

### Online Doctoral Degrees



# 15 ONLINE DOCTORAL PROGRAMS TO ADVANCE YOUR SCHOLARLY RESEARCH AND YOUR CAREER

Our high-touch online programs are taught by industry experts working in America's most technologically sophisticated government agencies and private-sector supply chain.

Capitol's small cohorts comprised of experienced doctoral students led by responsive professors allows students to innovate, test boundaries, and ultimately become a conduit of new knowledge for others.

The following two programs are taught online and have low-residency requirements. Students enjoy small cohorts, live classes and close contact with faculty and advisors.

#### **Business Analytics and Decision Sciences (PhD)**

In a competitive world, success depends on finding and maintaining an edge – and that requires making data-driven decisions. Organizations in every industry – from sports, to healthcare, to cybersecurity – are seeking professionals with the expertise to utilize data effectively.

In our PhD in Business Analytics and Decision Sciences PhD program, you will learn to evaluate the scope and impact of decision sciences and associated technology from institutional, industry and global perspectives. Your research will drive innovation and practical ideas in business management.

#### Cybersecurity (DSc)

Once an IT concern, cybersecurity is now a boardroom concern. The threat of cybercrime is a disruptive reality for decision-makers across all industries and branches of the government.

Capitol Technology University's first-of-its-kind DSc in Cybersecurity program brings together an extraordinary peer community of computer and security experts all committed to understanding and evaluating the scope and impact of systems and technology from a variety of perspectives.

Graduates are able to conduct research as a foundation for executive action. Their innovation and creativity will contribute to the decision-making processes and strategic performance of their organizations.

The following programs utilize a European Thesis Model, which offers students two paths for degree completion: dissertation or publication.

Courses using this model are available online at any time, enabling students to quickly engage in publishing research without the limitations inherent in traditional coursework models.

#### Artificial Intelligence (PhD)

The PhD in Artificial Intelligence is centered on how computers operate to match the human decision-making process in the brain. Your research will be led by Al experts in both research and industrial sectors. This emerging subject is attracting attention on wider issues as IOT and other advanced computer systems are integrated into our everday lives.

#### Aviation (PhD)

Specialized research is needed to support major technological innovation in aviation. Through our PhD in Aviation program, you will contribute to advancing this industry by conducting research to examine the implications of technological and business innovations across the world. You will gain valuable insights into the legal, political, ethical, and social dimensions that dictate design, efficiency, and future demand in the field of aviation.



## Capitol Technology University is among the first schools in the nation to be designated as A NATIONAL CENTER OF EXCELLENCE in cyber defense.

#### Construction Science (PhD)

The pressures for increased revenue, lower costs, sustained profit margins, higher quality, Green Building, and Leadership in Energy and Environmental Design (LEED) certification are more demanding now in a competitive global environment than in the past. Leaders in the highest levels of construction companies are now being driven to develop new solutions and techniques to survive and thrive.

As a doctoral student in Construction Science at Capitol Tech, you'll enter the program with a research idea and a committee chair. After enrollment, you'll work with your chair and research committee to further develop your research proposal before working independently to produce a meaningful body of original research of publishable quality. In the process, you'll also gain valuable insight into the legal, political, ethical, and social dimensions of your field of study.

#### Critical Infrastructure (PhD)

Critical infrastructure supports every aspect of our lives – from hospitals to power plants, dams, water treatment facilities, transportation systems, and much more. Disruption of these intertwined systems can endanger our nation's security, economy, public health, and safety.

While physical threats have long been a concern, attention has only recently turned to the risks of virtual attacks. As security experts grapple with the implications of today's Internet of Things, an urgent need exists for new research and ideas in the field.

Our PhD in Critical Infrastructure program will help you contribute to solving one of the greatest technological challenges of the 21st century – how to create a robust and sustainable infrastructure that is resilient against multiple threats and hazards.

#### **Emergency and Protective Services (PhD)**

The rapid infusion of new technology, material, and human interactions in every setting is creating new challenges for emergency and protective service professionals in every environment. The pressures to identify, plan, and implement response requirements for emergencies in which lives, property, and the environment are at risk is greater now than ever before.

Capitol Technology University's online PhD program in Emergency and Protective Services is designed for current professionals in the field whodesire to elevate their skills to the highest level and contribute to the field's current body of knowledge.

#### **Human Factors** (PhD)

Human Factors is a multidisciplinary field that leverages critical principles from engineering, computer science, cognitive engineering, and systems design. It is a scientific discipline that examines human behavior and capabilities in order to determine the best ways to design products, equipment, and systems for safe, effective, and satisfying use by humans.

Human Factors professionals are focused on studying humans' interaction with machines and consumer products to improve technology, safety, and usability. It is a field that has made essential contributions to the design, testing, and evaluation of products and systems used by people every day around the globe.

#### Manufacturing (PhD)

In the era of Manufacturing 4.0, companies with a long track record of profitability can find themselves challenged to maintain their momentum. New entrants can rise to the top quickly — and plummet just as suddenly.

Our PhD in Manufacturing program will prepare you to meet current challenges and maximize the opportunities that arise from revolutionary changes in the industry. You will gain an understanding of best practices for rapidly harnessing new technologies by examining business methods and strategy.

Your expertise will prepare you for high-demand roles in the manufacturing industry. You will be able to deliver solutions that can lower costs, streamline processes, and ensure the highest quality as your organization competes in the global marketplace.

#### Occupational Health and Safety (PhD)

As new technology, techniques, and materials are introduced to the workplace, so too are new challenges for occupational health and safety professionals in every work environment including the mounting pressure to identify hazardous conditions and prevent injury or harm to workers. Many employers now view safe workplace practices as a key component of generating and maintaining a strong stream of revenue.

Earning a PhD in Occupational Health and Safety enables you to conduct in-depth research and develop solutions to the challenges that occupational health and safety professionals are facing. You will gain the insight to take on key leadership roles in the field and become an asset in any workplace.

#### **Product Managment** (PhD)

Skilled product management leaders are a rare breed, who combine business intelligence with their knowledge of emerging technologies and creative problem-solving abilities. They lead product developments that ensure the relevance and growth of brands.

Our PhD in Product Management will prepare you to meet challenges and provide innovative leadership. Here, you will conduct research that examines how new technologies are introduced, the disruption they cause, and the risks associated with their entrance in the marketplace.

You will gain insight into how new solutions may be delivered to lower costs, streamline processes, improve user experiences, and ensure the highest quality throughout product life cycles. Your expertise will be in high-demand among those seeking to be technology leaders in their fields.

#### **Quantum Computing (PhD)**

The PhD in Quantum Computing is a unique doctoral program designed to meet the immediate industry need for innovative researchers and practitioners. Professionals will graduate with the skills necessary to become key leaders in the advancement, expansion, and support of the this rapidly growing industry.

Students in this program will conduct extensive and sustained original research on the applications of Quantum Computing, which harnesses and exploits the laws of quantum mechanics to process a vast number of calculations simultaneously. Faculty of this program are industry experts devoted to providing students deep proficiency in this area using an interdisciplinary methodology, cutting-edge courses, and dynamic faculty skill sets.

#### Technology (PhD)

Technological advances are changing the way we interact with each other at a rapid pace, creating the need to examine the implications of technology at the doctoral level.

Our PhD in Technology program will immerse you in the legal, political, ethical, and social dimensions of your field of research. Your PhD in Technology will enable you to become a leader in your chosen field of technology, pursue a career as a researcher, or enter higher education as a teaching professional.

#### **Technology Combination Program (MS / PhD)**

Are you interested in pursuing a PhD in Technology but do not have the appropriate master's degree? Our combined program lets you work on both degrees simultaneously. After completing 90 credits, you will be awarded a PhD in Technology with an MS in Research Methods.

Working with faculty advisors, you will build a solid foundation in research methods and develop your research proposal. You will then work independently to understand the legal, political, ethical, and social dimensions of your field of study. Ultimately, you will produce meaningful research of publishable quality.

#### **Unmanned Systems Applications** (PhD)

Unmanned systems inhabit the air, space, land and sea – opening possibilities for new research and insight across all sectors.

Our PhD in Unmanned Systems Applications program gives you the opportunity to conduct in-depth research into how these systems are best utilized and optimized in civilian, military, and commercial life. You will become knowledgeable in the legal, political, ethical, and social dimensions of unmanned systems technologies and contribute to the growing demands of the field.

#### **TUITION & FEES**

### The following rates are for the 2020-2021 academic year:

Application Fee: \$100Tuition: \$915 per credit

Active Duty Military Tuition: \$833 per creditRetired Military Tuition Discount: \$50 per credit

\*Tuition rates are subject to change.

#### PROGRAM DETAILS

### Learn Around Your Busy Schedule

Our low-residency requirement is considerate of the time you're currently committing to your career.

#### 100% Online & 100% Personal

All doctoral classes are online. We keep cohorts small, so you receive personalized attention from faculty.

#### Veteran's Educational Benefits

We offer military tuition assistance through the Montgomery GI Bill and unlimited participation within the Post-9/11 GI Bill® Yellow Ribbon Program.

#### ALL PROGRAMS ARE ACCREDITED





#### National Center of Academic Excellence

Capitol Technology University is a designated Center of Academic Excellence in Cyber Defense Education by the National Security Agency (NSA) and the Department of Homeland Security (DHS).







To learn more

Web Email Phone captechu.edu gradadmit@captechu.edu

Learn. Build. Succeed.

one 1.800.950.1992