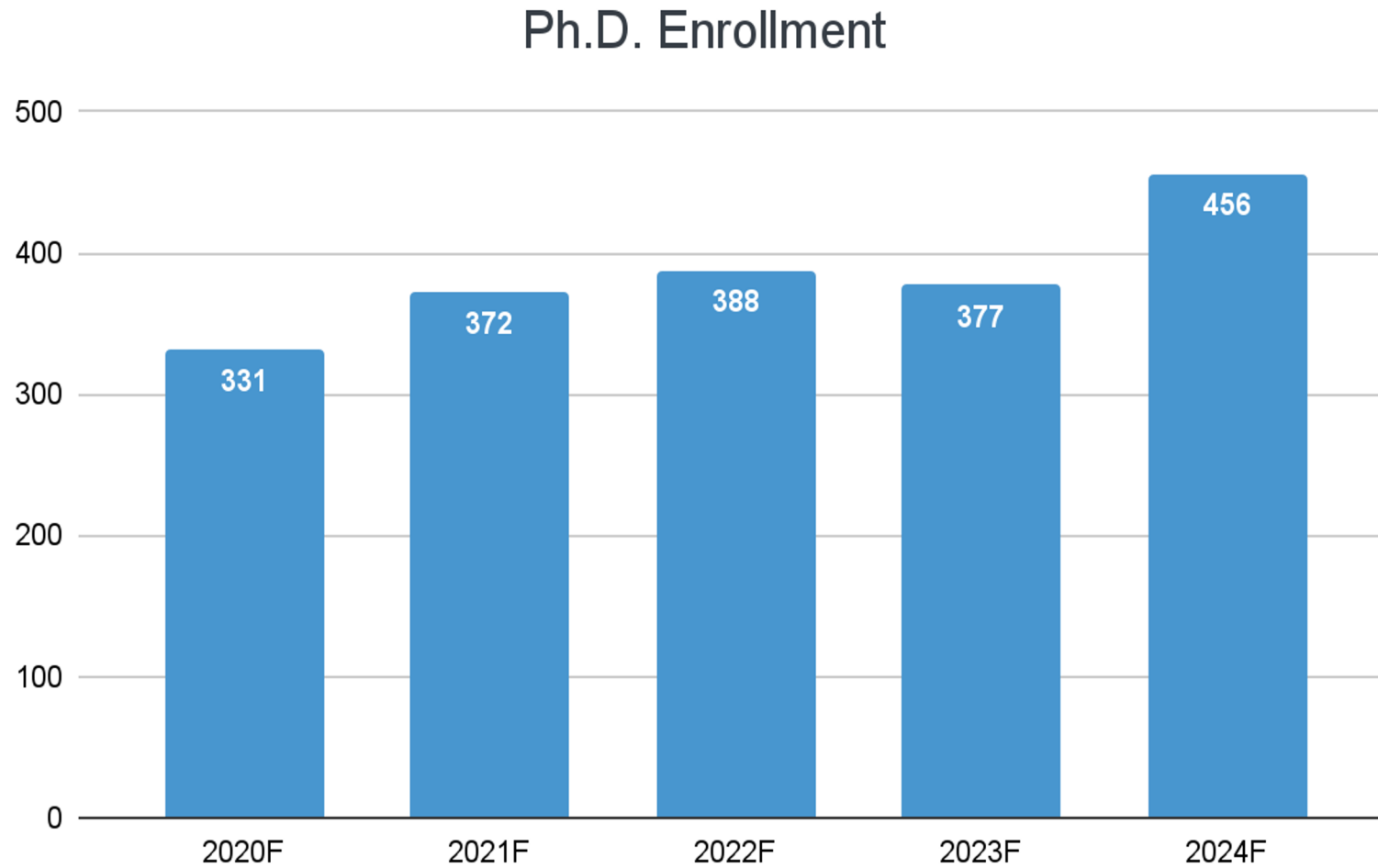
Undergraduate Enrollment



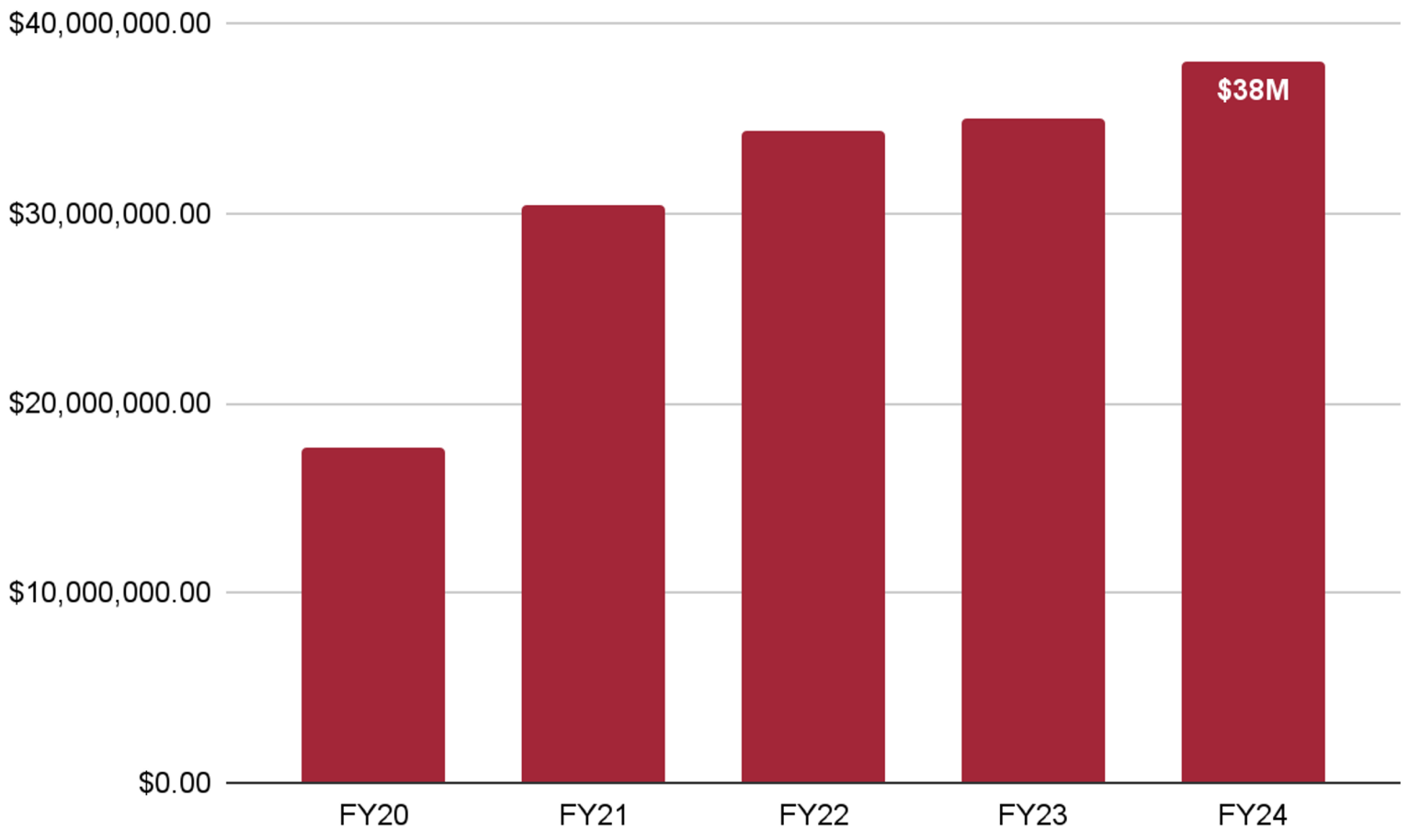
Master's Enrollment



Ph.D. Enrollment



Research Funding Awards



UG Engineering Design Spine

Series of 12 undergraduate design courses that teaches students to synthesize, analyze, and optimize solutions for open-ended and societally impactful problems.

Year 1

- Engineering Design & Systems Thinking
- Automation with Sensors
- Entrepreneurial Thinking



Year 3

- Design with Materials
- Engineering Design
- Engineering Economics & Project Management



- Statics and Introduction to Engineering Mechanics
- Design of Dynamical Systems

Year 2



- Capstone Design
- Innovation: Proposition Value
- Innovation: Venture Planning & Pitch

Year 4



State-of-the-Art Facilities

SES is home to 6 cutting-edge shared facilities

MakerCenter

High Performance Computing
Cluster

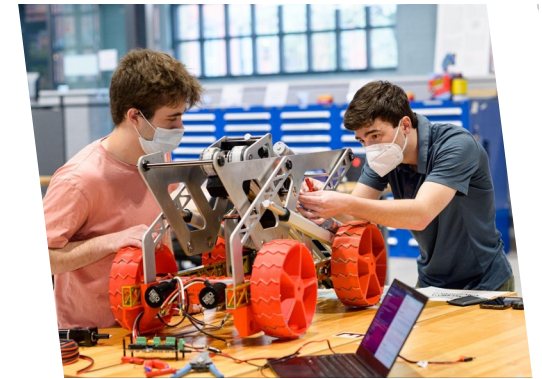
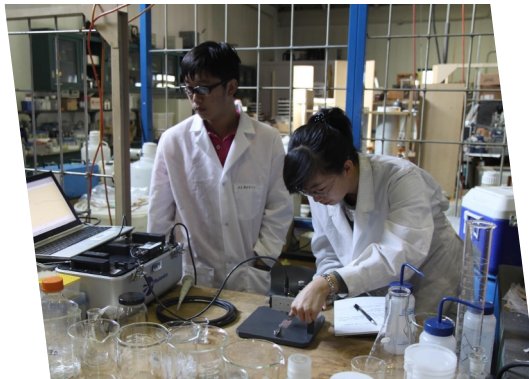
Laboratory for Multiscale
Imaging

MicroDevice Laboratory

Mass Spectrometry Laboratory

Prototype Object

Fabrication Laboratory



MakerCenter



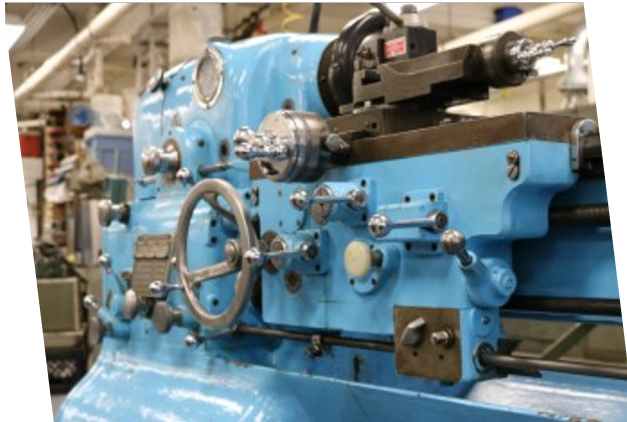
MakerSpace



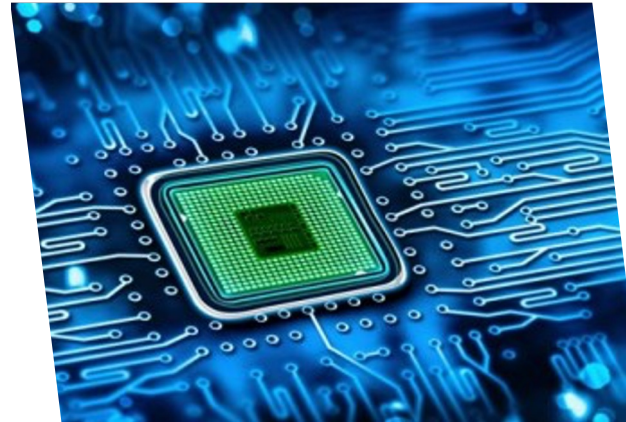
ProOF Lab



Quantum Space



Machine Shop



Electronics Shop



Welding Shop

Co-op Programs

Combining classroom education with practical real-world work experience

Our 5-year competitive program allows students to:

- Alternate semesters of academic study with semesters of full-time paid professional work

- Gain valuable work experience in a job related to their degree before graduation

- Earn a full-time hourly salary during each work semester

- Establish and broaden a network of professional contacts in a career field and industry.



Innovation Expo

An annual showcase for student design, innovation and entrepreneurship.



Research Highlights

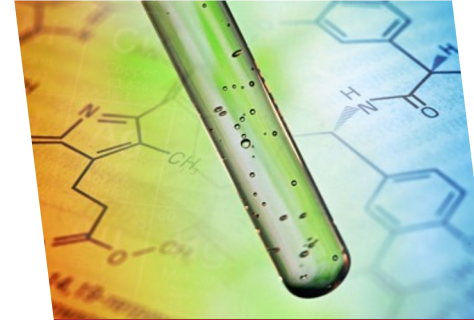
Stevens research tackles some of the most urgent challenges facing our world today



Artificial Intelligence



Neuromechanics



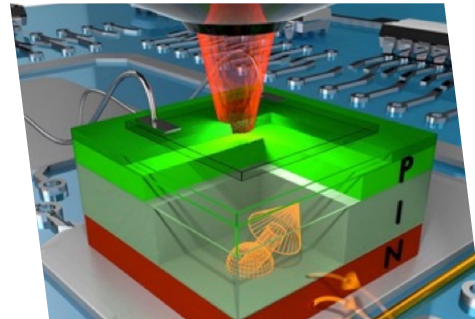
Cancer Research & Drug Discovery



Energy Innovation



Cyber-Physical Systems



Quantum Technologies



Robotics



Urban & Coastal Resiliency

9 Research Centers

Center for Environmental Systems

Semcer Center for Healthcare Innovation

Center for Innovative Computing and Networked Systems

Center for Neuromechanics

Center for Quantum Science and Engineering

Davidson Laboratory

Stevens Center for Sustainability

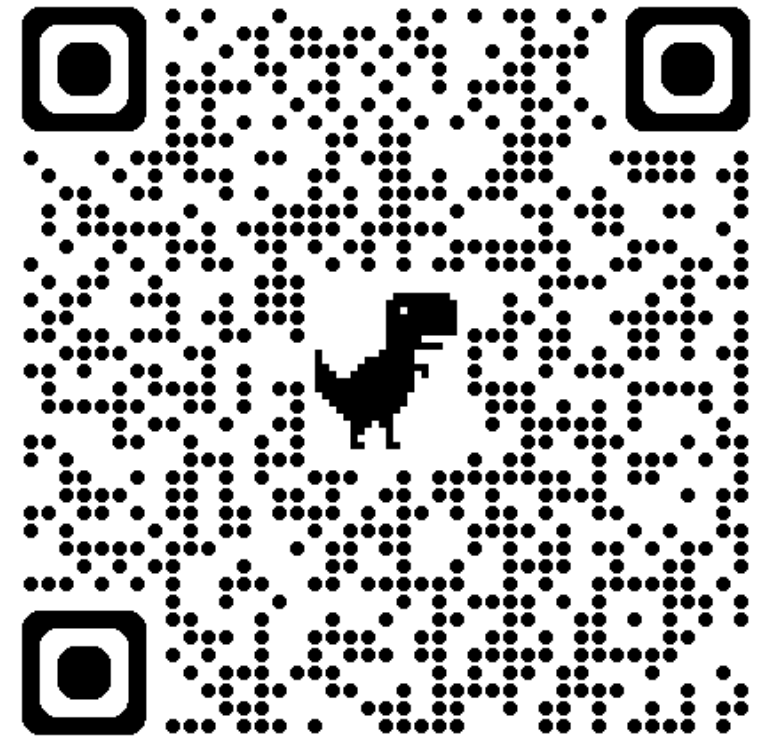
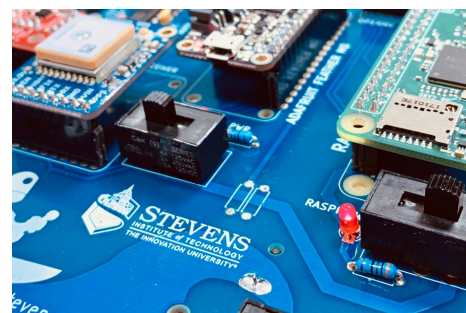
Stevens Institute for Artificial Intelligence

Systems Engineering Research Center

Department of Electrical and Computer Engineering

<https://www.stevens.edu/ECE>

As one of the first in the nation, the ECE Department at Stevens has a long legacy of innovation and discovery.



Department of Electrical and Computer Engineering

- People

- 26 full-time faculty
- 10 part-time faculty
- 4 staff members
- 620 students

1 National Academy of Engineering member
8 Fellows, IEEE
3 Fellows, National Academy of Inventors
1 Fellow, Canadian Academy of Engineering
8 NSF CAREER/DARPA YFA recipients



Department of Electrical and Computer Engineering

- Undergraduate Programs, Bachelor of Engineering (BE)

- Electrical Engineering (EE)
- Computer Engineering (CPE)

EE and CPE Concentrations:

- Artificial Intelligence
- Computer Architectures
- Electronics and Embedded Systems
- Image Processing and Multimedia
- Networks and Security
- Power Engineering
- Robotics and Control
- Software Engineering and Design
- Wireless Communications

Department of Electrical and Computer Engineering

- Graduate Degree Programs (Master and PhD)

- Electrical Engineering (Master and PhD)
- Computer Engineering (Master and PhD)
- Applied AI (Master)
- Dual EE/CPE Master and MBA

❖ **Master of Engineering (ME) degree:**
10 courses (30 credits)

8 EE and CPE concentrations

- Communications
- Power Engineering
- Robotics and Automated Systems
- Microelectronics and Photonics
- Artificial Intelligence
- Embedded Systems
- Software and Data Engineering
- Networks and Security

4 AAI concentrations

- Electrical Engineering
- Computer Engineering
- Data Engineering
- Software Engineering

Department of Electrical and Computer Engineering

- 8 Graduate Certificate Programs

- Artificial Intelligence for Engineering
- Autonomous Robotics
- Microelectronics and Photonics
- Real-Time & Embedded Systems
- Power Engineering
- Secure Network Systems Design
- Software Design for Embedded and Information Systems
- Wireless Communications

Department of Electrical and Computer Engineering

- Research Programs

iCNS

(Center for Innovative Computing and Networked Systems)

STEVENS
INSTITUTE OF TECHNOLOGY

<http://stevens.edu/iCNS>

HUDSONLab Hardware Utility Design and Software Optimization Networking Lab
STEVENS INSTITUTE of TECHNOLOGY

AISeCLab Analytics and Information Security for Complex Systems Lab
STEVENS INSTITUTE of TECHNOLOGY

SMARTLab Sensing, Machine learning, and Robotics Technologies Lab
STEVENS INSTITUTE of TECHNOLOGY

WiMoLab Wireless Communications and Mobile Computing Lab
STEVENS INSTITUTE of TECHNOLOGY

- Mobile and quantum computing
- High-performance computing
- Circuits and digital systems
- Power and energy systems
- Robotics and smart systems
- Signal processing and wireless communications
- Cybersecurity, cyber-physical systems, and IoT
- Open radio access networks
- 5G/6G and wireless networks
- Trustworthy AI and applications

USNWR Rankings on Graduate Programs

#8

Online Computer
Information
Technology Programs

U.S. News & World Report, 2023

#83

Best Engineering
Schools

U.S. News & World Report, 2024

#28

Online Engineering
Programs

U.S. News & World Report, 2023

#1 in NJ

Online Engineering
Programs

U.S. News & World Report, 2023

#77

Mechanical Engineering
Programs

U.S. News & World Report, 2024

#82

Electrical Engineering
Programs

U.S. News & World Report, 2024

#65

Computer Engineering
Programs

U.S. News & World Report, 2024

#90

Chemical Engineering
Programs

U.S. News & World Report, 2024

#82

Materials Science
Programs

U.S. News & World Report, 2024

#83

Biomedical Engineering
Programs

U.S. News & World Report, 2024

#82

Computer Science
Programs

U.S. News & World Report, 2023

#77

Civil and Environmental
Engineering Programs

U.S. News & World Report, 2024

Other Rankings

TechGuide (2024)

#13 in Best Master's in Artificial Intelligence Programs

#15 in Best Master's in Electrical Engineering Programs

TFE Times (2024)

#31 in Best Master's of Computer Engineering Programs

Why Study Abroad

“出国不仅是学习知识，更是体验人生，跳出我们自己的圈子，更好地认识自己，往往让人变得更加坚强，更加坚定，更有智慧，希望大家出国后好好学习，好好体验，好好创造人生的智慧”

— 清华大学心理与认知科学系教授、清华大学全球产业研究院院长、中国国际心理学大会执行主席 **彭凯平** 教授作为留学前辈给同学们视频寄语

Studying abroad is one of the best ways to

- learn and experience new cultures
- discover and develop your interests
- challenge yourself and explore your potential
- open your mind and enrich your life experience.

Immigration Matters

- Stevens will provide formal letter of admission and all necessary documents for visa application
- The liaison for visas will be the Office of International Students and Scholars Services at Stevens.



Thank you

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1 Castle Point Terrace, Hoboken, NJ 07030