



UNIVERSITY OF DELAWARE  
**PROFESSIONAL &  
CONTINUING STUDIES**

FALL 2019 PROGRAMS AND COURSES

*Using drones for an*  
**EFFECTIVE  
PERSPECTIVE**

A collision reconstructionist, Tavis Miller enrolled in the Professional Drone Pilot Training Academy to learn how to safely fly a drone and gain a different perspective of the accidents he needs to assess. Read his story on page 6.

UPCOMING PROGRAMS IN:  
BUSINESS, IT & DRONE  
EDUCATION  
ENGINEERING & SCIENCE  
FOOD & HOSPITALITY  
HEALTHCARE & HEALTH SCIENCES  
LAW | PRE-COLLEGE  
SAFETY | TEST PREP



[PCS.UDEL.EDU](https://pcs.udel.edu)



# What can UD do for you?

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Art Director: Cindy Dolan

Cover photo: Evan Krape

Editorial/Marketing Staff: Susan Castelli, Sherrie Fauvelle, Adam S. Kamras, Steven M. Kendus, Tim Nelson, Nora Zelluk

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The University of Delaware's Division of Professional and Continuing Studies (UD PCS) provides educational opportunities for anyone seeking to begin or complete their college career, enhance their professional skills or enrich their personal life. UD PCS also provides customized training and educational services to area businesses, organizations and professional associations.

As the adult and nontraditional learners' portal to the University of Delaware, UD PCS impacts thousands of students each year through UD credit courses and degree offerings, professional development courses, certificate programs, specialized conferences, workshops and lifelong learning member cooperatives throughout the state.

Through UD PCS, the University of Delaware extends its vast resources, research, technology and knowledge to the community, the region and the world. UD PCS provides:

- **Academic advisement and career counseling**
- **Credit courses and degree completion**
- **Customized learning and community partnerships**
- **Lifelong learning opportunities**
- **Pre-college programs**
- **Professional development programs and courses**
- **Online learning opportunities through UD Online**



CINDY DOLAN

## The ACCESS Center: Academic Advisement, Credit Registration and Career Counseling

The ACCESS Center provides free academic advisement, career exploration and counseling, and credit registration assistance. Advisors are available to help you achieve your educational and career goals.

ACCESS Center services and resources include:

- Academic advisement for first-time or returning students in choosing a University of Delaware program, including assistance with course selection and registration.
- Career exploration and counseling, including administration of career inventories.
- Unofficial transcript evaluation and curriculum review for prospective transfer students.
- Information and assistance with the University's admission and readmission processes.
- Information regarding UD resources and student services.
- Information on University policies and procedures.

**Explore your options! In-person and phone appointments are available. Contact the ACCESS Center for an appointment.**

UD Professional & Continuing Studies ACCESS Center  
501 S. College Avenue, Newark, DE 19716

Phone: 302-831-8843 • Fax: 302-831-2789  
access-advise@udel.edu • pcs.udel.edu/access

Office hours: Mon., Tues., Fri., 8 a.m.–5 p.m.;  
Wed., Thurs., 8 a.m.–8 p.m. (by appointment only after 5 p.m.)

## Power Up Your Career Seminars

Special career- and personal branding-focused seminars are available to students enrolled in Professional and Continuing Studies (PCS) noncredit programs, as well as veterans and active military members, at no additional charge. Seminars are also available to those not enrolled in PCS programs for a \$50 fee, which includes all sessions. The following seminars are offered on Thursday evenings in Newark, Del.

- Tips for Job Search Success in 2019 (September 12)
- Goal Setting—Achieving Your Personal Vision (October 10)
- Transitioning into a New Career (November 7)
- Creative Thinking and Problem Solving (December 12)

See [pcs.udel.edu/power-up](http://pcs.udel.edu/power-up) for more information.

## Credit courses and degree completion

Whether you are a high school student seeking the challenge of college coursework, an adult seeking to start or complete a degree, or someone interested in taking individual courses for personal, educational or professional enrichment, you may take courses at the University of Delaware as a Continuing Education, non-admitted student. You do not have to be officially admitted to the University to get started. As long as you meet the course prerequisites, many University courses are available to Continuing Education students on a space-available basis. A wide variety of courses are offered in the evening and online.

**Fall courses begin Tuesday, August 27, 2019.**

**Ready to search for a course? Visit [udel.edu/courses](http://udel.edu/courses).  
Ready to register? Visit [pcs.udel.edu/registration](http://pcs.udel.edu/registration).**

## Lifelong learning opportunities

The University of Delaware hosts Osher Lifelong Learning Institute (OLLI) programs in Bridgeville, Dover, Lewes, Ocean View and Wilmington for adults 50+ to enjoy classes, teach, exchange ideas and travel together. Try out a new language, meet with a passionate discussion group or revisit your favorite areas of study. These volunteer-based academic cooperatives offer more than 970 courses each year, with no grades or exams and no educational prerequisites. **See page 32 for details.**

### Over-60 tuition-free programs for matriculated Delaware residents

If you are a Delaware resident age 60 or older, you may pursue a University of Delaware degree without paying tuition. You must apply and be accepted (matriculated) to qualify. Visit [pcs.udel.edu/60-tuition-free-degree](http://pcs.udel.edu/60-tuition-free-degree).

**Need more information? Contact the Professional and Continuing Studies ACCESS Center at [access-advise@udel.edu](mailto:access-advise@udel.edu) or 302-831-8843.**

## Customized learning and community partnerships

The University of Delaware provides customized programs designed to help your business or organization achieve its training and employee development goals. Professional coaching, executive education and customized training programs are tailored to your organization's needs and can be delivered online, on-site or on campus.

### Customized training

We design and deliver customized training and executive education programs that meet the specific needs of your organization. We utilize the advanced expertise and experience of University of Delaware faculty and external subject matter experts to provide exceptional learning opportunities for your team.

### Comprehensive instructional design and course delivery solutions

Our strong knowledge of instructional design techniques, technology applications and adult learning styles enables our educators to produce and deliver classroom-based and online programs tailored to your needs.

### Professional executive coaching

We help organizations develop employee strengths, address challenges, improve productivity and increase job satisfaction. We will design new or enhance your existing coaching programs, including executive-level services.

### Benefits to your organization

Outsourcing your organization's professional development to UD enables your employees to focus their efforts on core business issues that affect your bottom line.

Other benefits include:

- Strengthening your workforce through proven leadership programs.
- Optimizing work processes with project management and occupational safety programs.
- Improving relationships through diversity, teamwork and communications programs.

**See pages 30–31 to find out how some businesses have benefited from our customized training programs.**

## Professional development programs and courses

UD PCS offers a variety of ways for you to build your credentials and move ahead in your career. Certificate programs, seminars, conferences and short courses provide you with practical knowledge and skills as well as resume-building credentials. Our faculty and adjunct instructors combine strong academic backgrounds with extensive real-world experience. Programs include:

- **Business/IT/Drone**—Business Analysis, Data Analytics, Digital Marketing, Leading a Lean Culture, Management Essentials for Emerging Leaders, Microsoft Excel, Professional Drone Pilot Training, Project Management, Social Media Marketing, Web Developer Coding
- **Engineering and Science**—Application of Emerging Data Techniques in Railway Maintenance
- **Food and Hospitality**—The Art and Science of Beer, HR Competencies for Restaurant Managers
- **Healthcare**—Advanced Telehealth Coordinator, Clinical Trials Management, RN Refresher
- **Law**—Paralegal, Advanced Paralegal Seminar Series, LSAT Prep
- **Pre-College**—UD Dual Enrollment, SAT/ACT Prep, Reading/Speed Reading
- **Safety**—COSS (Certified Occupational Safety Specialist), COSM (Certificate for Occupational Safety Managers), Safe Supervisor, Diminishing Human Error in the Workplace
- **Test Preparation**—ACT, GMAT, GRE, LSAT, MCAT, SAT, PMP®, CAPM®, Praxis

See pages 3–25 for complete program listings.

## Online learning opportunities through UD Online

More than 240 University of Delaware credit courses—as well as 26 degree programs, certificate programs or professional development programs—are offered online, and more are developed every year. Ranging from an online Associate in Arts to an online MBA or M.S. in mechanical engineering, online programs from the University of Delaware are ideal solutions for students and professionals seeking to advance their education while accommodating their busy schedules. See pages 26–29 for program listings.



# Business/IT/Drone programs

## FREE INFORMATION SESSION

**Thursday, July 18**  
**6–8 p.m.**

**University of Delaware Audion**  
**The Tower at STAR**  
**100 Discovery Blvd., Newark, Del.**

**Advanced Social Media Marketing for Business**

**Advanced Telehealth Coordinator Certificate (online)**

**Analytics: Optimizing Big Data Certificate**

**Business Analysis Certificate**

**Clinical Trials Management Certificate (online)**

**Coding Bootcamp—.NET/C# or Java**

**Digital Marketing Short Courses**

**Leading a Lean Culture**

**Management Essentials for Emerging Leaders**

**Microsoft® Excel Essentials and Advanced Concepts**

**Paralegal Institute**

**Professional Drone Pilot Training Academy**

**Project Management Certificate**

*Attendance and refreshments are free.*  
*RSVPs are requested.*

**[pcs.udel.edu/info-session](http://pcs.udel.edu/info-session)**

### CERTIFICATE PROGRAM | IN-CLASS

## Analytics: Optimizing Big Data Certificate

**Use data-supported solutions for improving business performance**

In today's business world, data is easier than ever to collect and store. But it's the analysis of the volume, velocity and variety of big data that provides managers with knowledge that can be translated into effective decision-making and improved business performance. This certificate program brings together statistics, analysis and both written and oral communication skills through an applied approach, providing participants with the tools to join the rapidly growing data analytics field.

### WHO SHOULD PARTICIPATE?

- Business, marketing and operations managers
- Data analysts or professionals in any field who deal with large amounts of data
- Financial industry professionals

**SCHEDULE:** Thursdays, September 12–December 12, 2019, 6–9:15 p.m.

**LOCATION:** Arsh Hall, 2700 Pennsylvania Ave., Wilmington, Del.

**PRICE:** \$2,895, course materials included. Discounts and financial assistance options available.

**[pcs.udel.edu/data](http://pcs.udel.edu/data)**

### CERTIFICATE PROGRAM | IN-CLASS

## Business Analysis Certificate

**Bridging the business/IT divide**

A business analyst bridges the “understanding gap” between an organization and its technology, functioning as a type of translator who converts business needs into measurable IT requirements and solutions. To succeed in this role, the business analyst must have a broad range of business,

technical and interpersonal skills, including being able to effectively write and review detailed functional specifications as well as develop and test systems based on those requirements.

### WHO SHOULD PARTICIPATE?

- IT professionals new to business analysis
- Employees currently working in or interested in moving to a position in which business analysis skills would be useful

### SCHEDULE:

Business Analysis Module 1:

Foundations of Business Analysis.

Wednesday, September 18 and Thursday, September 19, 2019

Business Analysis Module 2:

Eliciting and Documenting Requirements.

Wednesday, October 16 and Thursday, October 17, 2019

Business Analysis Module 3:

Requirements Analysis and Design Definition.

Wednesday, November 13 and Thursday, November 14, 2019

Business Analysis Module 4:

Solution Deployment and Evaluation.

Wednesday, December 4 and Thursday, December 5, 2019

All classes are scheduled from 8:30 a.m. to 4:30 p.m.

**LOCATION:** 501 S. College Ave., Newark, Del.

**PRICE:** \$995 per module; course materials and daily lunch included. Discounts and financial assistance options available. Save \$600 and become eligible to earn a University of Delaware Certificate of Completion by registering for all four Business Analysis modules at the same time. Offered at a bundled rate of \$3,380, this equates to more than a 15% discount versus registering for each module individually.

**[pcs.udel.edu/business-analysis](http://pcs.udel.edu/business-analysis)**

## ONLINE

## Coding Bootcamps— .NET/C# or Java

### Step up to a coding career!

Coding bootcamps put you on a fast track to a programming career. By receiving immersive training on a compressed schedule, you can speed your way to project-ready skills. Not everyone can reserve three or more months for nonstop training, so UD PCS, in conjunction with The Software Guild, offers Coding Bootcamp Badges. We help you master .NET/C# or Java—one skill set at a time. Our Coding Bootcamp Badges offer an affordable, flexible way to learn software development. Learn in stages, when you want, and where you want.

#### WHO SHOULD PARTICIPATE?

- Recent college graduates
- Professionals embarking on a new career
- Gamers
- Problem-solvers

**SCHEDULE:** Classes start monthly.

**LOCATION:** Online

**PRICE:** \$10,000 for all four badges, or \$2,000 to \$3,000 per badge  
Discounts available

[pcs.udel.edu/coding-bootcamp](https://pcs.udel.edu/coding-bootcamp)

#### CERTIFICATE PROGRAM | HYBRID-ONLINE

## Business Essentials Certificate

Undergraduate credit certificate program focused on business essentials for non-business professionals. See page 26.

## SHORT COURSES | IN-CLASS

## DIGITAL MARKETING

The Digital Marketing short courses are designed for anyone involved in the planning, implementation or measurement of digital strategies or who would like to pursue a career in these areas. Each module offers a strategic introduction to all of the core digital marketing disciplines. Upon completion of each module, participants will be prepared to undertake specialized digital marketing roles within their organization, as well as have a thorough grasp of the subject matter to pursue advanced courses.

*Each participant has flexibility and can choose to enroll in any of the modules for professional development purposes.*

### Digital Marketing Module 1: Foundations of Digital Marketing Concepts

What is digital marketing and why does it matter to businesses? How can you incorporate digital into your marketing mix to meet your audience where they are online?

The objective of this module is to introduce foundational marketing concepts needed for digital marketing. Participants will learn to:

- Differentiate between inbound and outbound marketing strategies
- Distinguish between examples of digital media used in digital marketing
- Differentiate between the characteristics of traditional and digital marketing
- Distinguish between the different digital channels and the opportunities they provide for business online
- Define digital marketing terms
- Conduct a SWOT analysis
- Coordinate a competitive analysis
- Develop a brand standard
- Discover target audiences and craft audience personas
- Create customer journey maps and marketing funnels

**SCHEDULE:** September 4–5, 2019,  
8 a.m.–5 p.m.

**LOCATION:** 501 S. College Ave., Newark, Del.

**PRICE:** \$795

[pcs.udel.edu/digital-marketing](https://pcs.udel.edu/digital-marketing)

## Digital Marketing Module 2: Email Marketing

This module covers the fundamental and advanced techniques of email marketing and how to strategize delivery plans to test, optimize and report on the performance of campaigns. Participants will learn to:

- Understand the evolving platform of email marketing and ensure that their email campaigns are CAN-SPAM compliant
- Review ethical, legal and permission compliance for email marketing
- Improve deliverability
- Develop email marketing strategies, lead drip campaigns and define touch points based on products/services and audience
- Leverage email marketing to accomplish brand awareness, lead generation, sales, customer retention and service
- Establish email marketing strategy including broadcast, triggered and multi-message sends
- Learn best practices for frequency, timing, design and mobile responsiveness
- Implement audience targeting and list-building strategies
- Track and measure results and set forth a series of KPIs and tests for continual improvement

**SCHEDULE:** September 24–25, 2019,  
9 a.m.–4 p.m.

**LOCATION:** 501 S. College Ave., Newark, Del.

**PRICE:** \$795

[pcs.udel.edu/digital-marketing](https://pcs.udel.edu/digital-marketing)

## Digital Marketing Module 3: Fundamentals of Social Media Marketing

In today's changing landscape, organizations need effective social media marketing strategies to reach their full potential. This program introduces students to leveraging social media platforms to build and extend brand awareness, increase visibility, engage current and potential customers, cultivate brand ambassadors, gain customers, and support organizational goals.

Students will learn the fundamentals and



best practices for using social media for marketing on current and emerging platforms, including monitoring and listening, audience engagement, content curation, campaign planning and execution, tools and resources, and measuring results. Platforms covered include Facebook, Twitter, LinkedIn, Instagram, Snapchat, YouTube and Pinterest. Participants will learn to:

- Understand the fundamentals of content marketing and how to leverage social influence to support organizational goals for communications, marketing, public relations, customer service, leads, sales and human resources
- Discern and evaluate various social media platforms' scope, audiences and usage benefits and risks, and which to include in an organization's marketing goals
- Utilize features on different social platforms
- Participate effectively and ethically on social platforms using current compliance, regulations and legal best practices
- Identify best practices for managing social media platforms and tactics for increasing audience engagement
- Employ specific writing tactics to create concise, persuasive content that supports communications and marketing objectives
- Evaluate and employ social media tools to curate and schedule content distribution, and monitor conversations and trends

**SCHEDULE:** October 22–23, 2019,  
8 a.m.–5 p.m.

**LOCATION:** 501 S. College Ave., Newark, Del.

**PRICE:** \$795

[pcs.udel.edu/digital-marketing](http://pcs.udel.edu/digital-marketing)

## Digital Marketing Module 4: Search Engine Optimization

Learn the fundamentals of SEO and how search engines work in this informative module. Garner a better understanding of why it is vital to align SEO objectives with overarching business objectives and how to use keywords and competitor research to build an effective SEO content plan. Participants will learn to:

- Distinguish between paid/organic search
- Differentiate the key components of SEO
- Recognize how search engines work

- Evaluate different types of search queries
- Identify components of a SERP
- Discern and create SEO objectives
- Evaluate short tail and long tail keywords
- Conduct keyword research
- Leverage keywords for SEO content
- Configure technical components of a website for best visibility in search engines
- Optimize on- and off-page elements to improve rankings
- Conduct SEO audit to optimize technical, on- and off-page components
- Differentiate between types of SEO metrics

**SCHEDULE:** November 5–6, 2019, 8 a.m.–5 p.m.

**LOCATION:** 501 S. College Ave., Newark, Del.

**PRICE:** \$795

[pcs.udel.edu/digital-marketing](http://pcs.udel.edu/digital-marketing)

## Digital Marketing Module 5: Pay Per Click Digital Advertising

The PPC module covers the fundamentals of paid search and demonstrates how to implement and manage paid search campaigns using Google Ads. Learn key concepts underpinning bid auctions, managing paid ad budgets and optimizing paid search campaigns. Participants will:

- Learn how consumers use search engines
- Understand best practices for structuring a Google Ads account
- Identify key elements of a Google Ads account
- Distinguish between keyword research for paid search and SEO campaigns
- Utilize an advertising budget using Google Ads
- Recognize key concepts underlying the bidding process
- Optimize paid search campaigns
- Identify appropriate KPIs
- Understand conversion tracking
- Distinguish between the key metrics for measuring the success of a paid search campaign

**SCHEDULE:** November 19–20, 2019,  
8 a.m.–5 p.m.

**LOCATION:** 501 S. College Ave., Newark, Del.

**PRICE:** \$795

[pcs.udel.edu/digital-marketing](http://pcs.udel.edu/digital-marketing)

## Digital Marketing Module 6: Analytics and Measuring Return on Investment

This module will help you understand the basic concepts of using analytics in digital marketing from initial setup to reporting. Learn to recognize the fundamentals of web analytics to draw actionable conclusions from data and calculate ROI using standard methodologies. Participants will:

- Recognize types of insights that web analytics provide
- Identify web analytics tools for collecting, measuring and analyzing data
- Understand legal requirements and responsibilities and best practices concerning analytics, consent and data collection
- Set up and configure Google Analytics and install tracking codes to analyze digital campaign performance
- Use goal funnels to analyze the customer conversion journey
- Use Google Analytics reports to understand the characteristics of website visitors, sources of website traffic, Google Ads activity, and conversion rates, channels and journeys
- Quantifiably calculate return on investment
- Differentiate between return on investment and cost benefit analysis
- Understand the concept of lifetime value of a customer and how that relates to return on investment

**SCHEDULE:** December 4–5, 2019,  
9 a.m.–4 p.m.

**LOCATION:** 501 S. College Ave., Newark, Del.

**PRICE:** \$795

[pcs.udel.edu/digital-marketing](http://pcs.udel.edu/digital-marketing)

# DRONE PROGRAM AIDS COLLISION RECONSTRUCTIONIST

By Adam S. Kamras

## Prepare for required certification

Prior to enrolling in the foundational drone pilot training courses offered by the University of Delaware's Division of Professional and Continuing Studies (UD PCS), Tavis Miller did not think there would be too much to learn about flying unmanned aerial systems (UAS). While his motivation to enroll might have been prompted by the need to earn an FAA Part 107 remote pilot certificate, which is required to legally fly a drone for commercial use, he quickly realized how much he did not know.

"I went in thinking about how I often see kids flying drones and this can be fun to do," said Miller. "The way they presented it showed me there is a lot more to it than I realized."

Miller, a collision reconstructionist with a municipal police agency in Delaware, wanted to learn how to fly a drone so he can get a different perspective of the accidents he needs to assess. While he does not expect it to solve the causes of the collisions, the overhead view enables him to analyze the situation from another angle.

Miller's first class, Ground School and FAA Part 107 Test Prep, provides comprehensive classroom training and prepares drone pilots for the Federal Aviation Administration's airman knowledge test, which must be passed to earn the FAA Part 107 remote pilot certificate.

"Because of all the material to grasp, I was really nervous going into the exam," said Miller. "But then I saw that everything they taught us was on the test. They didn't provide us with the actual questions, but all of the information was applicable."

## Hands-on training

Miller then enrolled in Foundations of Flight, which covers the basics of flying small unmanned aircraft systems. Topics include familiarization with various aircraft and system components, basic flight planning, safe flight deck setup and operations, basic flight maneuvers, emergency procedures, autonomous flight mode options, multi-aircraft mission design, and effective programmatic record keeping. Students become familiar with and receive individual hands-on flight time with a variety of aircraft systems. Miller appreciated the interactive format of both classes.

"I am more of a hands-on person than a classroom person," said Miller. "Even with Ground School and FAA Part 107 Test Prep, there was a lot of class participation, which made it easier to grasp everything as opposed to just lecture and death by PowerPoint."

## Applicable to many fields

The UD PCS Professional Drone Pilot Training Academy provides comprehensive UAS training to novice, intermediate and advanced drone users. In addition

**"IT'S REASSURING WHEN SOMEONE NOT ONLY TEACHES YOU HOW TO DO SOMETHING THE RIGHT WAY BUT THE SAFE WAY AS WELL."**

to Ground School and FAA Part 107 Test Prep and Foundations of Flight, intermediate and advanced programs are offered through customized on-site training.

Miller enjoyed being in classes with people from a variety of fields such as architecture and construction. Other occupations that can benefit from the academy include, but are not limited to, first responders, investigators, insurance adjusters, realtors, reporters, filmmakers, producers, photographers, marketers, web designers, engineers, roofers, accident scene investigators, and site and structure inspectors.

"Even if you are just going to operate a drone on a recreational level, I recommend the classes," said Miller. "It's reassuring when someone not only teaches you how to do something the right way but the safe way as well. If you go through the checklist they taught us, it will make the risk of a flyaway drone pretty much next to nothing."



EVAN KRAPE



## CERTIFICATE PROGRAM | IN-CLASS

## Leading a Lean Culture: Advanced Problem-Solving for the 21st Century

### Be a change facilitator

Mastering lean leadership and lean culture is paramount to an organization's success. Participants are guided through the process of cultivating their workforce for successful implementation of a lean, continuously improving culture. Rather than teaching lean tools in an isolated way, the focus is on cohesively merging these instruments with an emphasis on employee empowerment.

Understanding the importance of the "people side" of "lean thinking" is as critical as each individual lean tool. An approach to the thinking process and perspective necessary for creating a culture of continuous improvement is taken in this program. By implementing this discipline and combining lean values with principles, leaders can positively center their workforce to consistently and repeatedly achieve organizational objectives.

#### WHO SHOULD PARTICIPATE?

- Those looking to facilitate change in their organization
- Directors, managers or continuous improvement leaders
- Anyone aspiring to improve the performance of their organization

**SCHEDULE:** Coming Fall 2019

[pcs.udel.edu/leading-lean-culture](http://pcs.udel.edu/leading-lean-culture)

## CERTIFICATE PROGRAM | IN-CLASS

## Management Essentials for Emerging Leaders

Through this series of short courses focused on management topics, we aim to provide flexible, affordable and high-quality professional development opportunities for new or aspiring managers and leaders. These courses address the critical need for better soft skills development, while pairing the complementary technical skills emerging leaders need to manage more efficiently.

**SCHEDULE:** Coming Fall 2019

[pcs.udel.edu/emerging-leaders](http://pcs.udel.edu/emerging-leaders)

## DEGREE | ONLINE

## Master of Arts in Strategic Communication (M.A.)

An online graduate degree focused on professionals who wish to advance in their current career or take on new roles in strategic communication, public relations, digital media or social media management. See page 27.

### New Extended Format!

## MICROSOFT® EXCEL

Regardless of what you do in an office, there is a good chance you need to be proficient in the use of Microsoft Excel. With more than 2 million employment postings in 2016 requiring Excel ability, it was the year's most in-demand occupational skill. The software's broad range of applications can be utilized for everything from simple number-crunching to complex business decisions. Our new foundational and advanced classes are designed to equip you with the skills needed in today's job market.

## COURSE | IN CLASS

## Microsoft® Excel Essentials

Gain the foundational skill set needed to navigate throughout the Microsoft Excel application with confidence and acquire familiarity with Excel's data management capabilities. Learn to summarize datasets and prepare a workbook for distribution on a professional level.

#### WHO SHOULD PARTICIPATE?

- Students, recent graduates and other job seekers who are looking to add marketable skills to their resumes
- Anyone wishing to learn the fundamental operations of Excel

**SCHEDULE:** Tuesdays, September 3–24, 2019, 6–9 p.m.

**LOCATION:** 501 S. College Ave., Newark, Del.

**PRICE:** \$475, course materials included. Please bring your laptop.

[pcs.udel.edu/ms-excel](http://pcs.udel.edu/ms-excel)

## COURSE | IN-CLASS

## Microsoft® Excel Advanced Concepts

Gain the skill set needed to work with complex datasets using advanced functions and formulas in Microsoft Excel. Learn to present data insights using advanced charting techniques, set up forms for collaborative workplace projects, and prepare interactive pivot tables for distribution on a professional level.

#### WHO SHOULD PARTICIPATE?

- Students, recent graduates and other job seekers with Excel skills who wish to learn advanced Excel concepts

**SCHEDULE:** Tuesdays, October 1–22, 2019, 6–9 p.m.

**LOCATION:** 501 S. College Ave., Newark, Del.

**PRICE:** \$475, course materials included. Please bring your laptop.

[pcs.udel.edu/ms-excel](http://pcs.udel.edu/ms-excel)

## COURSE | IN-CLASS

## Microsoft® Excel Advanced Reporting and Analytics

Gain the advanced skills for creating interactive dashboard reports and data visualizations in Microsoft Excel by using the capabilities of Power View, Power Pivot and DAX formulas. Focus expands from traditional pivot tables to state-of-the-art Power Pivot data modeling. Students will be able to apply these techniques immediately in their place of work.

#### WHO SHOULD PARTICIPATE?

- Students, recent graduates and other job seekers with Excel skills who wish to learn advanced Excel reporting and analytics.

**SCHEDULE:** Tuesdays, November 5–December 3, 2019, 6–9:15 p.m.

**LOCATION:** 501 S. College Ave., Newark, Del.

**PRICE:** \$625, course materials included. Please bring your laptop.

[pcs.udel.edu/ms-excel](http://pcs.udel.edu/ms-excel)

## PROFESSIONAL DRONE PILOT TRAINING ACADEMY

The UD PCS drone training programs provide in-demand, multifaceted training at the best possible value. Our high-demand drone training offerings provide comprehensive unmanned aerial systems (UAS) training to drone novices and advanced users alike. Whether you are a beginner who is seeking FAA Part 107 remote pilot certification, an advanced pilot responsible for lifesaving tactical missions, or an engineer looking for more efficient surveying and inspection techniques, we have a course that fits your needs and skill level. Designed to be completed over a single weekend, the courses provide industry-leading instruction and feature highly qualified UAS experts with extensive flight experience in practical applications.

### FOUNDATIONAL CLASSES

COURSE | IN-CLASS

## Professional Drone Pilot: Ground School and FAA Part 107 Test Prep

### Are you certified?

Legally flying a drone for commercial use requires an FAA Part 107 remote pilot certificate. During this intensive course, flight instructors provide comprehensive classroom training and prepare drone pilots for the Federal Aviation Administration's airman knowledge test, which must be passed to earn the certificate. Topics include regulations, airspace, weather, loading and performance, and operations.

**SCHEDULE:** Saturday, August 10 and Sunday, August 11, 2019, 8:30 a.m.–5 p.m.

Saturday, October 12 and Sunday, October 13, 2019, 8:30 a.m.–5 p.m.

**LOCATION:** 501 S. College Ave., Newark, Del.

**PRICE:** \$395

[pcs.udel.edu/drones](http://pcs.udel.edu/drones)

COURSE | IN-CLASS

## Professional Drone Pilot: Foundations of Flight

### Ready to fly your drone?

Learn the basics of flying small unmanned aircraft systems (UAS). Topics include familiarization with various aircraft and system components, basic flight planning, safe flight deck setup and operations, basic flight maneuvers, emergency procedures, autonomous flight mode options, multi-aircraft mission design, and effective programmatic record keeping. Students will become familiar with and receive individual hands-on flight time with a variety of aircraft systems, such as the DJI Mavic, DJI Phantom 4 Pro and DJI Inspire I.

**SCHEDULE:** Saturday, July 27 and Sunday, July 28, 2019, 8:30 a.m. – 5 p.m.

Saturday, September 14 and Sunday, September 15, 2019, 8:30 a.m. – 5 p.m.

**LOCATION:** Arsht Hall, 2700 Pennsylvania Ave., Wilmington, Del.

**PRICE:** \$995

*Customized Drone Training: Intermediate and advanced drone training programs are available through our customized on-site training for your group. Sample training topics include:*

- Aerial Mapping and Inspection
- Aerial Imaging
- Night Operations and Thermal Imaging
- Matrice M210 Operator Proficiency
- D3P™ Drone Program Manager Proficiency Training

**Contact us today to discuss your group's training needs.**



CERTIFICATE PROGRAM | IN-CLASS

## Project Management Certificate

### New 10-week format!

### Learn project management best practices and theories

Successful companies and organizations in every sector use project management to achieve breakthrough results. The powerful and versatile tools of project management are transferable to any work environment and can be used to manage any project.

This new curriculum applies PMBOK® (A Guide to the Project Management Body of Knowledge®) Sixth Edition principles as well as the new *Agile Practice Guide* with its focus on change management to assist you in attaining the Project Management Institute's (PMI)® Project Management Professional (PMP)® designation.

### WHO SHOULD PARTICIPATE?

- Newly promoted or aspiring project managers
- Project leaders interested in achieving the next level of management skills
- Project managers seeking entry into the Project Management Institute's PMP® certification process

### SCHEDULE/LOCATIONS:

**Newark:** Mondays, September 16–November 18, 2019, 6–9:30 p.m.; 501 S. College Ave., Newark, Del.

**Wilmington:** Wednesdays, October 16–December 18, 2019, 6–9:30 p.m.; Arsht Hall, 2700 Pennsylvania Ave., Wilmington, Del.

**PRICE:** \$2,595, textbooks included. Discounts and financial assistance options available.



*This certificate is a great starting point for attaining the Project Management Institute's (PMI)® Project Management Professional (PMP)® designation. This program meets the education requirement for the Project Management Institute (PMI)® credential. The University of Delaware is a Registered Education Provider with the Project Management Institute (PMI)®. The PMI Registered Education Provider logo is a registered mark of the Project Management Institute, Inc.*

[pcs.udel.edu/project](http://pcs.udel.edu/project)



## COURSE | IN-CLASS

## PMP®/CAPM® Exam Prep: Project Management Professional® (PMP)/ Certified Associate in Project Management® (CAPM) Exam Prep

An intensive two-day combined exam preparation course concentrating on preparation for two levels of Project Management Institute (PMI®) certifications:

- Certified Associate in Project Management (CAPM®) examination
- Project Management Professional (PMP®) examination

Focus is on the knowledge areas documented in the *PMI® A Guide to the Project Management Body of Knowledge, Sixth Edition* and the *Agile Practice Guide*.

**SCHEDULE:** Saturdays, July 27 and August 3, 2019, 8:30 a.m.–4:30 p.m. or Saturdays, March 7 and 14, 2020, 8:30 a.m.–4:30 p.m.

**LOCATION:** 501 S. College Ave., Newark, Del.

**PRICE:** \$995, textbooks included. Discounts and financial assistance options available.

[pcs.udel.edu/project-exam-prep](http://pcs.udel.edu/project-exam-prep)

## CERTIFICATE PROGRAM | ONLINE

## Advanced Social Media Marketing for Business Certificate

In today's digital world, brands, businesses and organizations are turning to social media for advertising, customer service, human resources, market research, revenue growth and more. There are audiences to be engaged, communities to be managed, influencers and advocates to be guided, content to create, ad strategies to be developed, profiles to be optimized, and an assorted laundry list of daily tasks that need to be addressed.

Taught by distinguished social media marketing expert Nancy Dibert, UD's Advanced Social Media Marketing for Business Certificate course teaches students with fundamental to mid-level social media marketing skills to effectively and successfully leverage the power of social media to support organizational goals.

By working in teams with nonprofit organizations, students get in-depth, hands-on experience to research, plan, develop, integrate, execute and analyze the outcomes of comprehensive social media marketing strategies, integrated campaigns, targeted content and paid placement.

Students master skills to drive engagement through targeted, innovative social media marketing campaigns, gaining firsthand experience with industry standard tools such as Sprout Social and Rival IQ. Class members learn methodologies for creating, executing and evaluating goal-oriented social media marketing strategies across multiple social media platforms.

Classes include online lectures, multimedia demonstrations, detailed content and examples, case studies, open online discussions, and testimonials from businesses successfully using social media marketing. Past guest speakers have included industry experts Jason Falls and Samantha Toscano.

This class offers dynamic, interactive, fast-paced and highly engaging content to ensure participants are ready to take on today's social media landscape. Students will have until Sunday to complete each week's assignments while collaborating



and working on the group project. Plan to allocate eight to 12 hours per week toward this program.

### WHO SHOULD PARTICIPATE?

- Aspiring and current social media managers
- Marketing and communication professionals
- Consultants
- Nonprofit employees and volunteers
- Business owners
- Anyone looking to start a social media marketing business

**SCHEDULE:** August 26–December 8, 2019 (self-paced online course with weekly scheduled assignments and deadlines)

**LOCATION:** Online sessions

**PRICE:** \$3,495. Discounts and financial assistance options available.

[pcs.udel.edu/socialmedia](http://pcs.udel.edu/socialmedia)

## COURSE | ONLINE

## Socially Responsible and Sustainable Business Short Courses

Short online, self-paced courses addressing **human trafficking, human rights, labor** and **environmental problems in the global supply chain** for the apparel, textile, footwear and supply chain industries. See page 29.

# Education programs

DEGREE | HYBRID-ONLINE

## Master of Arts in Economics and Entrepreneurship for Educators

Hybrid/online graduate program preparing educators teaching economic, entrepreneurial and financial literacy. See page 27.

DEGREE | ONLINE

## Master of Education in Teacher Leadership

Online graduate degree program focused on equipping teachers to be leaders in the classrooms and in their schools. See page 27.

DEGREE | ONLINE

## Master of Education in Educational Technology (M.Ed.)

Online graduate degree designed to provide both a theoretical and a practical grounding in educational technology methods and techniques. Program content aligns with the International Society for Technology in Education (ISTE) and the Association for Educational Communications and Technology (AECT). See page 27.

DEGREE | ONLINE

## Master of Education in Exceptional Children and Youth (M.Ed.)

Online graduate degree program preparing teachers to meet the academic, social and behavioral needs of students with exceptional learning needs across all grade levels. See page 27.

DEGREE | ONLINE

## Master of Education in Literacy (M.Ed.)

Online graduate degree program preparing teachers for certification and career opportunities as reading or literacy specialists in their schools and districts. See page 27.

COURSE | IN-CLASS

## Alternative Routes to Teacher Certification (ARTC)

ARTC offers an alternative route to traditional teacher certification in Delaware. Through ARTC, qualified individuals complete certification requirements while employed as full-time teachers via education coursework and intensive, school-based supervision and mentoring. For details, see [artc.udel.edu](http://artc.udel.edu).

COURSE | LIVE-ONLINE

## Praxis Core Live-Online Test Prep

The Praxis Core Test Prep Live-Online courses (Core Math 5732 and Core Reading and Writing 5712/5722) are designed to help you improve your skills, confidence and score, all of which increase your chance of admission into the teacher preparation or certification program of your choice.

[pcs.udel.edu/praxis-test-prep](http://pcs.udel.edu/praxis-test-prep)





# Engineering and science programs

CERTIFICATE PROGRAM | ONLINE

## Composite Materials Certificate

Online graduate certificate for engineers wishing to expand their knowledge of composite materials. See page 28.

CERTIFICATE PROGRAM | ONLINE

## Composite Manufacturing and Engineering Certificate

Intended to provide the practicing engineer a strong foundation in the processing-structure-property relations in advanced fiber composites. See page 28.

CERTIFICATE PROGRAM | ONLINE

## Graduate Certificate in Applied Bioinformatics

Online graduate certificate program aimed at working professionals in the life sciences or in the data and computational sciences who wish to gain knowledge and practical experience in bioinformatics. See page 28.

CERTIFICATE PROGRAM | ONLINE

## Graduate Certificate in Cybersecurity

Online graduate certificate for undergraduates in engineering, computer engineering, computer science, mathematics, physics or related disciplines. See page 28.

CERTIFICATE PROGRAM | ONLINE

## Graduate Certificate in Particle Technology

Designed for engineering professionals who wish to expand their knowledge of particle technology. See page 28.

COURSE | IN-CLASS

## Application of Emerging Data Techniques in Railway Maintenance

Addressing the use of data analytics (big data) in railroad data analysis, this two-day short course provides a specific emphasis on track- and equipment-related data, such as from railroad inspection vehicles and wayside inspection stations. Theories and case studies are presented to illustrate how the principles are applied. Course materials include exploratory data analysis, machine learning, kernel methods, multi-variate adaptive regression splines (MARS), deep learning and neural networks, and Bayesian analysis techniques.

### WHO SHOULD PARTICIPATE?

- Railroad, transit, consultant and railway industry personnel working with inspection and other forms of data
- Rail and transit maintenance officers wanting to learn improved data analysis and forecasting techniques
- Analysts from industry who deal with railway data

**SCHEDULE:** Fall 2019

**LOCATION:** Newark, Del.

*This course can be customized and taught on-site at your location to meet your organization's management training needs. Contact Voula Martaki, [engg outreach@udel.edu](mailto:engg outreach@udel.edu). This program is co-sponsored by the University of Delaware's College of Engineering and the Division of Professional and Continuing Studies.*

DEGREE | ONLINE

## Master of Science in Cybersecurity

Online graduate degree combining research and theory with application to address today's cybersecurity issues. See page 28.

DEGREE | ONLINE

## Master of Science in Electrical and Computer Engineering

Online graduate degree aimed at engineers with prior degrees in electrical, computer or mechanical engineering, or in computer science or mathematics. See page 28.

DEGREE | ONLINE

## Master of Science in Mechanical Engineering (MSME)

Covers not only the foundations of solid mechanics, fluid mechanics, heat transfer and dynamics, but also allows for the choice of electives in diverse areas, including biomechanics, clean energy and environment, composite materials and manufacturing, energy-efficient mobility systems and smart cities, robotics and controls, and more. See page 29.

CERTIFICATE PROGRAM | ONLINE

## Railroad Engineering Certificate

Online graduate certificate program aimed at engineering professionals wishing to expand their knowledge of railroad engineering for advancement in the railroad industry. See page 28.

# Food and hospitality programs

COURSE | IN-CLASS

## NEW! The Art and Science of Beer

Offered in partnership with UD's College of Agriculture and Natural Resources, this two-day workshop introduces the process and end products of beer brewing. Intended to significantly augment students' working knowledge of beer's evolution, its history and the steps involved with making beer, the program includes discussion of distinctions between home and commercial brewing.

**SCHEDULE:** August 19–20, 2019,  
8:30 a.m.–4:30 p.m.

**LOCATION:** University of Delaware  
Newton Poultry Building, 314 Farm Lane,  
Newark, Del.

**PRICE:** \$695, various discounts apply.

**Participants in The Art and Science of Beer must be at least 21 years old.**

[pcs.udel.edu/beer-science](http://pcs.udel.edu/beer-science)

CERTIFICATE PROGRAM | ONLINE

## NEW! HR Competencies for Restaurant Managers

This dynamic new online program addresses the unique human resources issues faced by restaurant managers, supervisors and staff. Developed in partnership with the Delaware Restaurant Association and taught by experts in labor law, human resources, restaurant operations and hospitality business research, this program will benefit restaurant or food service general managers, supervisors and chefs, as well as anyone on the restaurant team who aspires to advance in the industry. Key topics include HR law, recruitment and retention, change leadership and organizational culture.

**SCHEDULE:** September 9–November 4, 2019  
(online)

**PRICE:** \$995, program materials included.  
Discounts, financial assistance available.

[pcs.udel.edu/restaurant-hr](http://pcs.udel.edu/restaurant-hr)



PATRICIA ALLEN

### Workshop provides appreciation of the brewing process and industry



By Adam S. Kamras

Upon learning that a professor of food microbiology, Dallas Hoover, and a professor of molecular plant pathology, Nicole Donofrio, from the University of Delaware's College of Agriculture and Natural Resources (CANR) are teaming up to teach a class, the subject of beer might not immediately come to mind to those unfamiliar with the procedure of making the popular beverage.

However, participants in The Art and Science of Beer, a two-day workshop being offered in partnership with UD's Division of Professional and Continuing Studies (UD PCS), will learn the connection to the professors' backgrounds and hopefully gain an appreciation for the brewing process and rapidly growing industry.

For several years, Hoover and Donofrio have been co-teaching Fermentation Sciences at UD, a course covering fermentation history, biochemistry behind fermentation, different fermentative organisms, and production of many popular items, such as cheese, bread, beer and vegetables. They also both enjoy spending time in UD's nanobrewery, a multipurpose laboratory that, along with beer brewing, is used for egg processing and honey processing.

"Beer making is a series of food processing unit operations involving enzymology, microbiology, and chemical and mechanical engineering," said Hoover. "A fair number of factors come into play in the process of making beer. With the knowledge of how these factors interact, one should develop a respect for the art of making beer."

In addition to spending some time in the classroom, students will participate in a tour of Iron Hill Brewery on Newark's Main Street, a breakout session focused on developing a beer recipe, and a visit to the UD hops garden. The nanobrewery will be in operation for hands-on demonstrations, and experts from Iron Hill Brewery and Flying Fish Brewing Co. will lead a beer-tasting session to explain the tastes of different beers.

Donofrio, who has enjoyed using yeast, one of the primary ingredients of beer, in her lab work, has also dabbled in home brewing. She and Hoover envision the workshop appealing to a wide range of people, including both experienced and inexperienced brewers as well as those just looking to increase their knowledge for personal growth or positions in the industry.

"Students will gain some tangibles, but they should also gain an appreciation of beer making," said Donofrio. "The better you understand the art and science, the better your product can be. It's a multi-million dollar industry in the state of Delaware alone, and it employs a lot of people."

# Healthcare/Health sciences programs

## FREE IN-PERSON INFORMATION SESSION

**Thursday, July 18**  
6–8 p.m.

**University of Delaware**  
**Audion, The Tower at STAR**  
**100 Discovery Blvd.**  
**Newark, DE 19713**

Attendance and refreshments are free.  
RSVPs are requested.

[pcs.udel.edu/info-session](https://pcs.udel.edu/info-session)

## VIRTUAL INFORMATION SESSIONS FOR ONLINE HEALTHCARE PROGRAMS

**Advanced Telehealth  
Coordinator Online Certificate**

**Thursday, August 15**  
6–7 p.m. (EST)

**Clinical Trials Management  
Online Certificate**

**Wednesday, August 14**  
6–7 p.m. (EST)

Learn more about these online programs  
at a virtual information session. The  
sessions are free, but RSVPs are requested.

Visit [pcs.udel.edu/health](https://pcs.udel.edu/health) for details.

CERTIFICATE PROGRAM | ONLINE

## Advanced Telehealth Coordinator Online Certificate

**Learn to coordinate telehealth  
technologies to improve access to  
healthcare specialties and services**

Telehealth initiatives hold exciting potential to address healthcare access issues from shortfalls in critical healthcare specialties and accessibility issues in underserved geographic locations. Telehealth also provides innovative ways to meet the demands of an aging population, reduce inappropriate use of emergency departments, prevent hospital readmissions, and bring care to the most appropriate setting and more. This 15-week program provides the foundations of telehealth for participants interested in utilizing it for the delivery of healthcare.

### WHO SHOULD PARTICIPATE?

Clinicians and administrators from a wide variety of healthcare disciplines within behavioral and medical healthcare, including:

- Physicians, physician assistants
- Dentists, dental hygienists
- Nurses, nurse practitioners
- Counselors
- Social workers
- Physical therapists
- Occupational therapists
- Speech therapists
- IT professionals

**SCHEDULE:** September 9–December 16, 2019  
(online course with some scheduled requirements and assignments)

**PRICE:** \$1,495, program materials included.  
Discounts and financial assistance options available.

4.5 Continuing Education Units

[pcs.udel.edu/telehealth](https://pcs.udel.edu/telehealth)

CERTIFICATE PROGRAM | ONLINE

## Clinical Trials Management Online Certificate

**Prepare for diverse career  
opportunities in this dynamic  
and challenging field**

Opportunities in the field of clinical trials management range from the principal role of investigator to the supportive tasks surrounding regulatory compliance, scientific writing, marketing, data management and more. Employment settings include pharmaceutical, biotechnology, medical device companies, contract research, hospitals, educational institutions and independent contractors. This program covers site management, data management, U.S. regulatory and legal implications, safety and auditing, and marketing a product, including core concepts consistent with the Association of Clinical Research Professionals (ACRP) certification exams, a valuable credentialing opportunity for clinical research professionals. For exam details, including eligibility requirements, visit [acrpn.net](http://acrpn.net).

### WHO SHOULD PARTICIPATE?

- Clinicians and other professionals currently involved in the clinical trials process
- Professionals with a strong science or healthcare-related background wishing to expand their knowledge in the clinical trials field

**SCHEDULE:** September 9–December 9, 2019  
(online course with some scheduled requirements and assignments)

**PRICE:** \$2,125, program materials included.  
Discounts and financial assistance options available.

2.0 Continuing Education Units

[pcs.udel.edu/ctm](https://pcs.udel.edu/ctm)



## CONFERENCE

## Continuing Dental Education Summer Symposium

**Current topics for general dentists, dental hygienists, dental students and dental assistants**

The Continuing Dental Education Summer Symposium is for general dentists, dental hygienists, dental students and dental assistants seeking continuing dental education and updates in the field. This year's topics include endodontics, infection control, opioids, pain management and risk management.

*The program is cosponsored by Dodd Dental Laboratories and the University of Delaware's Division of Professional and Continuing Studies.*

**SCHEDULE:** Monday–Friday, July 22–26, 2019, 8 a.m.–noon

**LOCATION:** Atlantic Sands Hotel and Conference Center, Rehoboth Beach, Del.

**PRICE:** Weekly rate is \$750 (dentists) or \$375 (dental hygienists or other team members); daily rate is \$225 (dentists) or \$100 (dental hygienists or other team members); \$80 students (weekly or daily). Registration includes program materials, certificates of attendance and continental breakfast. Participants assume responsibility for lodging and all other meals.

[pcs.udel.edu/dental](http://pcs.udel.edu/dental)

## CERTIFICATE PROGRAM | ONLINE

## Dietetic Internship Certificate Program

An online post-baccalaureate program for graduates of a didactic program in dietetics (DPD) meeting the internship requirement for registered dietitians. See page 29.

## DEGREE | HYBRID-ONLINE

## Doctor of Nursing Practice

A hybrid online and classroom-based program with post-baccalaureate and post-master's options. See page 29.

## CONFERENCE

## 43rd Annual Eastern Shore Medical Symposium

**Comprehensive coverage of current topics for physicians and other healthcare professionals**

The Eastern Shore Medical Symposium combines quality education with a great location, where primary care physicians, family practitioners, advanced practice nurses and other healthcare professionals receive comprehensive updates on relevant medical topics in a relaxed, collegial atmosphere. Topics have included hypertension guidelines, heart failure, gastroenterology updates, opioid epidemic, cancer screening and prevention, immunization updates, and diabetes management.

*The five-day conference is jointly provided by Sidney Kimmel Medical College at Thomas Jefferson University and the University of Delaware with promotional assistance provided by the Medical Society of Delaware. The Sidney Kimmel Medical College at Thomas Jefferson University is accredited by the ACCME to provide continuing medical education for physicians.*

**SCHEDULE:** Monday–Friday, June 15–19, 2020, 7 a.m.–12:30 p.m.

**LOCATION:** Rehoboth Beach Convention Center, Rehoboth Beach, Del.

**PRICE:** Registration includes course materials on a flash drive, online certificates of attendance and daily continental breakfast. Participants assume responsibility for lodging and all other meals. Physicians and faculty: \$795; retired physicians: \$755; previous participant bringing a first-time participant: \$695; nurses (professional, practitioner, case manager) and physician assistants: \$695; residents: \$520.

[pcs.udel.edu/esms](http://pcs.udel.edu/esms)

## CONFERENCE

## 51st Annual Medical Aspects of Sports Seminar

**Successful prevention, evaluation and rehabilitation of sports injuries**

This one-day sports medicine conference covers topics related to the evaluation and rehabilitation of sports-related injuries to the upper and lower extremities. This program is recommended for physical therapists, team and family physicians, athletic trainers, coaches, fitness club personnel, and students or school personnel involved in physical education, recreation and physical fitness programs.

Presenters include faculty and athletic training experts from the University of Delaware as well as expert practitioners from the region.

*Cosponsored by the University of Delaware Intercollegiate Athletics Program and Department of Kinesiology and Applied Physiology.*

**SCHEDULE:** Saturday, February 29, 2020, 7 a.m.–4:15 p.m.

**LOCATION:** University of Delaware Audion, The Tower at STAR

**PRICE:** \$215, Event registration includes all program materials, refreshments and lunch. Student rate and two or more group discount available.

[pcs.udel.edu/sports](http://pcs.udel.edu/sports)

## CERTIFICATE PROGRAM | HYBRID-ONLINE

## Molecular Diagnostics Certificate

Hybrid-online plus campus-based certificate program designed for medical laboratory scientists working in the clinical laboratory or in the fields of forensics, biotechnology and pharmaceuticals. See page 29.



# UNDERSTANDING TELEHEALTH for IMPROVED OUTCOMES

## Gemma Lowery

Advanced Telehealth Coordinator  
Certificate

“Christiana Care’s longest-running telehealth effort is the Virtual ICU, where overnight physician coverage has been provided virtually for the past 13 years. During that time, we’ve experienced shorter ICU stays and earlier ventilator removal. Both lead to improved outcomes in the ICU.

A newer program that’s been well-received is the Employee Virtual Practice coverage, which provides Christiana Care employees with virtual access to primary care providers. Some Christiana Care specialists have also adopted virtual visits for patient follow-up visits, providing flexibility for patients to avoid taking time off work or arranging transportation or child care.

I am a huge advocate for health equality and health equity. I believe telehealth is a way to help bridge gaps in healthcare access. Understanding all the ins and outs of the telehealth environment has helped me make smart decisions as I partner with clinical, IT and other teams involved in telehealth at Christiana Care.”

*Gemma E. Lowery is the new Telehealth Program Manager at Christiana Care Health System where she is responsible for leading and expanding telemedicine initiatives. She is a UD alumna and a graduate of UD’s Advanced Telehealth Coordinator Certificate program.*



# PROGRAMS AT A GLANCE

SUBJECT PROGRAM DATES/TIME LOCATION PRICE DELIVERY METHOD FORMAT PG. NO.

<b>BUSINESS/IT/DRONE</b>	<b>Analytics: Optimizing Big Data</b>	Thurs., Sept. 12–Dec. 12, 6–9:15 p.m.	Wilmington	\$2,895	In-classroom	Certificate	3
	<b>Business Analysis</b>	Sept. 18–19, Oct. 16–17, Nov. 13–14, Dec. 4–5 8:30 a.m.–4:30 p.m.	Newark	\$995/module or \$3,380/certificate bundle	In-classroom	Certificate	3
	<b>Business Essentials</b>		Newark/Online		Hybrid-online	Certificate	26
	<b>Coding Bootcamps--NET/C# or Java</b>	Classes start monthly		\$10,000 total, or \$2,000–\$3,000/badge	Online	Badge/Certificate	4
	<b>Digital Marketing--</b> <b>Foundations of Digital Marketing Concepts</b>	Sept. 4–5, 8 a.m.–5 p.m.					
	<b>Email Marketing</b>	Sept. 24–25, 9 a.m.–4 p.m.					
	<b>Fundamentals of Social Media Marketing</b>	Oct. 22–23, 8 a.m.–5 p.m.					
	<b>Search Engine Optimization</b>	Nov. 5–6, 8 a.m.–5 p.m.					
	<b>Pay Per Click Digital Advertising</b>	Nov. 19–20, 8 a.m.–5 p.m.					
	<b>Analytics and Measuring Return on Investment</b>	Dec. 4–5, 9 a.m.–4 p.m.					
	<b>Graduate Certificate in Socially Responsible and Sustainable Apparel Business</b>	Fall 2019			Online	Certificate	27
	<b>Leading a Lean Culture:</b> <b>Advanced Problem-Solving for the 21st Century</b>	Fall 2019			Hybrid-online	Certificate	7
	<b>Management Essentials for Emerging Leaders</b>	Fall 2019					
	<b>Microsoft® Excel Essentials</b>	Tues., Sept. 3–24, 6–9 p.m.	Newark	\$475	In-classroom	Certificate	7
	<b>Microsoft® Excel Advanced Concepts</b>	Tues., Oct. 1–22, 6–9 p.m.	Newark	\$475	In-classroom	Course	7
	<b>Microsoft® Excel Advanced Reporting and Analytics</b>	Tues., Nov. 5–Dec. 3, 6–9:15 p.m.	Newark	\$625	In-classroom	Course	7
	<b>Master of Arts in Strategic Communication (M.A.)</b>				Online	Degree	27
	<b>Master of Business Administration (MBA)</b>				Online	Degree	26
	<b>Master of Public Administration (MPA)</b>				Online	Degree	29
	<b>Master of Science in Applied Statistics (M.S.)</b>				Online	Degree	26
	<b>Master of Science in International Business (M.S.)</b>				Online	Degree	27
	<b>Professional Drone Pilot: Ground School and FAA Part 107 Test Prep</b>	Sat. and Sun., Aug. 10–11 or Oct. 12–13, 8:30 a.m.–5 p.m.	Newark	\$395	In-classroom	Course	8
	<b>Professional Drone Pilot: Foundations of Flight</b>	Sat. and Sun., July 27–28 or Sept. 14–15, 8:30 a.m.–5 p.m.	Wilmington	\$995	In-classroom	Course	8
	<b>Project Management</b>	Mon., Sept. 16–Nov. 18, 6–9:30 p.m., Wed., Oct. 16–Dec. 18, 6–9:30 p.m.	Newark Wilmington	\$2,595 \$2,595	In-classroom In-classroom	Certificate Certificate	8 8
	<b>PMP®/CAPM® Exam Prep</b>	Sat., July 27 and Aug. 3, 8:30 a.m.–4:30 p.m. or March 7 and 14, 2020	Newark	\$995	In-classroom	Course	9
	<b>Social Media Mktg. for Business: Advanced</b>	Aug. 26–Dec. 8		\$3,495	Online	Certificate	9
	<b>Socially Responsible and Sustainable Business</b>	Four virtual/online classes			Online	Course	29
<b>EDUCATION</b>	<b>M.A. in Economics and Entrepreneurship for Educators</b>				Hybrid-online	Degree	27
	<b>Master of Education in Educational Technology (M.Ed.)</b>				Online	Degree	27
	<b>Master of Education in Exceptional Children and Youth (M.Ed.)</b>				Online	Degree	27
	<b>Master of Education in Literacy (M.Ed.)</b>				Online	Degree	27
	<b>Master of Education in Teacher Leadership</b>				Online	Degree	27
	<b>Alternative Routes to Teacher Certification (ARTC)</b>				In-class	Course	10
	<b>Praxis: Core Math or Reading &amp; Writing</b>	Visit <a href="http://pcs.ude.edu/praxis-test-prep">pcs.ude.edu/praxis-test-prep</a> for details.			Online	Course	10



ENGINEERING & SCIENCE	Application of Emerging Data Techniques in Railway Maintenance	Fall 2019	Newark	In-classroom	Course	11
	Composite Materials Grad. Certificate			Online	Certificate	28
	Composite Manufacturing/Engineering Certificate			Online	Certificate	28
	Graduate Certificate in Applied Bioinformatics			Online	Certificate	28
	Graduate Certificate in Cybersecurity			Online	Certificate	28
	Graduate Certificate in Particle Technology			Online	Certificate	28
	M.S. in Cybersecurity			Online	Degree	28
	M.S. in Electrical and Computer Engineering			Online	Degree	28
	M.S. in Mechanical Engineering (MSME)			Online	Degree	29
	Railroad Engineering Grad. Certificate			Online	Certificate	28
FOOD & HOSPITALITY	The Art and Science of Beer	Aug. 19–20, 8:30 a.m.–4:30 p.m.	Newark	In-classroom	Course	12
	HR Competencies for Restaurant Managers	Sept. 9–Nov. 4		Online	Certificate	12
HEALTHCARE/HEALTH SCIENCES	Advanced Telehealth Coordinator Online	Sept. 9–Dec. 16		Online	Certificate	13
	Clinical Trials Management	Sept. 9–Dec. 9		Online	Certificate	13
	Continuing Dental Education Symposium	Mon.–Fri., July 22–July 26, 8 a.m.–noon	Rehoboth Beach	On-site	Conference	14
	Dietetic Internship			Online	Certificate	29
	Doctor of Nursing Practice			Online	Degree	29
	Eastern Shore Medical Symposium	Mon.–Fri., June 15–19, 2020, 7 a.m.–12:30 p.m.	Rehoboth Beach	On-site	Conference	14
	Medical Aspects of Sports	Sat., Feb. 29, 2020, 7 a.m.–4:15 p.m.	Newark	On-site	Conference	14
	Molecular Diagnostics			Hybrid-online	Certificate	29
	RN Refresher	Starts Aug. 28		Online	Course	18
	RN to BSN			Online	Degree	26
LAW	Paralegal	Mon./Wed., Sept. 4, 2019–July 22, 2020, 6–9 p.m.	Wilmington	In-classroom	Certificate	19
	Advanced Paralegal E-filing	Sat., Oct. 5, 8:30 a.m.–4:30 p.m.	Wilmington	In-classroom	Course	19
	LSAT Prep	Tues./Thurs., Sept. 19–Oct. 22, 6–9 p.m.	Newark	In-classroom	Course	25
SAFETY	Certified Occupational Safety Specialist (COSS)	Mon.–Fri., Aug. 5–9 or Oct. 21–25, 8 a.m.–5 p.m.	Newark	In-classroom	Course	22
	Certificate for Occupational Safety Managers (COSM)	Mon.–Fri., Sept. 23–27, 8 a.m.–5 p.m.	Newark	In-classroom	Course	22
	Safe Supervisor Training	Mon.–Wed., July 22–24, 8 a.m.–5 p.m.	Newark	In-classroom	Course	23
	Diminishing Human Error in the Workplace	Mon.–Fri., July 8–12, 8 a.m.–5 p.m. or Nov. 11–15	Newark	In-classroom	Course	23
	ACT Prep	Multiple live-online offerings; visit pcs.udeledu/sat-test-prep for details.		Online	Course	25
TEST PREP	GRE Prep	Mon./Wed., Oct. 2–28, 6–9 p.m. w/ live-online offerings; pcs.udeledu/gre-test-prep.	Newark or online	In-classroom or online	Course	25
	GMAT Prep	Live-online offerings; visit pcs.udeledu/gre-test-prep.		Online	Course	25
	LSAT Prep	Tues./Thurs., Sept. 19–Oct. 22, 6–9 p.m. w/ live-online offerings; pcs.udeledu/sat-test-prep	Newark or online	In-classroom or online	Course	25
	SAT Blitz	Sat., Oct. 26–Nov. 23, 8:30 a.m.–12:30 p.m. Sun., Sept. 8–29, 1–5 p.m.; Sun., Nov. 3–24, 1–5 p.m.;	Lewes Newark Newark	In-classroom In-classroom In-classroom	Course Course Course	25 25 25

COURSE | ONLINE

## RN Refresher Online Course

Update your nursing knowledge and clinical skills, and meet State Board of Nursing requirements for licensure reactivation

Have you been out of active nursing practice? Do you wish to update your nursing knowledge and return to a clinical setting? Does your State Board of Nursing require a refresher course for licensure reactivation? The University of Delaware's RN Refresher Online course is designed to help you expand your nursing options.

UD's RN Refresher Course consists of:

- A didactic component providing the latest updates in evidence-based nursing practice and patient care management through a self-study format
- An optional clinical component with a minimum of 80 hours of preceptored adult medical-surgical clinical experience in an acute care facility
- Learner support available via web, email, phone and fax

**SCHEDULE:** 15-week didactic component begins August 28, 2019. Optional clinical component immediately follows and must be completed by February 28, 2020. Application required. Please submit application early.

**PRICE:** \$950 course fee (early registration discount offered); \$200 clinical administration fee. Textbooks not included (approximately \$250). Discounts and financial assistance options available.

[pcs.udel.edu/rn-refresher](http://pcs.udel.edu/rn-refresher)

DEGREE | ONLINE

## RN to BSN Program

Online program for registered nurses wishing to earn a bachelor of science in nursing. See page 26.

## 50 YEARS OF UD OUTREACH IN SPORTS MEDICINE AND ATHLETIC TRAINING



CINDY DOLAN

By Nora Zelluk

Since 1970, the University of Delaware's annual Medical Aspects of Sports Seminar has served as a forum for experts from UD and the region to share research and practical expertise in the field of athletic training and sports medicine.

The event's 50-year milestone was also notable for the contributions of its outgoing program director, UD's Keith Handling, associate professor of kinesiology and applied physiology. Participating in the 1970 event as a UD athletic training student, Handling has since attended, presented or directed the event every year except for his two years' service in the Navy.

"From the beginning, the Medical Aspects of Sports seminar was conceived as an outreach opportunity for UD students, faculty and athletic trainers to share their knowledge," said Handling. "UD's athletic training education program has always stressed the importance of continuing education and lifelong learning in our field, emphasizing that as practitioners we need to be continually involved in keeping pace with advances in research and practice."

The seminar's leadership closely parallels the very short list representing UD's athletic training leadership of the last half-century. UD Athletic Hall of Fame director of athletic training Dr. C. Roy "Doc" Rylander founded and led the event until it was taken over by Handling, who was Rylander's student and himself a UD Athletic Hall of Fame inductee for athletic training. Most recently, UD's Dan Watson, associate director of athletics for athletic training and head athletic trainer,—and one of Handling's students—has taken over leadership of the event.

Like Handling, Watson emphasizes the seminar's ongoing outreach mission, and the role of mentorship and continuity in UD's athletic training education program. "This program allows us to showcase the talent we have on campus, especially from UD's athletic training and physical therapy programs, as well as local and regional experts, including our UD alumni who are involved in the field and bring back their experiences," said Watson, adding, "We're always motivated to hear about the research and practical insights from our colleagues in the field."

Two of last year's presenters are UD alums who currently serve as athletic trainers and physical therapists with NFL teams, Jon Boone (Miami Dolphins) and Steve Feldman (Philadelphia Eagles).

The Medical Aspects of Sports Seminar is co-sponsored by UD's Intercollegiate Athletics Program and the College of Health Sciences' Department of Kinesiology and Applied Physiology, held in partnership with UD's Division of Professional and Continuing Studies. For more details about the program, see page 14.

# Law programs

## LSAT TEST PREP FREE STRATEGY SESSION

Thursday, September 5  
6–7:30 p.m. • Newark, Del.

## LSAT TEST PREP COURSE

Tuesday/Thursday,  
September 19–October 22  
6–9 p.m.

CERTIFICATE PROGRAM | IN-CLASS

## Paralegal Certificate

Create a new career path or advance in your current position as a paralegal or legal assistant

Paralegals fill a vital role in the legal community, and for more than 40 years the University of Delaware's Paralegal Certificate program has been preparing legal assistants and paralegals in the region. Taught by a faculty of experienced attorneys, the program covers the American system of law, court systems and procedures, and legal research and writing, and introduces the major branches of law.

Professional opportunities are many and varied:

- Private law firms will continue to be the largest employers of paralegals
- Growth is expected in corporate legal departments, insurance companies, real estate and title insurance firms, and banks
- Opportunities are projected to expand in the public sector

### WHO SHOULD PARTICIPATE?

- Anyone wishing to change careers
- Anyone wishing to enter the field of law and legal services
- Anyone with legal experience wishing to earn a valuable credential
- Anyone considering law school



## Students benefit from Paralegal Association memberships

UD's Division of Professional and Continuing Studies is a sponsor of the Delaware Paralegal Association (DPA) and the Delaware County Paralegal Association (DCPA). We encourage participants in UD's Paralegal Certificate program to join these associations at the student membership level. For more information, visit [www.deparalegals.org](http://www.deparalegals.org) (DPA) and [www.delcparalegal.org](http://www.delcparalegal.org) (DCPA).

**SCHEDULE:** Mondays/Wednesdays,  
September 4, 2019–July 22, 2020, 6–9 p.m.

**LOCATION:** Arsh Hall, 2700 Pennsylvania Ave.,  
Wilmington, Del.

**PRICE:** \$3,650, textbooks additional.  
Discounts and financial assistance options available.

23.4 Continuing Education Units



### PARALEGAL ASSOCIATIONS DISCOUNT

Members of the Delaware Paralegal Association and the Delaware County Paralegal Association receive a 15% discount when enrolling in this program.

[pcs.udel.edu/paralegal](http://pcs.udel.edu/paralegal)

## ADVANCED PARALEGAL SEMINAR SERIES

### Keep up with trending legal topics

Anyone employed by a law firm, working toward a legal profession, or possessing legal experience and wishing to increase their knowledge in the legal field can enhance their career through advanced education in various areas of the law. By studying targeted topics, students can gain the specialized knowledge that will increase their scope of practice and competencies and make them more effective in working with attorneys who focus on particular legal fields and specialties. These short-term modules are designed to accommodate busy professionals.

COURSE | IN-CLASS

## NEW! E-filing

This one-day course addresses federal and state e-filing systems, including CM/ECF, File & ServeXpress™, File & Serve Delaware™, and eFlex. Students will learn common e-filing terminology, document requirements and deadlines for e-filing in each court, and how to search the docket in each e-filing system. Lecture includes e-filing demonstrations, best practices, pitfalls to avoid and resources for additional training.

### WHO SHOULD PARTICIPATE?

- Anyone working in a law firm
- Anyone working toward a legal profession
- Anyone with legal experience wishing to enhance their knowledge in the legal field

**SCHEDULE:** Saturday, October 5, 2019,  
8:30 a.m.–4:30 p.m.

**LOCATION:** Arsh Hall, 2700 Pennsylvania Ave.,  
Wilmington, Del.

**PRICE:** \$375

[pcs.udel.edu/paralegal-institute](http://pcs.udel.edu/paralegal-institute)

### FUTURE ADVANCED PARALEGAL SEMINAR SERIES TOPICS FOR 2020!

- Elder Law and Wills
- Real Estate Law



# Pre-college programs

## UD CREDIT COURSES FOR HIGH SCHOOL STUDENTS

### Individual Enrollment in UD Credit Courses

High school students interested in taking credit courses through Continuing Education are required to schedule an appointment to meet with an ACCESS Center academic advisor (see page 1). ACCESS advisors are available to answer questions, offer guidance and assistance with course selection and registration, and provide forms that need to be completed.

Advisors are available to support students throughout the process.

#### INTERESTED IN GETTING STARTED?

Contact the ACCESS Center to make an appointment with an advisor prior to enrolling.

302-831-8843 • [pcs.udel.edu/pre-college](https://pcs.udel.edu/pre-college)

## UD Dual Enrollment: Earn College Credits While Still in High School

Qualified Delaware high school students can concurrently earn University of Delaware and high school credits through established partnerships with local high schools. Academically qualified juniors and seniors may register for designated courses through their participating Delaware high schools and:

- Earn college credits and high school credits at the same time
- Gain experience taking college-level courses
- Take courses not available at their schools
- Enhance their college applications

Online courses are one of the options for students in UD's dual enrollment partnership program. Students may enroll in one or more of the designated online courses offered and taught by UD faculty. Although course offerings may change, typical offerings include:

### ANTH 101: Introduction to Social and Cultural Anthropology

Major ideas and areas of study in social and cultural anthropology. Use of ethnographic data and film to illustrate the anthropologist's view of societies in their sociocultural and ecological dimensions. (3 credits)

### BISC 105: Human Heredity and Development

Heredity and human affairs, pedigree analysis, physical and chemical basis of heredity, heredity and environment, radiation and mutation, heredity and diseases, and birth defects. (3 credits)

### BUAD100: Introduction to Business

Survey of basic business concepts designed for non-business majors. Topics covered include understanding the business environment, management and organizational behavior, marketing, and operations management, with coverage of international business and business ethics. (3 credits)

### HDFS 202: Diversity and Families

Examination of diverse families in the United States with a focus on issues of race, ethnicity, social class and gender. Emphasis is on the accelerating effects of globalization and social change. (3 credits)

### NTDT 200: Nutrition Concepts

Functions and sources of nutrients, dietary adequacy, energy balance and metabolism with emphasis on health promotion. Includes weight control, evaluation of popular diets, vegetarianism, eating disorders, alcohol, and other current issues and concerns in nutrition. (3 credits)

#### HOW TO GET STARTED

Contact your school's guidance office to find out if your school participates in UD Dual Enrollment.

[pcs.udel.edu/high-school-dual-enrollment](https://pcs.udel.edu/high-school-dual-enrollment)



## READING AND STUDY SKILLS PROGRAMS

UD PCS, in partnership with the Institute of Reading Development, offers reading skills programs for learners of all ages.

Fall online follow-ups are available to complement our summer reading programs for students in grade school and middle school.

UD PCS also offers various reading programs for adults, high school students and college students. Speed reading and study skills programs enable students to double their reading speed, improve reading comprehension and learn new ways of reading and studying textbooks.

**For details, visit [pcs.udel.edu/reading](http://pcs.udel.edu/reading) or call the Institute of Reading Development (IRD) at 1-800-903-0162.**

## Summer Reading Skills Programs

Summer Reading Skills programs address the specific learning needs of readers at all ages, with instruction provided by experienced teachers. Between weekly lessons, students continue to build skills through interactive online instruction tailored to their reading level.

### 4-year-olds through entering third graders

Fun programs focus on phonics, word-attack skills, building comprehension, developing a love of books and reading, and becoming confident enthusiastic readers.

### Entering fourth and fifth graders

Programs focus on students becoming skilled, enthusiastic readers with strong comprehension, including independent reading of enjoyable children's novels. Increased focus on textbook and nonfiction reading.

## Entering 6th through 11th graders

Programs focus on building stronger readers and better students, with emphasis on increased reading speed, improved comprehension, and how to effectively read and study textbooks.

**LOCATIONS:** Dover, Middletown, Newark, Wilmington

**SCHEDULE:** Summer programs meet one day a week for five weeks. Visit the website for available sessions and sign up for notifications and a discount.

## Speed Reading and Study Skills Programs

Increase your effectiveness as a reader and a student in this program designed for entering high school seniors, college students and adults. You will learn several speed reading techniques as well as comprehension, concentration and retention strategies. You will double your speed in materials ranging from novels to nonfiction, and learn how to adapt your approach based upon the type of material you're reading and your purpose as a reader. In addition, you will be able to prepare for tests efficiently without extensive rereading.

You will cut the time you spend on required reading in half, and the reading you do for pleasure will be faster and more enjoyable.

Program participants receive **free lifetime repeat privileges** at any of the 700 universities, colleges and other locations that offer the program nationwide.

**LOCATION:** Newark, Del., and online

**SCHEDULE:** Summer program and two-weekend fall programs are available; please call the Institute of Reading Development (IRD) for dates: 1-800-903-0162.

## COLLEGE TEST PREP: EARN HIGHER ACT AND SAT SCORES

Standardized tests are crucial components of the college application process. The University of Delaware partners with Educational Testing Consultants (ETC), a leader in higher education test preparation, to offer intensive programs that provide students with the tools they need to excel. A limited number of need-based scholarships are available for students enrolling in test prep programs.

Varied schedules and formats available:

- Live-Online
- Summer Institute
- Weekend Blitz programs

Courses are offered in Newark, Lewes and online. See page 25 for details.

[pcs.udel.edu/sat-test-prep](http://pcs.udel.edu/sat-test-prep)

## ACT Live-Online Test Prep

This test prep course is an intensive program that provides students with the tools they need to excel on the ACT exam. See page 25.

## SAT Test Prep

This test prep course is an intensive program that provides students with the tools they need to excel on the SAT exam. See page 25.

# Safety programs

## VIRTUAL INFORMATION SESSION

**September 9**  
2–3 p.m.

### Certified Occupational Safety Specialist (COSS) Course

### Certificate for Occupational Safety Managers (COSM) Course

### Safe Supervisor Course

Learn more about these occupational safety programs at a free virtual information session. RSVPs are requested.

Visit [pcs.udel.edu/occupational-safety](https://pcs.udel.edu/occupational-safety) for details.



## PROFESSIONAL SAFETY TRAINING INSTITUTE



The University of Delaware's Division of Professional and Continuing Studies partners with the Delaware Valley Safety Council to offer training for entry-level to experienced safety professionals as well as organizational leaders focused on promoting workplace safety culture and performance excellence. All programs are taught by Authorized OSHA Outreach Trainers.

### COURSE | IN-CLASS

## Certified Occupational Safety Specialist (COSS)

### Become a trained safety practitioner

Developed by expert safety practitioners focused on the core competencies of occupational safety and health, the Certified Occupational Safety Specialist (COSS) designation is recognized nationwide for its rigorous standards and outstanding curriculum. COSS graduates are able to teach their employees and colleagues how to work safely and eliminate the risk of fatalities and near misses—and avoid safety violations and OSHA citations.



Participants who successfully complete the program earn the nationally recognized Certified Occupational Safety Specialist (COSS) designation, which is endorsed by the American Association of Safety Councils and the American Council for Construction Education.

### WHO SHOULD PARTICIPATE?

This course is designed for entry-level safety professionals as well as experienced safety practitioners wishing to stay current in the field. Safety training is applicable to a wide range of industries, including construction, manufacturing, transportation, energy and utilities, public safety and security, healthcare, food, government and human resources.

**PREREQUISITE:** High school diploma or equivalent.

**SCHEDULE:** Monday–Friday, August 5–9 or October 21–25, 2019, 8 a.m.–5 p.m.

**LOCATION:** 501 S. College Ave., Newark, Del.

**PRICE:** \$2,649, course materials included. UD alumni, military and GBCA discount available.\*

[pcs.udel.edu/coss](https://pcs.udel.edu/coss)

### COURSE | IN-CLASS

## Certificate for Occupational Safety Managers (COSM)

### Advanced safety training for occupational safety professionals

This advanced, executive level safety program focuses on safety processes and procedures and building the safety culture to lead your company toward excellence.

Safety professionals and managers who have seen the difference training can make can take the next professional step in their careers with the COSM designation.

After completing 40 hours of training and submitting all assignments, participants will receive the COSM credential.

### WHO SHOULD PARTICIPATE?

This program benefits all organizational safety leaders involved in processes and decision-making as well as other managers and professionals charged with workplace health and safety for their organizations.

**PREREQUISITE:** Minimum two years of safety, health or environmental work experience.

Topics covered:

- Essentials of safety management
- Safety competencies and leadership
- Management roles and responsibilities
- Strategic planning and evaluating



- Managing risk (hazards and analysis), safety finances and workers' compensation
- Communicating the safety message
- Presenting to high-level executives
- Injury management, incentives and discipline
- Claims and investigation in post-accident management

**SCHEDULE:** Monday–Friday, September 23–27, 2019, 8 a.m.–5 p.m.

**LOCATION:** 501 S. College Ave., Newark, Del.

**PRICE:** \$2,749, course materials included. UD alumni, military and GBCA discount available.\*

[pcs.udel.edu/cosm](http://pcs.udel.edu/cosm)

## COURSE | IN-CLASS

### Safe Supervisor Training

#### Become a safety leader in your workplace

Achieving an injury-free workplace takes more than a catchy phrase or one individual championing the cause. Frontline supervisors play a pivotal role in shaping the safety mindset in the workforce.

Safe Supervisor Training is a three-day course designed to enhance a supervisor's understanding of the bigger picture in creating a safer work environment. By learning how to promote safety on a job site, graduates have the knowledge to help reduce fatalities, near misses and OSHA citations.

Topics covered:

- How exposures to hazards can lead to accidents
- Performance of a worksite analysis
- Recognizing hazards
- Determining potential effects of hazards
- Determining how OSHA code applies to identified hazards
- Controlling identified hazards
- Communicating hazard-related information
- Initiating an accident investigation
- Understanding some of the psychology that drives employees' "unsafe" behaviors

**SCHEDULE:** Monday–Wednesday, July 22–24, 2019, 8 a.m.–5 p.m..

**LOCATION:** 501 S. College Ave., Newark, Del.

**PRICE:** \$1,399, course materials included. UD alumni, military and GBCA discount available.\*

[pcs.udel.edu/safe-supervisor](http://pcs.udel.edu/safe-supervisor)

## COURSE | IN-CLASS

### Diminishing Human Error in the Workplace

#### Is there a proactive or reactive safety culture in your organization?

Every organization needs safety leaders, managers and professionals who are focused on promoting an organization's safety culture and values while championing the drive toward safety excellence. This advanced course seeks to develop workplace safety leaders with expertise in unraveling human behavior, addressing human error, understanding behavior-based safety systems, risk management and performing hazard analysis. The course also covers implementation of system safety and development of an advanced safety management plan and safety leadership skills, with a focus on enhancing human performance and significantly reducing incidents in the workplace.

This one-of-a-kind advanced course covers an extensive array of safety topics focusing on developing resilience in safety and advancing safety engineering and management principles. Designed to be highly engaging and requiring active class participation, the course includes in-class and homework projects.

#### WHO SHOULD PARTICIPATE?

While geared toward upper level safety professionals, any experienced safety professional willing to learn in a powerful yet fun learning atmosphere will benefit from this course..

**SCHEDULE:** Monday–Friday, July 8–12, 2019, 8 a.m.–5 p.m., November 11–15, 2019

**LOCATION:** 501 S. College Ave., Newark, Del.

**PRICE:** \$2,295, course materials included.

[pcs.udel.edu/safety-human-performance](http://pcs.udel.edu/safety-human-performance)

\*Contact the Delaware Valley Safety Council at 856-558-8797 or [detraining@dvsconline.org](mailto:detraining@dvsconline.org) to apply any discount. Only one discount may be applied per enrollment. General Building Contractors Association, Inc. (GBCA) members receive a discount when enrolling in COSS, COSM or Diminishing Human Error in the Workplace.

## OSHA's annual most frequently cited violations

1. Fall Protection—General Requirements
2. Hazard Communication
3. Scaffolding
4. Respiratory Protection
5. Lockout/Tagout

[pcs.udel.edu/occupational-safety](http://pcs.udel.edu/occupational-safety)



# UD PCS AND ETC support UPWARD BOUND CLASSIC

## SAT Summer Institute scholarships awarded to 20 students

By Adam S. Kamras

### Scholarships valued at nearly \$10,000

The University of Delaware's Upward Bound Classic program added structured SAT prep to its already intensive curriculum by utilizing 20 SAT Summer Institute scholarships contributed by UD's Division of Professional and Continuing Studies (UD PCS) and Educational Testing Consultants (ETC). The scholarships are valued at nearly \$10,000.

Providing tutoring and academic support to 69 eligible high school students at target high schools in New Castle County, Upward Bound Classic students meet two evenings per week for tutoring and one Saturday a month for a variety of academic workshops, college tours and cultural trips during the academic year. The six-week residential summer program is held on UD's Newark campus and consists of English, math, science and Latin courses.

"The Upward Bound Classic program was truly honored to receive the SAT Summer Institute scholarships," said John France, academic program director. "Our students were undoubtedly grateful for this opportunity and understood it did not come to them by chance, rather from sponsors that believed in their success."

With a mission statement of "To promote each young scholar's learning experience by providing a series of specialized college preparatory services," the University of Delaware's Upward Bound Classic program is part of the federal TRIO family of programs for equality in educational opportunity for students from low-income and first-generation college backgrounds. Funded by the U.S. Department of Education, Upward Bound is free to eligible applicants.

"We were aware of the important work being done here by Dr. France and his colleagues and saw an opportunity to utilize our scholarship program to help Upward Bound further its mission," said Patricia Allen, UD PCS program coordinator. "To reach students of low income and high aspiration, the two programs seemed like a perfect fit."

### Aid offered for most test prep courses

The SAT Summer Institute, as well as most of UD PCS' other test prep programs, are offered in partnership with Educational Testing Consultants. UD PCS and ETC have established a scholarship program to award need-based financial aid to students enrolling in the classes.

**"OFTEN IT IS THE STUDENT LEAST ABLE TO AFFORD THE COURSE WHO BENEFITS FROM IT THE MOST"**

"The scholarship program enables us to reach underserved students, including those who will benefit from SAT prep and the expanded college scholarship opportunities that come with a higher score," said Allen. "Often it is the student least able to afford the course who benefits from it the most."

France said while the students have been presented with financial and academic challenges by growing up in less privileged communities, this has also helped them to appreciate the value of a college education.

"By participating in this course, they gained the opportunity to show the colleges or universities of their choosing how far they've come academically, even if their GPA is a little lower than expected or wanted," said France. "Committed to their education and one step closer to their dreams, their educational pursuits would not be possible without generous support from scholarship sponsors like UD PCS and ETC."





# Test prep programs

## TEST PREP FREE STRATEGY SESSIONS

### GRE Strategy Workshop

**Wednesday, September 11**

**6–7:30 p.m. • Newark, Del.**

### LSAT Strategy Workshop

**Thursday, September 5**

**6–7:30 p.m. • Newark, Del.**

COURSE | IN-CLASS OR LIVE-ONLINE

## College Test Preparation Courses

**Intensive in-class or live-online test preparation and review tools to help you perform at your peak**

Standardized tests are a crucial component of the college and graduate school application process, and success on these exams can be a big part of achieving your goals. These test prep courses are intensive programs that provide students with the tools they need to excel on these exams. Students are provided with an in-depth review of the exam materials, insight into strategies for succeeding on each exam, and a comprehensive study plan. An official study guide, a customized workbook and online resources are provided with each course. This program is offered in partnership with Educational Testing Consultants (ETC), a leader in higher education test preparation.

### WHO SHOULD PARTICIPATE?

- Rising high school juniors taking the SAT or ACT for college admissions
- Undergraduates preparing to take the GRE, GMAT, LSAT or MCAT for admission to graduate school, law school or medical school

- Future teachers taking the Praxis for certification or admission to colleges/schools of education
- Anyone wishing to continue their education at the college/university or graduate level

**PRICE:** See website for current pricing and available discounts.

**LOCATION:** Courses offered on UD's main campus in Newark, Del., and now in Lewes, Del. and live-online. See website for details.

[pcs.udel.edu/test-prep](http://pcs.udel.edu/test-prep)

### ACT

(Multiple live-online offerings)

[pcs.udel.edu/sat-test-prep](http://pcs.udel.edu/sat-test-prep)

### GRE

Mon./Wed., Oct 2–28, 2019, 6–9 p.m.

(Multiple live-online offerings)

[pcs.udel.edu/gre-test-prep](http://pcs.udel.edu/gre-test-prep)

### GMAT

(Multiple live-online offerings)

[pcs.udel.edu/gre-test-prep/](http://pcs.udel.edu/gre-test-prep/)

### LSAT

Tuesdays/Thursdays,

September 19–October 22, 2019, 6–9 p.m.

(Multiple live-online offerings)

[pcs.udel.edu/lsat-test-prep](http://pcs.udel.edu/lsat-test-prep)

### MCAT

**Returning June 2020!**

### SAT

#### SAT BLITZ

Sun., September 8–29, 2019, 1–5 p.m. (Newark)

Sat., October 26–November 23, 2019,

8:30 a.m.–12:30 p.m. (Lewes)

Sun., November 3–24, 2019, 1–5 p.m. (Newark)

(Multiple live-online offerings)

*Discounts are available for veterans, Delaware residents, and UD students and alumni.*

[pcs.udel.edu/sat-test-prep](http://pcs.udel.edu/sat-test-prep)

### FINANCIAL AID AVAILABLE

Need-based financial aid is available for students enrolling in the ACT, SAT, GMAT, GRE or LSAT test prep programs. Applications are accepted on a rolling basis, with preference given to submissions received three weeks prior to the applicable course start date.

[pcs.udel.edu/test-prep](http://pcs.udel.edu/test-prep)

### OTHER EXAM PREP OFFERINGS

## PMP®/CAPM® Exam Prep

See page 9 for more information.

## Praxis Live-Online

See page 10 for more information.





# UD Online programs

## Study with flexibility

When you choose to study with UD, you gain access to our expert faculty and our leading-edge curriculum, all with the flexibility of online learning. Online programs from the University of Delaware are ideal solutions for students and professionals seeking to advance critical skills with a leading research university while accommodating their busy schedules.

[online.udel.edu](http://online.udel.edu)



## University of Delaware—a top-ranked education

- *U.S. News and World Report* names UD #38 nationally among top public universities.
- Kiplinger's Personal Finance magazine calls UD a best value school.
- Times Higher Education World University Ranking lists UD in the top 300 universities in the world.

## UNDERGRADUATE DEGREES AND CERTIFICATES

### Associate in Arts Online

The Associate in Arts Online is a liberal arts degree representing completion of approximately half of a UD bachelor of arts degree. Your previous college credit may be transferable into the program, and you may begin taking courses prior to formal admission to the degree. Consult with an ACCESS Center advisor to choose courses and customize your program. A UD degree is closer than you think!

**CONTACT:** [access-advise@udel.edu](mailto:access-advise@udel.edu)  
302-831-8843  
[pcs.udel.edu/associate-arts-online/](http://pcs.udel.edu/associate-arts-online/)

### Bachelor of Science in Nursing (RN-to-BSN)

The University of Delaware School of Nursing's RN-to-BSN program provides licensed registered nurses the opportunity to earn their BSN degree through online study. Building on basic nursing knowledge to enhance nursing practice in an increasingly complex society, the curriculum further develops students' scholarly writing skills,

leadership skills, research knowledge and use of evidence-based practice to provide a growth experience for the actively practicing registered nurse. Providing year-round learning opportunities for degree completion, courses are offered in fall, winter, spring and summer.

**CONTACT:** [access-advise@udel.edu](mailto:access-advise@udel.edu)  
302-831-8843  
[sites.udel.edu/nursing/nursing-education/](http://sites.udel.edu/nursing/nursing-education/)

### Certificate of Business Essentials

Through a combination of online and campus courses, this certificate offers students and working professionals in non-business fields the opportunity to earn a business-related certificate. The program is comprised of four targeted courses from UD's Lerner College of Business and Economics:

- Economic Issues and Policies
- Survey of Accounting
- Introduction to Business
- Fundamentals of Finance

**CONTACT:** [access-advise@udel.edu](mailto:access-advise@udel.edu)  
302-831-8843 • [pcs.udel.edu/essentials](http://pcs.udel.edu/essentials)

## GRADUATE DEGREES AND CERTIFICATES

### BUSINESS

### Master of Science in Applied Statistics

This program is designed for working professionals from a range of occupational and educational backgrounds. Students receive training in applied and theoretical statistics and graduate ready to excel in data careers.

**CONTACT:** 844-247-6251  
[onlinestats@udel.edu](mailto:onlinestats@udel.edu)  
[onlinestats.canr.udel.edu](http://onlinestats.canr.udel.edu)

### Master of Business Administration (MBA)

The online MBA program allows participants to engage in experiential learning, maximizing real-world knowledge to equip them with the skills and knowledge needed to excel in today's competitive global market. Graduates can add a powerful, AACSB accredited MBA to their resume in as few as 16 months, with concentrations in business analytics, finance, healthcare management, international business and strategic leadership, and a major in health-care management or strategic leadership. Five start dates a year.

**CONTACT:** [mbaprogram@udel.edu](mailto:mbaprogram@udel.edu)  
844-237-1338 • [mbaonline.udel.edu](http://mbaonline.udel.edu)

## Questions?

Please visit [online.udel.edu](http://online.udel.edu),  
write to [continuing-ed@udel.edu](mailto:continuing-ed@udel.edu)  
or call 302-831-7600.

## Graduate Certificate in Socially Responsible and Sustainable Apparel Business

Addresses labor and environmental problems in global supply chains for the apparel, textile and footwear industries. Coursework is grounded on principles of the United Nations (UN) Global Compact and provides the foundation needed to manage international production, design, product development, buying, promotion and sourcing in ways that are socially responsible and sustainable.

**CONTACT: 302-831-4475**  
[dickson@udel.edu](mailto:dickson@udel.edu)  
[fashion.udel.edu/graduate/graduate-certificate](http://fashion.udel.edu/graduate/graduate-certificate)

## Master of Science in International Business

This degree prepares professionals for leadership in international business, with emphasis on strategic, financial and managerial roles. Participants customize their program with coursework drawn from accounting, economics, finance, marketing, entrepreneurship and analytics.

**CONTACT: 844-237-1338**  
[business.online.udel.edu/msib](http://business.online.udel.edu/msib)

## Master of Arts in Strategic Communication (M.A.)

By evaluating past media campaigns and their results, conducting competitive research, and designing new campaigns based on insights from student analysis, this degree focuses on the tactics necessary to craft persuasive messaging. Graduates are prepared to advance in their current career or take on new roles in strategic communication, public relations, digital media or social media management. Students can pursue concentrations in either public relations or digital and social media as well as customize electives to design a program that best matches their career goals.

**CONTACT: 844-237-1338**  
[stratcomm.online.udel.edu](http://stratcomm.online.udel.edu)

## EDUCATION

### Master of Arts in Economics and Entrepreneurship for Educators (M.A.E.E.E.)

This combined hybrid online plus on-campus program focuses on economic, entrepreneurial and financial literacy and on preparing educators for teaching these subjects in elementary and secondary schools. The M.A.E.E.E. equips educators with a solid foundation in economic theory and a set of strategies for teaching economics, entrepreneurship and personal finance to inspire students to become effective participants in the economy, successful entrepreneurs, responsible consumers and wise investors.

**CONTACT: asarta@udel.edu**  
**302-831-2559**  
[lerner.udel.edu/programs/masters-programs/economics-and-entrepreneurship-for-educators](http://lerner.udel.edu/programs/masters-programs/economics-and-entrepreneurship-for-educators)

### Master of Education in Educational Technology (M.Ed.)

Based on the assumption that new media and the Internet can have a positive effect on teaching and learning, this degree provides both a theoretical and a practical grounding in educational technology methods and techniques, emphasizing theories of teaching and learning that support these methods. To demonstrate mastery of the program's goals, all candidates complete the same series of seven program assessments. Depending on the student's career path, these assessments are evaluated by rubrics developed according to standards of the International Society for Technology in Education (ISTE) or the Association for Educational Communications and Technology (AECT).

**CONTACT: 302-831-2396**  
[education.udel.edu/masters/edtech](http://education.udel.edu/masters/edtech)

### Master of Education in Exceptional Children and Youth (M.Ed.)

With perennial shortages in the field of special education, this program is aimed at developing teachers and education professionals committed to serving children and youth with disabilities. Concentrations are available in K-12 Special Education and Autism/Severe Disabilities. This program is appropriate for teachers with a certificate in either general or special education who wish to develop advanced knowledge and skills as well as other education professionals wishing to pursue an advanced degree in the disability field. A five-course program for Delaware teachers meets requirements for Delaware certification as a Teacher of Exceptional Children Grades K-12 or Teacher of Students with Autism or Severe Intellectual Disabilities.

**CONTACT: kritchey@udel.edu**  
[education.udel.edu/masters/exc-online](http://education.udel.edu/masters/exc-online)

### Master of Education in Literacy (M.Ed.)

This program is for K-12 teachers wishing to prepare for certification as reading or literacy specialists. Current teachers and educators will study the theoretical and evidenced foundations of reading and writing development, learn to plan culturally and linguistically relevant literacy instruction for all students, and support students and teachers in the use of digital literacy tools. Career opportunities include reading and literacy specialist positions in school districts as well as English language arts (ELA) positions in K-12 schools.

**CONTACT: karchmer@udel.edu**  
[education.udel.edu/masters/literacy/](http://education.udel.edu/masters/literacy/)

### Master of Education in Teacher Leadership (M.Ed.)

Today's ever-changing educational landscape requires teachers who are equipped to be leaders in the classroom, able to foster collaboration within the school and community, and to understand and implement policies that impact students in K-12 classrooms, private schools,

preschools, higher education and home schooling. This program provides teachers with the insights, knowledge and skills needed to better manage their classrooms, improve student outcomes and enhance their own professional growth as well as guide their peers toward more effective teaching strategies.

**CONTACT:**  
[education.udel.edu/teacherleadership/](http://education.udel.edu/teacherleadership/)

## ENGINEERING

### Online Graduate Certificate in Applied Bioinformatics

Bioinformatics is an emerging field where biological and computational disciplines converge, leading to job opportunities in rapidly growing fields like biomedicine, pharmaceuticals, healthcare, agriculture and data analytics. This four-course program is aimed at working professionals in the life sciences or data sciences who wish to gain knowledge and practical experience in bioinformatics. Focused on real-world applications, students will learn in an interactive, experiential and multidisciplinary team environment from nationally and internationally renowned researchers and practitioners in the field. No previous programming or database experience is required, but a familiarity with molecular biology concepts is recommended.

**CONTACT:** [bioinformatics@udel.edu](mailto:bioinformatics@udel.edu)  
[bioinformatics.udel.edu/ABNF-CERT](http://bioinformatics.udel.edu/ABNF-CERT)

### Graduate Certificate in Composite Manufacturing and Engineering

Design rules for composite materials are fundamentally different than for traditional materials, with the engineer tailoring the material structure at the micro- and nano-scales to achieve desired mechanical and physical properties. This program is intended to provide the practicing engineer a strong foundation in the processing-structure-property relations in advanced fiber composites. UD's Center for Composite Materials and Department of Mechanical Engineering

are internationally recognized as leaders in composites research and education.

**CONTACT:** 302-831-8302  
[enggoutreach@udel.edu](mailto:enggoutreach@udel.edu)  
[me.udel.edu/academics/graduate/graduate-certificate-in-composites-manufacturing-engineering/](http://me.udel.edu/academics/graduate/graduate-certificate-in-composites-manufacturing-engineering/)

### Graduate Certificate in Composite Materials

Offered by UD's Department of Mechanical Engineering and Center for Composite Materials, the Graduate Certificate Program in Composite Materials is designed for engineering and science professionals who wish to expand their knowledge of the mechanics of composite materials.

**CONTACT:** 302-831-8302  
[enggoutreach@udel.edu](mailto:enggoutreach@udel.edu)  
[me.udel.edu/academics/graduate/graduate-certificate-in-composite-materials/](http://me.udel.edu/academics/graduate/graduate-certificate-in-composite-materials/)

### Graduate Certificate in Cybersecurity

As cyber-systems become more integrated into society, the impact of cyber-attack increases, necessitating the need for cybersecurity research and education. The educational goals of this online graduate certificate are to impart cybersecurity best practices to professionals working in computing and related areas; provide a first step in students' pursuit of a graduate degree in cybersecurity, enabling them to become cybersecurity professionals; or serve as a first step in students' pursuit of a Ph.D. focused on cybersecurity.

**CONTACT:** 302-831-2406  
[ece.udel.edu/graduate/cybersecurity-certificate.html](http://ece.udel.edu/graduate/cybersecurity-certificate.html)

### Graduate Certificate in Particle Technology

The certificate is designed for engineering professionals working in the process industries and/or for undergraduate or graduate engineers desiring to expand their knowledge of particle technology. The objective is to equip professionals with the knowledge and ability to meet the expectations of employers in the processing industry with respect to particle technology expertise.

**CONTACT:** 302-831-8302  
[enggoutreach@udel.edu](mailto:enggoutreach@udel.edu)  
[che.udel.edu/grad/mept/GradCertPT.html](http://che.udel.edu/grad/mept/GradCertPT.html)

### Graduate Certificate in Railroad Engineering

The railroad industry is growing and hiring qualified individuals into long-term, high-paying careers. This certificate can help participants become competitive candidates for these positions and with advancement in the field. The program prepares participants to meet railroad industry employers' expectations regarding knowledge of railroad and rail transit and is designed for engineering professionals working in the area of railroad engineering or for those desiring to expand their knowledge of railroad engineering and related engineering disciplines with the goal of advancement in the railroad industry.

**CONTACT:** 302-831-8302  
[enggoutreach@udel.edu](mailto:enggoutreach@udel.edu)  
[railroadengineering.engr.udel.edu/courses/](http://railroadengineering.engr.udel.edu/courses/)

### Master of Science in Cybersecurity

Protect your organization from malware and infiltration with an NSA- and DHS-designated National Center of Academic Excellence in Cyber Defense Education program. Learn to design, execute and evaluate secure systems and software. Gain advanced instruction in engineering secure software and systems from a faculty of experts in technology and security. This 10-course program combines research and theory with application to address today's cybersecurity issues as an in-demand specialist.

**CONTACT:** 302-831-2406 • [ece-info@udel.edu](mailto:ece-info@udel.edu)  
[ece.udel.edu/online/graduate/masters-in-cybersecurity-online.html](http://ece.udel.edu/online/graduate/masters-in-cybersecurity-online.html)

### Master of Science in Electrical and Computer Engineering

Build your expertise in math, engineering and data science with a program focused on skill building across signal processing, data analytics, communication and cybersecurity to prepare you to lead solution



development in data and communications. In addition to the master skill set of electrical and computer engineering, the program strongly focuses on the critical insights you'll need to secure, protect and implement the systems you create. Developed by a faculty with diverse corporate and research backgrounds, this flexible program is for those with prior degrees in electrical, computer or mechanical engineering, or computer science or mathematics, and can be completed in as few as two years.

**CONTACT:** 302-831-2406 • [ece-info@udel.edu](mailto:ece-info@udel.edu)  
[ece.udel.edu/online/graduate/msece-online.html](http://ece.udel.edu/online/graduate/msece-online.html)

## Master of Science in Mechanical Engineering (MSME)

This online program is comprised of 30 credits covering not only the foundations of solid mechanics, fluid mechanics, heat transfer and dynamics but also allows for the choice of electives in biomechanics, clean energy and environment, composite materials and manufacturing, energy efficient mobility systems and smart cities, robotics and controls, and more. Program faculty are the same world-class, awarded faculty who teach in the full-time, campus-based program.

**CONTACT:** [enggoutreach@udel.edu](mailto:enggoutreach@udel.edu)  
[me.udel.edu/academics/graduate/msme-online/](http://me.udel.edu/academics/graduate/msme-online/)

## NURSING/HEALTHCARE

### Dietetic Internship

This post-baccalaureate certificate program provides graduates of a didactic program in dietetics (DPD) with the knowledge and skills necessary to become registered dietitians with the creative problem-solving skills necessary in the field of dietetics. Upon successful completion of the program, students receive a verification of completion certificate and are eligible to take the Registration Examination for Dietitians.

**CONTACT:** 302-831-4989  
[aleef@udel.edu](mailto:aleef@udel.edu) • [udel.edu/bhan/dietetic](http://udel.edu/bhan/dietetic)

## Doctor of Nursing Practice (DNP)

UD's Doctor of Nursing Practice program prepares graduates to perform at the highest level of advanced nursing practice. The foundation for practice expertise with a population health focus will enable the graduate to plan and lead evidence-based interventions, quality improvement strategies and health policy changes that address patient safety, promote patient-centered care and reduce health disparities among diverse groups. Three concentrations are available in a hybrid-online and on-campus format: adult-gerontology nurse practitioner, family nurse practitioner, and psychiatric mental health nurse practitioner.

**CONTACT:** [ud-gradnursing@udel.edu](mailto:ud-gradnursing@udel.edu)  
[sites.udel.edu/nursing/graduate/](http://sites.udel.edu/nursing/graduate/)

## Molecular Diagnostics Certificate

This post-baccalaureate certificate program has a hybrid-online plus on-campus format, providing medical laboratory scientists working in forensics, biotechnology or pharmaceuticals with the opportunity to update skills and knowledge to help meet the demands of modern molecular biology theory and application. The program also provides individuals seeking Molecular Biology, American Society for Clinical Pathology (MB-ASCP) certification with a solid preparation for national credentialing examinations. The three-course program is comprised of two 14-week online lectures and one weeklong campus-based laboratory practicum.

**CONTACT:** [mms-dept@udel.edu](mailto:mms-dept@udel.edu)  
[sites.udel.edu/mms/](http://sites.udel.edu/mms/)

## PUBLIC ADMINISTRATION

### Master of Public Administration (MPA)

This program is designed to help public service professionals develop their knowledge of current societal issues and strengthen their administrative acumen using a curriculum based on applied research and contemporary case studies. Founded on theory, research and application-based solutions and taught by

an interdisciplinary faculty, this flexible program challenges participants to apply best practices while mastering the strategies necessary to shape policy and lead effective management in government, nonprofit and private sectors.

**CONTACT:** 302-831-1687 • [sppa@udel.edu](mailto:sppa@udel.edu)  
[bidenschool.udel.edu/masters-programs/masters-programs/mpa-master-of-public-administration](http://bidenschool.udel.edu/masters-programs/masters-programs/mpa-master-of-public-administration)

## Socially Responsible and Sustainable Business—Online Short Courses

- Risks of Human Trafficking
- Human Rights of Workers in Supply Chains
- Textile and Apparel Product Safety
- Impact of Corporate Purchasing Practices on Workers in Supply Chains

Over 4,500 supply chain professionals from 39 countries have successfully completed one of UD's Socially Responsible and Sustainable Business short courses, and 125 companies have used a course to train their employees in industries including apparel, footwear, pharmaceutical, manufacturing, retail, biotech, food processing, jewelry, packaging, telecommunications and electronics.

**CONTACT:** 302-831-7600  
[continuing-ed@udel.edu](mailto:continuing-ed@udel.edu)  
[pcs.udel.edu/srsb](http://pcs.udel.edu/srsb)

## NURSING/HEALTHCARE

### Advanced Telehealth Coordinator

Provides the foundations of telehealth for participants interested in utilizing telehealth for the delivery of healthcare. See page 13.

### Clinical Trials Management

Key competencies necessary for understanding and conducting clinical trials and new product development. See page 13.

### RN Refresher

Online course for nurses seeking to reinstate their license; optional clinical hours. See page 18.

# DEVELOPING EMPLOYEES THROUGH CUSTOMIZED TRAINING PROGRAMS



Whether we are designing and delivering the content ourselves or collaborating with partners and other departments, the University of Delaware's Division of Professional and Continuing Studies (UD PCS) is committed to helping businesses in our community, region and beyond succeed. Realizing a one-size-fits-all approach is not practical or effective, and what worked for one company may not work for another,

UD's customized training programs truly are individually tailored to meet each organization's needs. Utilizing the advanced expertise and experience of University of Delaware faculty and external subject matter experts to provide exceptional learning opportunities for your team, we can develop customized training for all industries and groups of any size and present it on-site, on campus or online. **Instead of just taking our word for it, read how five businesses have recently benefited from our customized training. For more information, visit [pcs.udel.edu/customized](https://pcs.udel.edu/customized).**



**PARTICIPANTS:** 30 managers and supervisors

**LOCATION:** On-site at Chesapeake Utilities

**SCHEDULE:** Quarterly sessions over one year

**KEY TOPICS:** Motivating employees, coaching, analyzing performance problems, handling difficult situations, leading versus managing

Wanting to better develop its employees as the company grows, Chesapeake Utilities determined that the University of Delaware presented the proposal that best matched up with what it was trying to accomplish. Shane Breakie, Chesapeake Utilities assistant vice president, said his organization was especially impressed with the flexibility offered by UD to develop **customized training modules** for the managers and supervisors. Working closely with several Chesapeake senior managers, UD's corporate education consultant devised contextual lessons that addressed key challenges. Training commenced with each participant completing an introspective Emotional Quotient Inventory assessment that played a pivotal role in devising the subsequent topics.



**PARTICIPANTS:** 14 managers representing Grain's three locations

**LOCATION:** UD Newark campus

**SCHEDULE:** Six consecutive weekly sessions

**KEY TOPICS:** Bullying, emotional intelligence, managing peers

Grain's co-proprietors, Lee Mikles and Jim O'Donoghue, were not satisfied with the options they were being presented with in their quest to find educational programming for their managers. Everything they looked at prior to meeting with UD was "off the shelf" and only partly offered what they were looking for. In preparation for their **customized training program**, UD PCS' Manager of Customized Learning Vic Wang visited all three of Grain's establishments and shadowed the employees to gain a fundamental understanding of Grain's corporate culture. The training has led to an increased emphasis on "the Grain way," which Mikles said includes how they want to conduct business, how they want to be treated, and how they want to treat people.



VA



U.S. Department of Veterans Affairs  
Wilmington VA Medical Center

**PARTICIPANTS:** 375 managers, frontline associates and health care providers divided into 25-person cohorts

**LOCATION:** UD Newark campus

**SCHEDULE:** Five consecutive weekly sessions

**KEY TOPICS:** Managing expectations, service excellence, service recovery, healthcare theatre, conflict and stress management; listening, empathy and flexibility

The **VA Patient Experience Academy** is a multidisciplinary collaboration between UD's College of Arts and Sciences, College of Health Sciences, Alfred Lerner College of Business and Economics' Hospitality Business Management department, and UD PCS. With a mission "to make hospitals truly hospitable," the Patient Experience Academy focuses on experience and engagement addressed through a variety of learning methods, including short presentations, targeted readings, facilitated discussions and situational practice sessions. On a visit to the academy's state-of-the-art facilities in the Tower at Star, Secretary of Veterans Affairs Robert Wilkie and Delaware U.S. Sen. Tom Carper both praised the program.



DELAWARE HEALTH AND SOCIAL SERVICES

**PARTICIPANTS:** 50 long-term care professionals representing multiple DHSS teams

**LOCATION:** On-site at Delaware Hospital for the Chronically Ill

**SCHEDULE:** Two-day intensive workshop

**KEY TOPICS:** Comprehensive coverage of long-term care regulations

During the **Nursing Home Administration Regulations Course** recently conducted for the Division of Services for Aging and Adults with Physical Disabilities and other DHSS agencies, long-term care expert Ilene Warner-Marion focused on Delaware and federal regulations and case studies relevant for the audience of long-term care professionals in attendance.

Participants ranging from clinical professionals, elder advocates, investigators, and social services administrators and others were challenged to identify interventions that improve the delivery of care.



**PARTICIPANTS:** 23 managers

**LOCATION:** On-site at Nickle Electrical Companies

**SCHEDULE:** Quarterly sessions over one year

**KEY TOPICS:** Communication, mentoring, coaching, accountability, team building, leadership, conflict resolution

Looking to take Nickle's management team to a whole new level, Heather Shupe, human resources director, conducted a bunch of research but was not finding what her company wanted. Nickle needed something it could customize, make its own, replicate and do over again, and put more managers through. Shupe requested and received a customized **Emerging Leadership Training** program from UD that was highly interactive and addressed scenarios that Nickle's managers experience on the job. Following the conclusion of the program, Shupe said the development in Nickle's managers is evident, and the lessons and skills are continuing to be reinforced in performance evaluations and subsequent trainings.

"WE TALKED WITH A FEW DIFFERENT PROVIDERS, BUT UD WAS VERY OPEN TO TAILORING IT TO OUR NEEDS, WHICH WAS GREAT."

—LEE MIKLES, GRAIN CO-PROPRIETOR



UNIVERSITY OF DELAWARE  
**PROFESSIONAL &  
CONTINUING STUDIES**



# Osher Lifelong Learning Institute

**Are there topics you've always been curious about but haven't had the opportunity to explore?**

**Do you miss playing music, creating art or having a chance to dive deeper into current issues with other thoughtful adults?**

**Are you over 50 and want to keep growing?**

**It's your time to learn!**

The University of Delaware is proud of its history as one of the earliest and largest lifelong learning programs in the country, hosting Osher Lifelong Learning Institute (OLLI) programs in Bridgeville, Dover, Lewes, Ocean View and Wilmington. Structured as academic cooperatives, OLLI programs are open to adults 50+ to take and teach classes together, with course offerings determined by member interest as well as the passions and expertise of the dedicated volunteer member-instructors at each program's location. Five-, 10- and 14-week classes are created by members for members, with no grades, exams or educational prerequisites. Classes include art, history, languages, literature, music, science and much more.

**Register now for the fall semester!**

## WHAT MEMBERS SAY...

### CAMARADERIE AND LIFELONG LEARNING

"Lifelong learning has always been important to me, although none of my former teachers would be likely to describe me as a highly motivated student. They should see me now: I never thought I could love school this much." –Joe Bailey, Dover

"What I love about OLLI? The friendly people, many of whom have become dear friends; the interesting classes and fun events which lead to even more fun events; the camaraderie; and the wonderful, supportive staff." –Carol West, Ocean View

### CLASSES AND INSTRUCTORS THAT INSPIRE

"The combination of fine, highly qualified teachers and around 250 courses in many subject areas allows persons to design a class schedule that will inspire and entertain them. Wonderful facilities managed by a great UD staff have helped make the program successful for 38 years, and it continues to attract well over 2,000 members each semester. It's truly a national leader."

–Lee Kaser, Wilmington

"My favorite aspect of our UD lifelong learning program as a course leader is the lively interaction with class members. Our shared insights range from humorous to poignant... and we often laugh heartily together." –Gary Ramage, Lewes

"We have found a home here at Osher and are loving our classes. We are truly getting a top-notch education and are so impressed with the hard work and dedication of all the instructors here at OLLI!" –Ellen and Adam Goldstein, Wilmington

### DOVER

Wyoming Church  
216 Wyoming Mill Road  
Dover, DE 19904

302-645-4111 · LLL-dover@udel.edu

[olli.udel.edu/dover](http://olli.udel.edu/dover)

### BRIDGEVILLE · OCEAN VIEW · LEWES

Fred Thomas Building  
520 Dupont Ave.  
Lewes, DE 19958

302-645-4111 · LLL-lewes@udel.edu

[olli.udel.edu/lewes](http://olli.udel.edu/lewes)

### WILMINGTON

Arsht Hall  
2700 Pennsylvania Ave.  
Wilmington, DE 19806-1169

302-573-4417 · LLL-wilm@udel.edu

[olli.udel.edu/wilmington](http://olli.udel.edu/wilmington)



# PERSONAL ENRICHMENT and PAYING IT FORWARD

**Karen M. Ingram**

UD Osher Lifelong Learning Institute  
member, Wilmington

“My siblings and I were raised to pursue a college degree, be gainfully employed, invest in the future and enjoy the fruits of our labor. The first two goals I accomplished in my education and career. My involvement at OLLI and in the community grow out of the second two.

At OLLI, I have new interests and friends and am working on committees that make a difference. The instructors are knowledgeable, talented and caring, and their class content is meaningful and enables me to share the information with others.

I continue to be inspired by my own father's example of compassion and generosity. I believe in sharing my wealth of information and resources so that others will learn, serving as a mentor whenever possible, and paying it forward to the next generation.”

*Karen M. Ingram serves on OLLI Council, Diversity/Inclusion Team and more. In the community, she volunteers with several mentoring organizations, co-manages Hanover Presbyterian Church Clothing Closet, and is president of her neighborhood civic association. Karen is pictured with her first-place award-winning Community Greenest Block.*







UNIVERSITY OF DELAWARE  
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UD PROFESSIONAL DEVELOPMENT PROGRAMS

# *INFORMATION SESSION*

**Thursday, July 18, 2019  
6–8 p.m.**

University of Delaware Audion, The Tower at STAR  
100 Discovery Blvd., Newark, DE

Attendance and refreshments are free.  
Call 302-831-7600 (reservations requested).

Register and pay in full for a fall 2019 certificate at or  
before the information session and receive a 10% discount.



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[pcs.udel.edu/fall2019](https://pcs.udel.edu/fall2019)