



GRAND CANYON
UNIVERSITY®

College of Science, Engineering and Technology

TECHNOLOGY PROGRAMS

FIND YOUR PURPOSE

Private. Christian. Affordable.



Message From **THE DEAN**

“There has never been a better time to enter the fields of science, engineering and technology. Each day, the people working in these fields shape our lives, how we interact with each other and our potential to flourish in this world. Grand Canyon University continues to make huge investments into our College of Science, Engineering and Technology, including expanded facilities and development of innovative, adaptive and relevant programs focused on meeting the needs of today’s workforce and helping to ensure that our graduates are equipped for promising and potentially high-paying career opportunities. GCU is a place where students prepare themselves for science, engineering and technology-based professions as part of a greater purpose. Our graduates often become transformative leaders in fields that they have a genuine personal passion and a true calling for. They are innovative thinkers who know how to thrive and lead – regardless of the field they choose as their vocation – in ways that are transformative and servant-based at both a community and global level. Throughout your journey as a student at GCU, our faculty and staff walk this path alongside you, helping you to succeed in your program and become the strongest candidate for the next step in your career. GCU’s College of Science, Engineering and Technology can help you in many ways to reach your full potential.”

– Dr. Mark Wooden, Dean of the College of Science, Engineering and Technology

WHY GCU?

GCU's technology programs are set apart from other universities because of our unique ability to provide students with opportunities to work with cutting-edge technology, push their knowledge beyond the classroom curriculum and open their minds in entrepreneurial and innovative ways. We also offer students the chance to expand their networks and receive mentorship along their entire academic pathway.

Additional benefits include:



Industry-driven curriculum adaptive to the ever-changing field of technology



Faculty dedicated to learning beyond lectures with emphasis on demonstrations



Hands-on, project-based learning environments with industry-relevant technology platforms



Christian worldview integrated into core technology courses



DEGREE PROGRAMS

Grand Canyon University's College of Science, Engineering and Technology offers a premier educational experience designed to prepare you for a career in a competitive science, technology, engineering and math (STEM) field. Our programs change to adapt to new developments in STEM industries while continuing to support ethical decision-making within our Christ-centered curriculum.

For more details and a full listing of degrees, visit [gcu.edu/CSET](https://www.gcu.edu/CSET)

Applied Technology

This program is geared to be transfer friendly and provides students who have pre-existing credits from a community college, the military or from another university a simpler path to complete an educational journey in technology. Students work through problem-solving scenarios utilizing technology associated with hands-on technical experience.

Computer Science with an Emphasis in Big Data Analytics

This degree program works to develop foundations in data science and software design capable of analyzing large amounts of data. Students learn to assess existing algorithms and methodologies and build their own as a way to engage in continuous development.

Computer Science with an Emphasis in Business Entrepreneurship

Students are empowered to plan, design and optimize technology while learning a wide range of skills in project management and business entrepreneurship.

Computer Science with an Emphasis in Game and Simulation Development

The primary focus of this program is the science, algorithms, concepts and theory behind computer games and simulation of scientific phenomena.

Cybersecurity

Our program was developed with industry guidance to produce highly skilled, well-equipped cybersecurity professionals. As an increasing number of cyberattacks and information security threats affect our nation, expert cybersecurity professionals are in significant demand by government agencies, defense firms, financial services and companies in a wide range of industries that handle private data.

Information Technology

This program provides students with the practical experience associated with the care for both an organization's IT infrastructure (such as networks, servers, databases, etc.) and the people who utilize it. Graduates are prepared to establish careers in the rapidly expanding field of information technology.

Information Technology with an Emphasis in Cybersecurity

This is a designated Center of Academic Excellence in Cybersecurity (CAE-C) program that equips students for careers working with computer-based information systems. Students will work with software application and computer hardware to study, design, develop and support how information is shared, saved and used in an organization. With this emphasis, students learn both IT and cybersecurity skills, allowing them to graduate with the ability to support and design systems that are safe from cyberattacks.

Software Development

This program covers the fundamentals of object-oriented programming, problem solving and algorithm analysis. Expert faculty guide students through project-driven courses where they learn to work with a variety of programming languages, mobile and web technologies, web application frameworks and today's cloud platforms.

Software Engineering

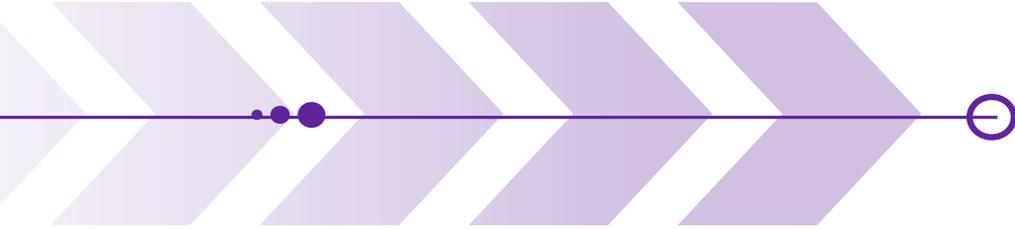
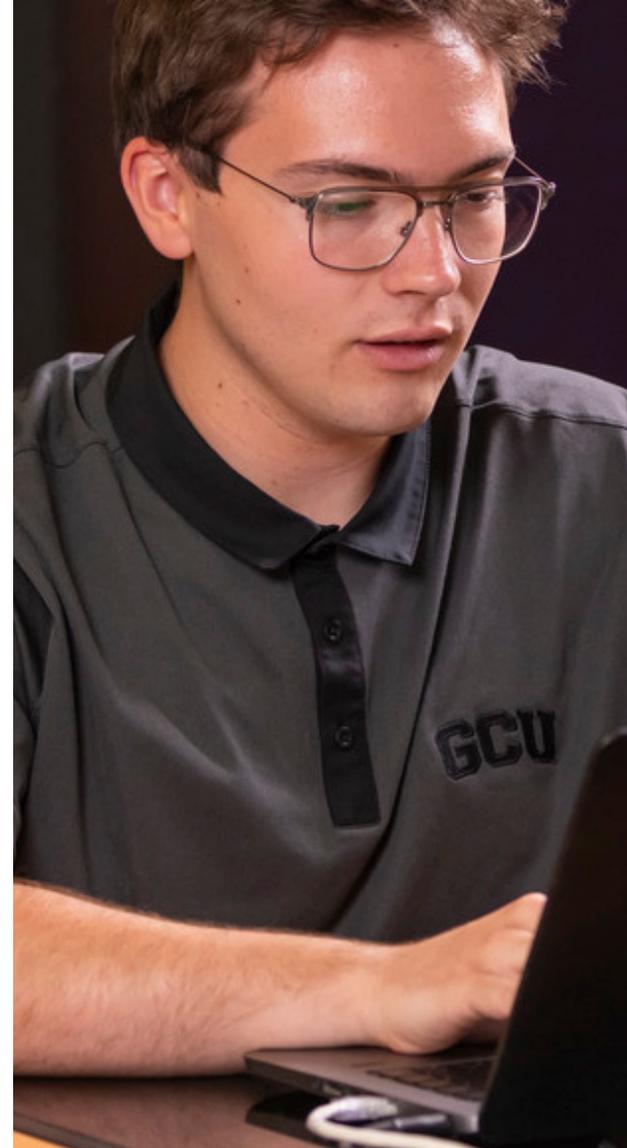
This program focuses on fully understanding the Software Development Life Cycle (SDLC) and allows students to develop fundamental skills in embedded systems, machine learning and artificial intelligence by utilizing the development tools of robots, IoT devices, microcontrollers and FPGA boards. Students will graduate with the ability to use state-of-the-art engineering and computer science practices and technologies to find solutions for complex software issues.

GCU's computer science program is accredited by the ABET Computing Accreditation Commission.
Visit [gcu.edu/ABET](https://www.gcu.edu/ABET) to learn more.

GCU TECHNOLOGY CLUB



The GCU Technology Club is united behind the mission to celebrate and promote interest in innovation in every field of technology and cultivate an environment for students to engage with others in projects, learning and community. There is one club with many different divisions to allow for community as well as focused events. Breakout focuses include cybersecurity, software development, game simulation data analytics and more.





The Clubs and Organizations Office is dedicated to offering students an opportunity to get connected and involved on campus by building community and engaging in service.

Visit gcuclubs.org to find a club that's a perfect fit for you!

ON-CAMPUS FACILITIES AND STUDENT RESOURCES

CYBER CENTER OF EXCELLENCE

The Cyber Center of Excellence provides a hands-on learning environment that combines academics with real-world experiences to develop competence and knowledge. This environment encourages creative thinking and provides both enhanced educational experiences and unique professional opportunities.

LOPESCLOUD

This application connects students to cloud-based virtual machine environments and is much like a virtual computer living in “the cloud” that GCU’s technology students can access. Instead of downloading software – and filling up space on their computer – students can tap into whatever they need in this GCU-specific, virtual computer.

**FIND OUT MORE ABOUT WHY THE SKY’S THE LIMIT
FOR TECH STUDENTS ON LOPESCLOUD!**

RESEARCH DESIGN PROGRAM (RDP)

This program flips the learning experience from the instructor to the students. Ongoing RDP work, spanning as little as a semester and as long as a few years, encompasses Artificial Intelligence, Robotics, Cybersecurity, Virtual Reality, Data Science, and coming soon - whatever the students choose! Students choose an area they are passionate about or work on an industry project and put a plan in place to explore the topic, regularly reporting to a faculty or industry mentor the progress they are making.

VIRTUAL REALITY LAB

The GCU VR Lab provides an opportunity to research and develop VR technology with broad-reaching impact. There is a perception that VR is primarily for entertainment, however VR is used in education, health care, law enforcement, and multiple industry trainings and simulations. The Lab is a collaborative space for all colleges at Grand Canyon University and is hosted by CSET (College of Science, Engineering, and Technology) and CAM (College of Arts and Media).



STUDENT WORK AND INTERNSHIPS

GCU is proud of our innovative students and are honored to have our industry partners support their work at events such as our annual Technology Capstone Showcase.

“Our engineering and technology degree programs provide a challenging, inquiry-based environment fostering creativity, innovation and collaboration. Through our industry partnerships, we ensure our students receive opportunities to solve real-world problems, innovate, think entrepreneurially, intern and engage with industry experts.”

- Dr. Mark Wooden, Dean of the College of Science, Engineering and Technology

RELEVANT RESOURCES

With many exciting careers available in the growing STEM industry, it can be a challenge to find the field that best suits you. We're here to help you choose the right degree from GCU and obtain an internship that puts you on the path to a career with purpose.



The Cyber Center of Excellence (CCE) provides a hands-on learning environment that combines academics with real-world experiences to develop competence and knowledge. Based on a “hackers with halos” code of conduct combined with technical controls, the CCE is a place where participants can think like a hacker but without breaking laws or compromising fundamental ethical principles.

NEXT STEPS



TAKE THESE NEXT STEPS

1



Apply at
gcu.edu/ApplyNow
and upload your transcripts.
No application fee!

2



Make an appointment
with your counselor to
review scholarships
and programs.

3



Upon acceptance,
visit campus
(all-expenses-paid¹
programs available)

4



Register early to
secure courses and
on-campus housing.

5



Pack your sunglasses
and move to
Lope Country!

DISCOVER GCU IS NOW BETTER THAN EVER!

This overnight, all-expenses-paid¹ trip to sunny Arizona will let you experience life as a Lope firsthand.

TO LEARN MORE ABOUT GRAND CANYON UNIVERSITY

undergraduate programs offered on campus, available scholarships and more, contact an admissions counselor.

855-428-7884 | gcu.edu/CampusAdmissions

¹ Travel reimbursement is only available to accepted prospective traditional campus students, plus one legal guardian, from a student's home city/state to Phoenix, AZ. School/district/organizations staff, faculty and/or personnel are also eligible. To participate, the program requires a signed MOU by both the student and parent/guardian or personnel, approval of travel dates by GCU and receipts submitted per GCU requirements. Travel reimbursement thresholds vary based on location and education sector. Only one form of travel will be reimbursed, air or ground. GCU does not reimburse hotel expenses, baggage costs, early check-in or travel insurance fees. Travel reimbursement usually occurs within 45 days.



GCU

FIND YOUR PURPOSE



Grand Canyon University is accredited by the Higher Learning Commission ([hlcommission.org](https://www.hlcommission.org)), an institutional accreditation agency recognized by the U.S. Department of Education. Please note, not all GCU programs are available in all states and in all learning modalities. Program availability is contingent on student enrollment. Pre-licensure nursing students who begin or resume attendance in Fall 2020 and beyond will be ineligible to utilize most GCU institutional aid/scholarships for tuition and fees once accepted into the clinical portion of the program. Important policy information is available in the University Policy Handbook at <https://www.gcu.edu/academics/academic-policies.php>. The information printed in this material is accurate as of MARCH 2023. For the most up-to-date information about admission requirements, tuition, scholarships and more, visit [gcu.edu](https://www.gcu.edu). Approved by the Associate Dean of Technology of the College of Science, Engineering and Technology on Feb. 28, 2023. ©2023 Grand Canyon University 22GTR0488