School of Engineering & Applied Science

(SEAS)

GONZAGA
UNIVERSITY

Research Opportunities

FACULTY-LED RESEARCH IN ALL SEAS PROGRAMS

- Academic year research
- GRO-MECS: Summer research in SEAS and Math disciplines

Learn more at **gonzaga.edu/gro-mecs**

SEAS LAB FACILITIES FOR RESEARCH, TEACHING & DESIGN PROJECTS

- 270,490 sq ft STEM learning facilities
- 36 SEAS Laboratories

Center for Materials Research (CMR)

Cutting-edge facility advancing materials research and next-gen aerospace innovations *Open Fall 2025*

Learn more at **gonzaga.edu/cmr**

Manufacturing Technology Center (MTC)

Cadwell Maker Space

ADDITIONAL GONZAGA RESOURCES FOR RESEARCH COLLABORATION

- Institute for Informatics & Applied Technology
- Institute for Climate, Water & the Environment
- Center for Community Engaged Learning

Innovation with Purpose & Partnership

Student Experience

CLUBS

Build, lead, and connect through any of our STEM clubs, with hands-on projects like the award-winning Concrete Canoe, Baja Car, Mars Rover, and Design/Build/Fly Aircraft!

Find clubs at Zagtivities!

STUDY ABROAD

SPRING

- **Italy***
- **Spain**
- **New Zealand**

SUMMER

- **Netherlands***
- **Germany***
- **Ireland***
  coming soon!

*Taught by Gonzaga SEAS faculty

SENIOR DESIGN

Tackle real-world challenges, build solutions, and gain valuable career experience with our industry & community sponsors.

Learn more at **gonzaga.edu/cede**

Biomedical Engineering

ENGINEERING SOLUTIONS FOR BETTER HEALTH CARE

Biomedical engineers create life-changing technologies, from prosthetics and imaging systems to wearable devices and medical diagnostics.

Gonzaga's Biomedical Engineering program blends engineering and computer science with biology, human physiology, and biochemistry, making it one of our most interdisciplinary degrees.

In their junior and senior years, students specialize through electives in areas like:

- **Biomechanics**
- **Biomaterials**
- **Biomedical instrumentation**

The new Biomedical Engineering Laboratory Suite opens in Fall 2025 in the lower level of the Bollier Center, housing a new teaching laboratory, tissue culture room, and two faculty research labs.

Graduates are prepared for careers in hospitals, labs, manufacturing, start-ups, and more, or to continue on to medical or graduate school.

gonzaga.edu/biomed

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Civil Engineering

BUILDING A SAFER, MORE SUSTAINABLE WORLD

Civil engineers design and maintain the systems that keep our communities running, from clean water and safe buildings to efficient transportation.

At Gonzaga, students may choose a specialized sub-discipline in Civil Engineering that shapes their electives and senior design projects:

- **Construction*** – Manage infrastructure projects on time, on budget, and to specification
- **Environmental** – Protect and improve water quality
- **Geotechnical** – Design safe foundations and retaining walls
- **Structural** – Analyze loads on buildings and bridges
- **Transportation** – Plan highways, rails, trails, and other transit systems
- **Water Resources** – Improve water distribution and flood control

* A **Construction** concentration is available that includes a minor in Business for Engineering Technologies.

Graduates are prepared to design the infrastructure for tomorrow.

gonzaga.edu/civil

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Computer Science

LEAD THE FUTURE WITH CODE, DATA & INNOVATION

Gonzaga's Computer Science Department offers four undergraduate degrees:

- **BS Computer Science**
- **BA Computer Science**
- **BS Data Science**
- **BS Cybersecurity**

Gonzaga undergraduate students also have an accelerated option for an MS in Data Science degree. These programs equip students with the tools to thrive in fast-paced, data-driven industries.

Whether you are drawn to data science and AI, defending against cyber threats, or developing the next generation of software, our curriculum provides a strong foundation in mathematics, programming, software engineering, and advanced topics to help prepare you for success in any of these fast-evolving fields.

Graduates pursue careers in technology, healthcare, finance, sports, and entertainment, fields where demand for digital expertise continues to grow.

gonzaga.edu/compsci

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Electrical & Computer Engineering

POWERING INNOVATION, CONNECTING THE FUTURE

Electrical engineers design and build electrical systems, devices, and technologies that power modern life.

Computer engineers blend electrical engineering and computer science to create, develop, and integrate hardware and software systems.

At Gonzaga, students explore a wide variety of topics in these two majors:

ELECTRICAL ENGINEERING

Signal processing, electronics, VLSI, microchips, controls, communications, and power/green energy.

COMPUTER ENGINEERING

Embedded systems, computer architecture, cybersecurity, IoT, cloud computing, and digital systems

Both programs offer **Applied AI** and **Robotics** concentrations and minors.

Graduates are well prepared for careers in telecom, healthcare, energy, aerospace, automotive, and tech innovation.

gonzaga.edu/ece

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Engineering Management

WHERE TECHNICAL EXPERTISE MEETS LEADERSHIP

Engineering management graduates bridge the gap between technical innovation and business needs.

Gonzaga's Engineering Management program provides a broad engineering foundation combined with the flexibility to specialize in one or more SEAS disciplines. These skills are complemented with essential business knowledge through the required Business for Engineering Technologies minor.

Graduates from this program can also take advantage of a 4+1 Masters of Business Administration pathway or pursue Gonzaga's new online Master of Engineering Management.

Today's high-tech world needs engineers to not only solve complex technical challenges but to also manage teams, projects, and resources. Engineering management skills will be in demand.

gonzaga.edu/engm

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Mechanical Engineering

DESIGNING THE TOOLS, SYSTEMS & TECHNOLOGIES THAT MOVE THE WORLD

Mechanical engineers shape the world, designing everything from advanced technologies to everyday tools. As one of the most versatile engineering fields, mechanical engineering spans a broad range of industries and applications.

Gonzaga's Mechanical Engineering program builds a strong foundation in problem-solving, creativity, and ethical leadership, with coursework in:

- **Materials & manufacturing**
- **Thermal-fluid & energy systems**
- **Dynamics & controls**
- **Mechatronics**

Graduates from our program are prepared to tackle real-world challenges across a broad spectrum of cutting-edge fields, including aerospace, automotive, renewable energy, biomedical innovation, advanced materials, manufacturing, robotics, and more.

gonzaga.edu/meng

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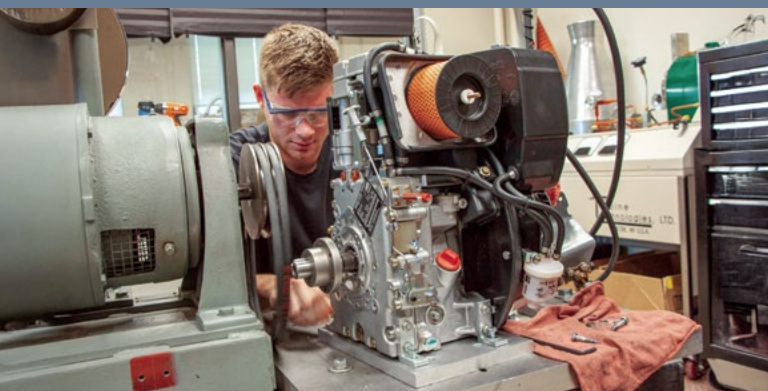

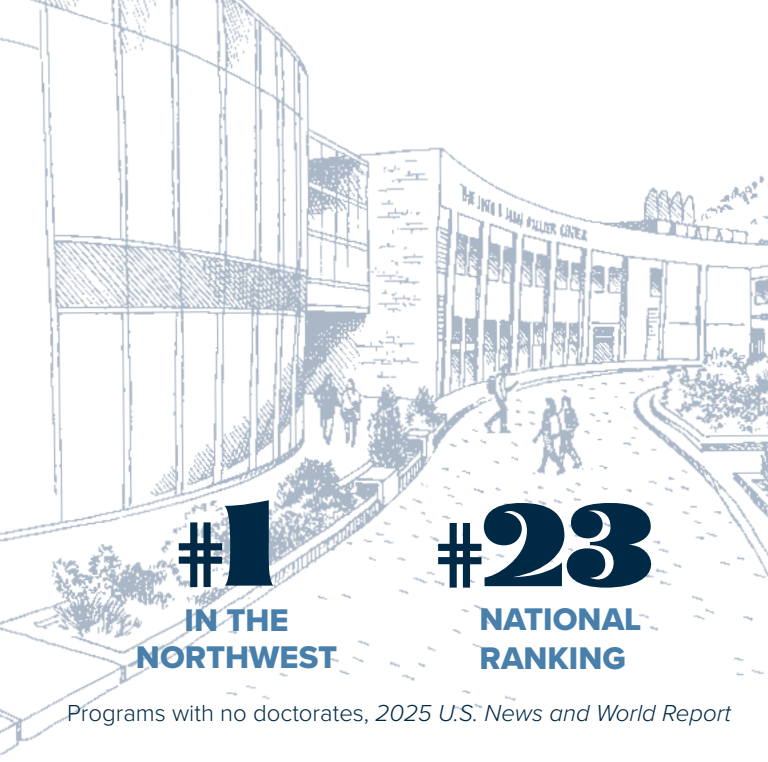

#1
IN THE NORTHWEST

#23
NATIONAL RANKING

Programs with no doctorates, *2025 U.S. News and World Report*

OVER **800**
SEAS MAJORS

SUCCESS RATE
96%

75%
1st YEAR RETENTION

74%
COMPLETE INTERNSHIPS

85% **FINISH IN 4 YEARS**

FOLLOW US
ON INSTAGRAM!
@gonzaga.seas