PROFESSIONAL DEVELOPMENT SOLUTIONS

World-Class Training Provider

2018 COURSE CATALOG

CYBERSECURITY | ENGINEERING | IT | LEADERSHIP | MANAGEMENT

CLASSROOM

ONLINE

CUSTOMIZED

PCS.uah.edu/PDSolutions
256.824.4430 | PDSolutions@uah.edu

THE UNIVERSITY OF ALABAMA IN HUNTSVILLE
OUR PROGRAMS – YOUR SCHEDULE

Choose programs at times, locations, and formats to meet your needs and your organization’s needs.

We understand that your time is as valuable as your professional development goals. That’s why we offer certificate programs, exam preps, and specialized short courses in a variety of formats, subject areas, and convenient times. Our programs complement a degree and validate your professional capabilities. Choose the best option to fit your needs and begin your career advancement!

CLASSROOM

Attending courses on the UAH campus is a great way for the hands-on learner to connect. You will interact with peers and actively participate in discussions led by industry professionals and expert instructors.

ONLINE

Enjoy the flexibility of completing an instructor-led certificate program or short course online and on your schedule. Register at any time and take up to 30 days to complete the course.*

*60 days to complete courses over 30 hours and IT courses.

CUSTOMIZED

We can provide your team with programs tailored specifically to meet your organizational goals. Select the topics, location, and times that are convenient for you or your team, and we will bring the transformative learning experience to you.

FACILITATION

Facilitation services that promote rich dialog and recognize learning moments are offered to you or your team. We ask provocative questions and conduct experiential learning through team exercises, videos, role-playing, and case studies.
GENERAL INFO

WAYS TO REGISTER
Complete the registration form and submit via one of the following:
Hours: M – F, 8:15 am – 5 pm (CST)

ONLINE:
PCS.uah.edu

PHONE:
256.824.6010 or 800.448.4031

MAIL OR IN PERSON:
UAH CPCs, Wilson Hall, Room 103,
Huntsville, AL 35899-0650

FAX:
256.824.6760

WE ACCEPT:
MasterCard, Visa, American Express,
Discover, Company POs, and SF-182s.

Classroom courses are held on the UAH campus unless otherwise noted.
Refer to your confirmation letter for the location.
View the campus map on the inside back cover.
A parking permit will be provided.

UAH WILL BE CLOSED:
Dec 22, 2017 – Jan 1, 2018 | Jan 15, 2018
Mar 26 – 30, 2018 | May 28, 2018 | Jul 4, 2018
CYBERSECURITY

Security breaches, Homeland Security, acts of data sabotage … today’s organizations require cybersecurity professionals at all levels to ensure public safety and respond to security incidents. Hospitals, financial institutions, corporations, and the military need security professionals with comprehensive knowledge and innovative skills. Begin a career in cybersecurity or enhance your current cybersecurity skills through our certification exam prep courses that equip you to successfully pass the exam.

ENTRY

A+ Exam Prep
Meets DoD Directive 8140

CompTIA’s A+ certification fulfills a basic requirement for most technical support and IT administrative positions. On completion of this course, you will understand the fundamental concepts of installation, configuration and maintenance of PCs, devices and related hardware/software. Learn to assemble components based on customer requirements. Apply troubleshooting skills to properly and safely diagnose, resolve, and document common issues, while providing appropriate customer service. Validate your knowledge to perform effectively as a technician. Prepare for CompTIA’s A+ Certification Exam 220-901/902 which applies to DoD 8140 Information Assurance Technical (IAT) Level I. Go to comptia.org for complete certification information.

Prerequisite:
Basic understanding of information technology and/or 6 – 12 months hands-on experience in the IT field recommended.

D. Spooner, 28 hrs, $955/$1195*
Campus: Jul 9 – Aug 1, 2018  |  M, W  |  5:00 – 8:30 pm  |  C2118042
Online: D2118012

Linux+ Exam Prep

The CompTIA Linux+ certification, powered by LPI (Linux Professional Institute), provides access to a range of careers. It offers a framework for acquiring working knowledge of Linux for IT professionals working as junior-level system administrators, as well as those working in Web and software development. This course provides clear, concise information on all aspects of Linux administration with a focus on the latest version of the exam. Gain insight from real-world scenarios, with detailed guidance and authoritative coverage of key topics, including GNU and Unix commands, system operation, system administration, system services, and security from a practical perspective that easily translates into on-the-job know-how. While preparing for CompTIA’s Linux+ Certification Exam LX0-103/104, you can also automatically receive the LPI LPIC-1 and the SUSE (Software Und System Entwicklung) Certified Linux Administrator (CLA) certifications. Earn three industry-recognized certifications for the cost, time, and effort of one! Visit comptia.org for details.

Prerequisite:
A+, Network+, and/or 6 – 12 months of Linux administration experience recommended.

J. Hough, 28 hrs, $1295/$1495*
Campus: May 1 – 24, 2018  |  T, Th  |  5:30 – 9:00 pm  |  C2118070

*With exam voucher

I really enjoyed the methods that the instructor used to teach the class. He made it fun and easy to concentrate on the material. The course helped me to think and analyze situations in order to pass the exam.

ISSA Member Discount

Receive a 10% ISSA member discount on cybersecurity exam preps. Register Today!

Select Courses Meet DoD Directive 8140

Select courses assist in the credentialing/continuing education requirements of DoD employees with privileged access to DoD information systems. Courses Include: A+, Network+, Security+, CISSP®, CEH™, CAP®, CASP™ Exam Preps

PCS.UAH.EDU/PDSOLUTIONS  |  256.824.4430
INTERMEDIATE

Network+ Exam Prep
Meets DoD Directive 8140

CompTIA’s Network+ certification is recognized by the U.S. Department of Defense, and many companies require or recommend CompTIA Network+ certification for their networking technicians. Benefit from hands-on exercises and exam question practice in a lab environment. Covered exam topic areas include network technologies, installation and configuration, media and topologies, management, and security. Possible career opportunities for those with Network+ certification include network administrator, network technician, network installer, help desk technician, and IT cable installer. The certification applies to DoD 8140 Information Assurance Technical (IAT) Level I. Prerequisite: 6 – 12 months of technical networking experience recommended.

J. Cuneo/D. Spooner, 28 hrs, $1295/$1495*
Campus: Feb 19 – Mar 14, 2018 | M, W | 5:00 – 8:30 pm | C2118026
Campus: Aug 20 – 23, 2018 | M – Th | 8:30 am – 4:30 pm | C2119009

*With exam voucher

Security+ Exam Prep
Meets DoD Directive 8140

CompTIA’s Security+ certification is the premier vendor-neutral security certification and is designed for professionals who have two years’ experience with an emphasis on security. Build on your current skill set and prepare for the CompTIA Security+ certification exam. Familiarize yourself with concepts and tools, and anticipate, guard against, mitigate, and respond to security incidents. Hands-on lab gives each student in-depth knowledge and practical experience with the current essential security systems. The certification applies to DoD 8140 Information Assurance Technical (IAT) Level II and Information Assurance Management Level I. Visit CompTIA.org for complete information. Prerequisite: 2 Years of technical networking experience and/or Network+ recommended.

J. Hough/J. Hairston, 28 hrs, $1295/$1525*
Campus: Jun 4 – 27, 2018 | M, W | 5:30 – 9:00 pm | C2118068
Campus: Dec 10 – 13, 2018 | M – Th | 8:30 am – 4:30 pm | C2119025
Online: D2118011

*With exam voucher

Over 100 IT exams and over 35 certification/licensure exams are available including professional certification exams, college entrance exams, and credentialing exams.

We are a Pearson Vue provider with licensure and certification exams including CompTIA, CISCO, and EC-Council.

View a full listing of exams available at PCS.uah.edu/TaCS or call 256.824.6373

NOW OPEN
UAH TESTING AND CERTIFICATION SERVICES

Online On Demand Learning
Register for an On Demand course at ANY time. Participants have one month to complete the course, or two months for IT courses and courses over 30 hours.
Certified Ethical Hacker (CEH™) Exam Prep
Meets DoD Directive 8140

Dive into an interactive environment and learn how to scan, test, and secure systems from hackers. Hands-on lab gives each student in-depth knowledge and practical experience with the current essential security systems. Learn how perimeter defenses work and then scan and attack your own networks (no real network is harmed). Understand how intruders escalate privileges and what steps can be taken to secure a system. Study Intrusion Detection, Policy Creation, Social Engineering, DDoS Attacks, Buffer Overflows, Virus Creation and Cloud Computing. Go to eccouncil.org for complete certification information. **Prerequisite:** Technical networking experience with an emphasis on security recommended.

J. Hairston, 35 hrs, $2195/$2595*
Campus: Apr 16 – May 16, 2018 | M, W | 5:00 – 8:30 pm | C2118041
Campus: Dec 10 – 14, 2018 | M – F | 8:30 am – 4:30 pm | C2119013

*With exam voucher.

Certified Network Defender (CND) Exam Prep

Are you a network administrator, network security administrator, network security engineer, involved in network operations, or concerned about the integrity of your network infrastructure? Then this course is for you! Enhance your network defense ability and learn about attackers by taking this intensive, hands-on, lab-based course. This course offers network security and cyber defense strategies to protect, detect, and respond to cyber attacks. Interactive labs provide technical skills required to design a secure network with future threats in mind. The CND certification is the next step towards protecting your network. Prepare for the EC-Council CND 312-38 exam and gain 35 hours of class time with an optional 4 hours to complete the CND 312-38 exam at our location and at your convenience after completion of the course. Go to eccouncil.org for complete certification information. **Prerequisite:** Technical networking experience with an emphasis on security recommended.

J. Hairston, 35 hrs, $2195/$2495*
Campus: Sep 11 – Oct 11, 2018 | T, Th | 5:00 – 8:30 pm | C2119010

*With exam voucher.

CompTIA® Advanced Security Practitioner (CASP) Exam Bootcamp
Meets DoD Directive 8140

The CompTIA Advanced Security Practitioner (CASP) exam is for those who want to take the next step in their career. Demonstrate that you can provide the best cybersecurity solutions and protection for organizations worldwide. Through hands-on activities and lecture, develop the skills you require to confidently perform your duties as an advanced security professional. The CASP is designed for security professionals who want to obtain the technical knowledge and skills needed to implement secure solutions across complex enterprise environments. Go to comptia.org for additional certification information. **Prerequisite:** 10 years of IT experience and/or 5 years of hands-on technical security experience recommended.

What You Will Learn:
• Managing risk in the enterprise
• Integrating computing, communications, and business disciplines
• Integrating advanced authentication and authorization techniques
• Implementing security controls for hosts, storage, and applications
• Integrating hosts, storage, networks, and applications

E. Jackson, 35 hrs, $2195/$2525*
Campus: May 14 – 18, 2018 | M – F | 8:30 am – 4:30 pm | B2118001

*With exam voucher.
Certified Authorization Professional (CAP®) Exam Prep
Meets DoD Directive 8140

Organizations require the CAP® Certification to monitor and protect their network infrastructure and information systems. Knowledgeable people are the key to a secure organization. Cyberspace is the new battlefield where commercial, federal, state, and local government agencies, including the DoD, have become virtual targets. Threats include critical infrastructures such as the energy, transportation, health, emergency services, telecommunications, financial systems, shipping, food, water, and chemical sectors. The Federal Government recognizes the CAP® credential in DoD 8140 at IAM Level I and II. It applies to those responsible for assessing risk and establishing security requirements and documentation using the RMF model.

Prerequisite: 5 years of IT security, risk management, systems, and/or technical networking experience recommended.

CAP® Benefits:
- Demonstrates commitment and knowledge
- Offers a career differentiator and credibility
- Provides you with increased earning potential (world-wide average increase of 25%)
- Fulfills requirements for information security certification mandates


R. Spee, 28 hrs, $1295**
Campus: Apr 10 – May 3, 2018 | T, Th | 5:30 – 9:00 pm | C2118032
Campus: Sep 11 – Oct 14, 2018 | T – F | 8:30 am – 4:30 pm | C2119003

**Exam voucher not included

Certified Information Systems Security Professional (CISSP®) Exam Bootcamp
Meets DoD Directive 8140

Understand information security best practices and prepare for the CISSP® Exam. Organizations gain a leading edge by demanding qualified information security staff. They demonstrate their dedication by providing the highest standard of security for their customers, employees, stakeholders, and organizational information assets. Define the architecture, design, management, and/or controls that assure the security of business environments. Broaden your expertise in critical topic areas such as application, information, and operations security. Gain in-depth security knowledge in risk management, cloud computing, mobile security, and application development security. The certification applies to DoD 8140 Information Assurance Technical (IAT) Level III, Information Assurance Management Levels II and III, and System Architect and Engineer Levels I and II. Go to isc2.org for complete certification information.

Prerequisite: 10 years of IT experience and/or 5 years of hands-on technical security experience recommended.

K. Williams/R. Beavers, 35 hrs, $2195**
Campus: Apr 2 – May 2, 2018 | M, W | 5:30 – 9:00 pm | C2118040
Campus: Sep 17 – Oct 17, 2018 | M, W | 5:00 – 8:30 pm | C2119011

**Exam voucher not included

Proud Partners With CompTIA® and EC-Council

As a CompTIA academy partner, we offer participants the option to pay a single fee and receive course registration including a discounted exam voucher from PearsonVue. Exam vouchers are distributed prior to the last class. Simply register for the “with exam voucher” session. The voucher is only valid in the United States for one year. Courses included are A+, Security+, Network+, Linux+, and CASP™.

As an EC-Council Accredited Training Center, we offer certification training recognized worldwide by various Government agencies including the U.S. DoD, NSA, and the CNSS.
INFORMATION TECHNOLOGY

MICROSOFT EXCEL CERTIFICATE

Move from novice to confident Excel specialist.

**SAVE $45 by taking the 3-course certificate or take just one course:**

- Excel Essentials
- Excel Intermediate
- Excel Advanced

Excel Essentials

Grasp basic features of Excel. Learn spreadsheet terminology, navigate worksheets/books, and the Help system. **Prerequisite:** Experience with PCs and Windows.

A. Spain/J. Barnes, 7 hrs, $265

- **Campus:** Feb 16, 2018 | F | 8:30 am – 4:30 pm | C2118048
- **Campus:** Jun 5 – 7, 2018 | T, Th | 5:00 – 8:30 pm | C2118056
- **Campus:** Oct 9, 2018 | T | 8:30 am – 4:30 pm | C2119015

Excel Intermediate

Practice more advanced formatting options, charting techniques, outlining/subtotals, and pivot tables. **Prerequisite:** MS Excel Essentials or equivalent experience.

A. Spain/J. Barnes, 7 hrs, $265

- **Campus:** Feb 23, 2018 | F | 8:30 am – 4:30 pm | C2118049
- **Campus:** Jun 12 – 14, 2018 | T, Th | 5:00 – 8:30 pm | C2118058
- **Campus:** Oct 16, 2018 | T | 8:30 am – 4:30 pm | C2119018

Excel Advanced

Learn advanced formulas and lookup functions, data validation, import/export, and external database queries. **Prerequisite:** MS Excel Essentials and Intermediate or equivalent experience.

A. Spain/J. Barnes, 7 hrs, $265

- **Campus:** Mar 2, 2018 | F | 8:30 am – 4:30 pm | C2118051
- **Campus:** Jun 19 – 21, 2018 | T, Th | 5:00 – 8:30 pm | C2118059
- **Campus:** Oct 23, 2018 | T | 8:30 am – 4:30 pm | C2119019

MICROSOFT WORD CERTIFICATE

Gain the skills necessary to navigate Word at the feature and functionality level.

**SAVE $45 by taking the 3-course certificate or take just one course:**

- Word Essentials
- Word Intermediate
- Word Advanced

Word Essentials

Cover the basic functions of Word. Learn to enter and edit text, save and browse documents, format documents, and edit table structure. **Prerequisite:** Experience with PCs and Windows.

S. Steinhauer, 7 hrs, $265

- **Campus:** Mar 2, 2018 | F | 8:30 am – 4:30 pm | C2118050
- **Campus:** Jul 10, 2018 | T | 8:30 am – 4:30 pm | C2118061
- **Campus:** Nov 14, 2018 | W | 8:30 am – 4:30 pm | C2119022

Word Intermediate

Go beyond the basics of document creation. Create styles, use columns and diagrams, create outlines, utilize password protect, and track changes. **Prerequisite:** MS Word Essentials or equivalent experience.

S. Steinhauer, 7 hrs, $265

- **Campus:** Mar 9, 2018 | F | 8:30 am – 4:30 pm | C2118052
- **Campus:** Jul 17, 2018 | T | 8:30 am – 4:30 pm | C2118063
- **Campus:** Nov 28, 2018 | W | 8:30 am – 4:30 pm | C2119023

Word Advanced

Learn advanced features like creating a table of contents, footnotes, cross references, indexes, backgrounds, and document revisions. **Prerequisite:** MS Word Essentials and Intermediate or equivalent experience.

S. Steinhauer, 7 hrs, $265

- **Campus:** Mar 23, 2018 | F | 8:30 am – 4:30 pm | C2118054
- **Campus:** Jul 24, 2018 | T | 8:30 am – 4:30 pm | C2118064
- **Campus:** Dec 5, 2018 | W | 8:30 am – 4:30 pm | C2119024

INFORMATION TECHNOLOGY

MICROSOFT EXCEL CERTIFICATE

Move from novice to confident Excel specialist.

**SAVE $45 by taking the 3-course certificate or take just one course:**

- Excel Essentials
- Excel Intermediate
- Excel Advanced

Excel Essentials

Grasp basic features of Excel. Learn spreadsheet terminology, navigate worksheets/books, and the Help system. **Prerequisite:** Experience with PCs and Windows.

A. Spain/J. Barnes, 7 hrs, $265

- **Campus:** Feb 16, 2018 | F | 8:30 am – 4:30 pm | C2118048
- **Campus:** Jun 5 – 7, 2018 | T, Th | 5:00 – 8:30 pm | C2118056
- **Campus:** Oct 9, 2018 | T | 8:30 am – 4:30 pm | C2119015

Excel Intermediate

Practice more advanced formatting options, charting techniques, outlining/subtotals, and pivot tables. **Prerequisite:** MS Excel Essentials or equivalent experience.

A. Spain/J. Barnes, 7 hrs, $265

- **Campus:** Feb 23, 2018 | F | 8:30 am – 4:30 pm | C2118049
- **Campus:** Jun 12 – 14, 2018 | T, Th | 5:00 – 8:30 pm | C2118058
- **Campus:** Oct 16, 2018 | T | 8:30 am – 4:30 pm | C2119018

Excel Advanced

Learn advanced formulas and lookup functions, data validation, import/export, and external database queries. **Prerequisite:** MS Excel Essentials and Intermediate or equivalent experience.

A. Spain/J. Barnes, 7 hrs, $265

- **Campus:** Mar 2, 2018 | F | 8:30 am – 4:30 pm | C2118051
- **Campus:** Jun 19 – 21, 2018 | T, Th | 5:00 – 8:30 pm | C2118059
- **Campus:** Oct 23, 2018 | T | 8:30 am – 4:30 pm | C2119019

MICROSOFT WORD CERTIFICATE

Gain the skills necessary to navigate Word at the feature and functionality level.

**SAVE $45 by taking the 3-course certificate or take just one course:**

- Word Essentials
- Word Intermediate
- Word Advanced

Word Essentials

Cover the basic functions of Word. Learn to enter and edit text, save and browse documents, format documents, and edit table structure. **Prerequisite:** Experience with PCs and Windows.

S. Steinhauer, 7 hrs, $265

- **Campus:** Mar 2, 2018 | F | 8:30 am – 4:30 pm | C2118050
- **Campus:** Jul 10, 2018 | T | 8:30 am – 4:30 pm | C2118061
- **Campus:** Nov 14, 2018 | W | 8:30 am – 4:30 pm | C2119022

Word Intermediate

Go beyond the basics of document creation. Create styles, use columns and diagrams, create outlines, utilize password protect, and track changes. **Prerequisite:** MS Word Essentials or equivalent experience.

S. Steinhauer, 7 hrs, $265

- **Campus:** Mar 9, 2018 | F | 8:30 am – 4:30 pm | C2118052
- **Campus:** Jul 17, 2018 | T | 8:30 am – 4:30 pm | C2118063
- **Campus:** Nov 28, 2018 | W | 8:30 am – 4:30 pm | C2119023

Word Advanced

Learn advanced features like creating a table of contents, footnotes, cross references, indexes, backgrounds, and document revisions. **Prerequisite:** MS Word Essentials and Intermediate or equivalent experience.

S. Steinhauer, 7 hrs, $265

- **Campus:** Mar 23, 2018 | F | 8:30 am – 4:30 pm | C2118054
- **Campus:** Jul 24, 2018 | T | 8:30 am – 4:30 pm | C2118064
- **Campus:** Dec 5, 2018 | W | 8:30 am – 4:30 pm | C2119024
**MICROSOFT PROJECT CERTIFICATE**

Use Project’s flexible features to keep your projects organized and on time.

**SAVE $50 by taking the 2-course certificate or take just one course:**
- Using Project
- Project Power User

### Using Project

Learn to effectively manage your projects by building a solid foundation in Project. Set up MS Project to facilitate efficiency and ease of use. Utilize entered data to create a valid and dynamic model of the project. This course is tailored for project managers and planners. **Prerequisite:** Experience with PCs and Windows.

- **P. Tatum, 12 hrs, $395**
  - **Campus:** Jan 29 – 30, 2018 | M, T | 8:30 am – 3:30 pm | C2118043
  - **Campus:** Jul 18 – 19, 2018 | W, Th | 8:30 am – 3:30 pm | C2118062
  - **Campus:** Oct 10 – 11, 2018 | W, Th | 8:30 am – 3:30 pm | C2119017

### Project Power User

Learn how to maximize your ability to manage tasks and projects. Practice handling delays and conflicts, consolidating project files, and sharing resources. Execute, monitor, and control tasks so that your project is completed on time, within budget, and according to scope. **Prerequisite:** Using MS Project or six months’ experience using MS Project.

- **P. Tatum, 12 hrs, $395**
  - **Campus:** Feb 12 – 13, 2018 | M, T | 8:30 am – 3:30 pm | C2118047
  - **Campus:** Jul 30 – 31, 2018 | M, T | 8:30 am – 3:30 pm | C2118065
  - **Campus:** Oct 17, 2018 | W | 8:30 am – 4:30 pm | C2119016

**Access Essentials**

Learn Access basics of planning, creating, and manipulating databases using tables. Master data entry rules and properties using them to your advantage. **Prerequisite:** Experience with PCs and Windows.

- **B. McCall, 7 hrs, $265**
  - **Campus:** Feb 6 – 8, 2018 | T, Th | 5:00 – 8:30 pm | C2118045
  - **Campus:** Jun 26 – 28, 2018 | T, Th | 5:00 – 8:30 pm | C2118060
  - **Campus:** Nov 6 – 8, 2018 | T, Th | 5:00 – 8:30 pm | C2119014

**PowerPoint Essentials**

Create basic PowerPoint presentations, and gain hands-on experience in formatting text, adding and modifying graphical objects, and adding charts and tables. **Prerequisite:** Experience with PCs and Windows.

- **S. Steinhauser, 7 hrs, $265**
  - **Campus:** Feb 9, 2018 | F | 8:30 am – 4:30 pm | C2118046
  - **Campus:** Jun 11 – 13, 2018 | M, W | 5:30 – 9:00 pm | C2118057
  - **Campus:** Oct 17, 2018 | W | 8:30 am – 4:30 pm | C2119016

**Using SharePoint**

Effective communication is vital to successful organizations. SharePoint® combines the latest technology, functionality of applications, and the web into a single environment to share information and collaborate with colleagues. Learn how to create, edit, and manage content on your team’s site. **Prerequisite:** Experience with PCs and Windows.

- **K. Counselman, 14 hrs, $425**
  - **Campus:** Apr 2 – 3, 2018 | M, T | 8:30 am – 4:30 pm | C2118055
  - **Campus:** Aug 28 – Sep 6, 2018 | T, Th | 5:00 – 8:30 pm | C2118066

---

**SAVE WHILE TRAINING YOUR EMPLOYEES**

**Corporate Training Bundles** provide you with a cost-effective and stress-free approach to organization-wide Microsoft training. Save up to 40% by purchasing a select number of “seats” that can be used by any employee towards the listed Microsoft courses.

**Start Saving! Visit PCS.uah.edu/CorporateBundle**

---

**Earn Your Accountancy CPEs at UAH!**

The Alabama State Board of Public Accountancy has granted CPE equivalency to many of our courses and certificate programs. Visit PCS.uah.edu/Accountancy for the full list of approved courses.
**Oracle Applications Developer Certificate**

Learn the power of Oracle 12c, the first database designed for the cloud. On completion, participants will be equipped to use Structured Query Language (SQL) in the Oracle environment program, using PL/SQL, Oracle’s answer to programming logic not available in SQL. Develop front-end web-enabled applications that retrieve information easily from the Oracle database. Update your skills to Oracle 12c, the latest version of the most widely used database engine, or develop new Oracle 12c knowledge in the database industry where job satisfaction and workforce demand are high.

**Save $150 by taking the 3-course certificate series or take just one course:**

- Fundamentals of SQL Using Oracle
- Oracle PL/SQL Programming
- Developing Oracle Application Express (APEX) Web Applications

**Fundamentals of SQL Using Oracle**

Gain an extensive introduction to data server technology. Cover concepts of both relational and object database theory, design, and terminology. Learn SQL statement categories and their purpose. Study basic SQL programming concepts and techniques to store, retrieve, and manipulate data. Participate in hands-on labs to create and maintain database objects to reinforce learning.

* T. Bell, 21 hrs, $895
  * Campus: Feb 20 – Mar 8, 2018 | T, Th | 5:30 – 9:00 pm | C2118027

**Oracle PL/SQL Programming**

Oracle PL/SQL language provides for programming logic features not contained within SQL. Cover the main features of PL/SQL: blocks, sections of blocks, error handling, variables, constants, data abstraction, subprograms, stored programs, triggers, and control statements. Create and manage user-defined packages and Oracle supplied packages.

* T. Bell, 21 hrs, $895
  * Campus: Apr 3 – 19, 2018 | T, Th | 5:30 – 9:00 pm | C2118030

**Developing Oracle Application Express (APEX) Web Applications**

Build database-centric, web-enabled applications using Oracle APEX, a true rapid application development (RAD) environment. Create and define attributes of live, front-end applications in APEX using the Oracle database engine as the database host. Generate additional application pages, update the application, fine tune the look and feel using themes and templates, and deploy the application.

* T. Bell, 21 hrs, $895
  * Campus: May 1 – 17, 2018 | T, Th | 5:30 – 9:00 pm | C2118033

**NEW Using VMware vSphere**

Gain a solid understanding of how to administer a vSphere infrastructure for an organization of any size. This hands-on course is designed to help systems engineers, network engineers, and network administrators gain a basic understanding including terminology and navigation. Explore installation, configuration, and management of VMware vSphere, which consist of VMware ESXi and VMware vCenter Server. Understand the vCenter server architecture and software-defined data center. Learn to create virtual machines, configure virtual networks, manage your infrastructure with VMware client, and more. **Prerequisite:** Experience with either Microsoft Windows, Linux operating systems, CompTIA Network+, A+, Security+, Linux+, or MCSA Windows Server is recommended.

* D. Spooner, 21 hrs, $695
  * Campus: Sep 18 – 20, 2018 | T – Th | 8:30 am – 4:30 pm | C2119012
NEW Using HTML5 and CSS3

Discover the new standards and features of HTML5 and CSS3 to create more visually engaging web pages with transitions, animations, and media elements. Using style sheets, explore mobile device media that can be viewed and supported in mobile browsers to include audio and video in web pages. This step-by-step course allows web developers to create dynamic pages.

C. Cantrell, 21 hrs, $495
Campus: Jun 5 – 21, 2018 | T, Th | 5:30 – 9:00 pm | C2118036
Online: D2118007

NEW JavaScript for Beginners

Learn to code, create, and build in JavaScript, the native language of the web used by developers all over the world. Understand how to create HTML5 sites and other interactive websites using this versatile language. As a web developer, it is essential that you have a solid understanding and become acquainted with one of the most highly-sought job market skills by employers today. JavaScript is the foundation of many commonly used libraries and frameworks.

C. Cantrell, 21 hrs, $495
Campus: Jul 10 – 26, 2018 | T, Th | 5:00 – 8:30 pm | C2118037
Online: D2118006

QuickBooks Foundation

Create a fully functioning business financial management system with ease! Track finances, manage payroll, process invoices, manage sales and expenses, and maximize the software’s features. Learn proven techniques and time-saving shortcuts. Prerequisite: Basic computer skills and knowledge of accounting terms.

M. Ezell, 7 hrs, $265
Campus: Mar 20, 2018 | T | 8:30 am – 4:30 pm | C2118053
Campus: Oct 30, 2018 | T | 8:30 am – 4:30 pm | C2119020

QuickBooks for Government Contractors

Utilize QuickBooks to be in compliance with DCAA accounting requirements. Structure the chart of accounts in cost pool format to properly segregate direct costs from indirect costs, as well as exclude the unallowable costs outlined in FAR 31. Set up payroll items, projects, and timecards to use in conjunction with the Customer module for job costing. Accumulate the data you will need for rate computations. In addition, complete DCAA’s pre-award audit form SF 1408 to show how the requirements can be met. Prerequisite: QuickBooks Foundation or basic knowledge of QuickBooks and Government contracting.

M. Ezell, 7 hrs, $265
Campus: Feb 6, 2018 | T | 8:30 am – 4:30 pm | C2118044
Campus: Aug 7, 2018 | T | 8:30 am – 4:30 pm | C2118067

MASTER PROGRAMMER CERTIFICATE

Enhance your programming skills by receiving a comprehensive Master Certificate in Programming Languages. Improve your personal marketability with training designed to build expertise and experience that leads to career advancement, recognition, and increased earning potential. This program is comprised of the most in-demand developer programs offered at UAH PD Solutions.

Whether you plan to use the knowledge gained for a current position, or simply for self-enrichment, the Master Programmer Certificate will drastically improve your overall programming ability and understanding of programming best practices, which will place you in a position to effectively achieve career success.

SAVE $500 by taking the complete 5-course series or take just one course.

Choose five of the following courses (See pages 10 – 11):
• C++ Programming
• Advanced C++ Programming
• Introduction to Java Programming
• Java Programming Advanced Features
• Introduction to Python Programming
• Advanced Python Programming
C++ Programming

Familiarity with C++ is an essential skill for engineers, scientists, and many technical managers. This introductory course offers a solid understanding of Object-Oriented programming, which is critical for programming on the latest compilers and systems. Design and use classes, loops and decisions, and objects effectively in C++ to create powerful applications. **Prerequisite:** Experience with a programming language such as C.

D. Brockhaus/C. Cantrell, 21 hrs, $895
Campus: Feb 5 – 21, 2018 | M, W | 5:30 – 9:00 pm | C2118004
Campus: Aug 13 – 29, 2018 | M, W | 5:00 – 8:30 pm | C2118038
Online: D2118001

Introduction to Java Programming

Through a series of hands-on, instructor-led lab exercises you will learn Java syntax, Object-Oriented (OO) programming, and study the structure of a well-written Java program. Cover skills common to all modern programming languages such as variables, flow-control, pointers, and arrays. During lab exercises, gain hands-on experience with Java development tools and tour the massive Java I/O library to learn what is available and how to use it. **Prerequisite:** Experience with PCs and programming concepts.

D. Layman/C. Cantrell, 28 hrs, $995
Campus: Apr 2 – 25, 2018 | M, W | 5:30 – 9:00 pm | C2118029
Campus: Oct 8 – 31, 2018 | M, W | 5:00 – 8:30 pm | C2119005
Online: D2118003

Advanced C++ Programming

Build on your knowledge of basic C++ syntax and explore the full capabilities of the standard C++ library. Learn to apply the streaming operators and the proper canonical interface of an object. Practice using object management with smartpointers and reference counting. Add the STL containers and algorithms to your own programs and explore the Gang of Four Object-Oriented (OO) design patterns. **Prerequisite:** C++ Programming or equivalent program development experience.

D. Brockhaus/C. Cantrell, 21 hrs, $895
Campus: Mar 5 – 21, 2018 | M, W | 5:30 – 9:00 pm | C2118028
Campus: Sep 10 – 26, 2018 | M, W | 5:00 – 8:30 pm | C2119001
Online: D2118002

Java Programming Advanced Features

Learn to leverage the power of Java for developing client/server applications. Gain proficiency with the Java JDBC API and create applications to demonstrate its use. Become familiar with core concepts for GUI applications, and learn to embed Java inside HTML with JSP. Learn client/server programming, using both raw network sockets and the more powerful RMI (Remote Method Invocation) system so that your Java application will be able to run on any operating system with Java support, including Windows, Linux, and Mac. **Prerequisite:** Introduction to Java Programming or equivalent experience.

D. Layman/C. Cantrell, 28 hrs, $995
Campus: May 7 – Jun 4, 2018 | M, W | 5:30 – 9:00 pm | C2118034*
Campus: Nov 12 – Dec 10, 2018 | M, W | 5:00 – 8:30 pm | C2119006**
Online: D2118004

*Class will not meet May 28, 2018
**Class will not meet November 21, 2018
Python Developer Certificate

Do you want to learn a programming language but do not know where to begin? Python Programming is a great place to start and is one of the most popular programming skills. Python is a widely used, high-level programming language. It is simple in its design, yet incredibly flexible and powerful. Python code is easy to read and enforces good programming style without being overly strict about syntax. It is a general-purpose language that can be applied to a large variety of projects such as data science, web development, system automation and administration, computer graphics, basic game development, and more. Python allows you to write programs having greater functionality with fewer lines of code. You will be amazed how much you can do with Python once you learn the basics. You will also gain an advantage with Python’s large online support community. Whether you are new to coding or can script in your sleep, Python is something you need to know. Improve your programming skill set and demonstrate your expertise to employers by earning the Python Certificate.

Take the 2-course certificate series or take just one course.

NEW Introduction to Python Programming

Developed as a dynamic, Object-Oriented programming language, Python has gained popularity for its simple, yet robust design that allows you to create dynamic applications that can easily be integrated into other programs or systems. Expand your skill set by gaining the knowledge needed to easily develop Python by incorporating the various domains explored. Learn Python’s basic syntax and present ways to emphasize readability by writing fewer lines of code. Whether you are a beginner or an experienced programmer trying to expand your skill set, Python can provide you with the tools needed to further your professional horizons. **Prerequisite:** Experience with PCs and familiarity with programming concepts.

D. Layman, 21 hrs, $895
Campus: Mar 19 – Apr 11, 2018  |  M, W  |  5:30 – 9:00 pm  |  C2118029*
Campus: Oct 1 – 3, 2018  |  M – W  |  8:30 am – 4:30 pm  |  C2119008
Online: D2118005

*Class will not meet March 26 or 28, 2018

NEW Advanced Python Programming

Put your Python skills into action with several real-world applications. Create an event-driven graphical desktop application with the built-in Python Graphical User Interfaces (GUI) library. Learn to write code to connect to SQL and NoSQL databases and dive deeper into Object-Oriented programming. Develop a client/server application using sockets and network programming and create a web application using Python technology on the server. While creating these applications, master tricky language features like generators and lambdas. **Prerequisite:** Introduction to Python Programming or equivalent experience.

C. Cantrell, 21 hrs, $895
Campus: Jul 31 – Aug 21, 2018  |  T, Th  |  5:30 – 8:30 pm  |  C2118069
Online: D2118010

Also Available:
Introduction to R Programming
See page 12.

Virtual Desktops
Utilize the Virtual Desktop tool to enhance your course experience. Feel confident that you can apply your newly attained knowledge!
NEW Certified Modeling and Simulation Professional (CMSP) Certification Exam Prep

Learn about the CMSP exam from the primary author of the CMSP exam. Successfully completing this course will increase the likelihood of passing the CMSP exam. Review details of the CMSP exam, including topical coverage, question format, and the mechanics of taking the exam. Several example questions from the exam will be presented and primary sources of questions in the exam will be identified. The course will then survey the content of the exam, covering key concepts, basic terminology, and important topics. The Certified Modeling and Simulation Professional (CMSP) certification is a professional certification for modeling and simulation. The CMSP certification identifies individuals who have attained a significant degree of knowledge and experience in modeling and simulation (M&S). To earn CMSP certification, a candidate must show evidence of education and experience in M&S, provide references supporting his or her certification, sign a statement of professional ethics, and demonstrate substantial expertise in M&S by passing a comprehensive certification examination. **Prerequisite:** Some education or experience in modeling and simulation.

M. Petty, 14 hrs, $795
**Campus:** Apr 3 – 4, 2018 | T, W | 8:30 am – 4:30 pm | C2318026

**Also Available:**
Risk Management and Schedule Risk Analysis
See page 21.

NEW Introduction to R Programming

R is an open-source programming language and environment with powerful and extensive features for data analysis, data visualization, and statistical computing. Although R first appeared in the 1990s, the use of R has recently grown substantially with the increased interest in data analytics, for which it is well suited. R also includes a full range of general purpose programming language features, including control structures, mathematical operations, and file input/output. This course will begin with the basic concepts and statements of R, and then proceed through file input/output, data analysis, and data visualization. Complete working R programs will be presented as examples. Hands-on instructor-led classroom exercises will reinforce participants' abilities and confidence with R. **Prerequisite:** Familiarity with programming concepts, and preferably, prior experience with at least one programming or scripting language.

What You Will Learn:
- Understand the principles of programming
- Learn to use the R console
- Create vectors and data frames in R
- Generate graphs and plots in R

M. Petty, 14 hrs, $795
**Campus:** Jul 25 – 26, 2018 | W, Th | 8:30 am – 4:30 pm | C2318027
**Fundamentals of Modeling and Simulation**

Gain an introduction to fundamental M&S terminology and concepts. Review model types and modeling methods to understand how simulations work. Survey typical and emerging M&S applications. Study in depth three important M&S paradigms and develop simple simulations.

*M. Petty, 14 hrs, $795*

**Online:** D2318003

---

**Developing Simulations**

Explore the challenges of real-world simulation development and how to plan for large-scale projects with this hands-on simulation building course. Explore modeling approaches including stochastic and physics-based modeling, and artificial intelligence. Delve into simulation techniques, engines, languages, and design features. **Prerequisite:** Fundamentals of Modeling and Simulation or a background in modeling and simulation.

*R. Alexander, 14 hrs, $795*

**Online:** D2318004

---

**Simulation Verification, Validation, and Accreditation**

Learn a range of verification and validation (V&V) methods including informal, static, dynamic, and formal methods. Review guidelines for selecting the best method for a given model. Explore specific procedures for performing important V&V methods and interpreting their results.

*M. Petty, 14 hrs, $795*

**Online:** D2318005

---

**Systems Analysis, Modeling, and Simulation**

Cover the analytical methods that, with tests, provide the basis for systems validation and verification processes and procedures. Build your skill base for development of systems models, integration of component models into a systems model, and model-based and hardware-in-the-loop simulation.

*R. Alexander/J. Little, 14 hrs, $795*

**Campus:** Nov 6 – 7, 2018  |  T, W  |  8:30 am – 4:30 pm  |  C2319006

**Online:** D2318008

Also a core course for the Systems Engineering Certificate.

---

**NEW Monte Carlo Simulation**

Monte Carlo simulation is a powerful method that uses probability distributions to simulate many types of systems. Monte Carlo simulation uses randomness, applied in a controlled manner, to explore the range and likelihoods of possible outcomes inherent in a scenario or system and produces results that vary from run to run. Learn two types of Monte Carlo simulation: Stochastically (randomly) varying initial conditions are input to a deterministic model; and fixed initial conditions are input to a stochastic model. In both, randomness is generated using probability distributions selected and parameterized to model the actual variability present in the scenario or system being modeled. **Prerequisite:** Background in probability or statistics and MS Excel is recommended. Examples will be given in both Excel and R.

*M. Petty, 14 hrs, $795*

**Campus:** Jun 19 – 20, 2018  |  T, W  |  8:30 am – 4:30 pm  |  C2318015

**Online:** Coming Spring 2018

---

**FEATURED INSTRUCTOR:**

**DR. MIKEL PETTY** is a Senior Scientist for Modeling and Simulation at the UAH Information Technology and Systems Center. He has worked in modeling and simulation research and development since 1990 in areas that include simulation interoperability and composability, human behavior modeling, multiresolution simulation, and verification and validation methods. Dr. Petty is also an author of the CMSP Certification Exam.
**Private Pilot Ground School**

Whether you are aspiring to have an aviation career or just want to learn the requirements to become a pilot, you will gain a better appreciation and understanding of aviation and piloting airplanes. Prepare to complete the Federal Aviation Administration’s (FAA) Private Pilot Airplane Knowledge Test. Passing this test is one of the prerequisites for obtaining a private pilot’s license from the FAA. This course is designed in accordance with Part 141 – Pilot Schools Training Requirements of the Federal Aviation Regulations. Cover the twelve Federally mandated aeronautical knowledge areas required for private pilot certification. FAA-approved and aviation industry endorsed curriculum training techniques and materials are used. The comprehensive Private Pilot Kit is authored by Gleim Aviation and is available for approximately $150 at the Off Campus Bookstore.

*R. Lindstrom, 42 hrs, $599*

_Campus:_ Jan 9 – May 1, 2018 | T | 5:30 – 8:30 pm | C2318025

---

**Missile System Fundamentals**

Learn foundational vocabulary and working knowledge of missile systems, technologies, issues and problem-solving resources. Illustrate key concepts of requirements development, operations, and risk assessment. Understand the capabilities and limitations of missile technology as well as the trade-offs between technology, cost, and performance. This course is designed for employees seeking introductory or deeper practical knowledge in Government, program management, and contractor offices. **Prerequisite:** Undergraduate degree in a technical field or equivalent experience. Participants must be U.S. citizens and provide verification of citizenship. See page 31 for details.

*D. Gunther, 35 hrs, $1295*

_Online:_ D2318001

_Customized Training:_ 256.824.4430

---

**Missile System Fundamentals**

Learn foundational vocabulary and working knowledge of missile systems, technologies, issues and problem-solving resources. Illustrate key concepts of requirements development, operations, and risk assessment. Understand the capabilities and limitations of missile technology as well as the trade-offs between technology, cost, and performance. This course is designed for employees seeking introductory or deeper practical knowledge in Government, program management, and contractor offices. **Prerequisite:** Undergraduate degree in a technical field or equivalent experience. Participants must be U.S. citizens and provide verification of citizenship. See page 31 for details.

*D. Gunther, 35 hrs, $1295*

_Online:_ D2318001

_Customized Training:_ 256.824.4430

---

**Online On Demand Learning**

Register for an On Demand course at ANY time. Participants have one month to complete the course, or two months for IT courses and courses over 30 hours.

---

**AEGIS COMBAT SYSTEM**

Available for Customized Training. Call 256.824.4430 for details.
PREPARE TO PASS REMOTE PILOT KNOWLEDGE EXAM.

NEW Small Unmanned Aircraft System Certified Pilot Exam Prep

Drones, aka Unmanned Aerial Vehicles (UAVs), are quickly becoming part of our everyday life. While they originated primarily through military applications, their use is rapidly expanding to commercial, scientific, agricultural, and other applications, such as policing, peacekeeping and surveillance, product deliveries, and aerial photography (for real estate, small business, hotels, tourism, etc.). Civilian operated UAVs now significantly outnumber military UAVs and have the potential for many more commercial applications. Are UAVs in your professional future? Prepare to take the Remote Pilot Knowledge (RPK) Exam. The RPK is the primary requirement to become a Small Unmanned Aircraft System (sUAS) certified pilot, to legally fly a drone and open up new career opportunities. Practice tests will reinforce course material and a comprehensive final, example exam at the end of the course will help you successfully pass the RPK exam. Prerequisite: Familiarity with mathematics and engineering is a plus, but not required.

What You Will Learn:
• The 12 subject areas of the RPK Exam
• sUAS regulations
• Airspace classification
• Emergency procedures
• Radio communication procedures
• sUAS performance

B. Stilner, 14 hrs, $495
Campus: May 7 – 21, 2018 | M, W | 5:30 – 8:30 pm* | C2318029
*Class will meet 5:30 – 7:30 pm on May 21.

Fundamentals of Model-Based Systems Engineering with SysML

Take part in this engaging three-day learning event. SysML is a graphical modeling language that enables you to practice MBSE and has become the standard among MBSE practitioners. You will be guided through the practice of MBSE and how it provides the context—and the business case—for learning SysML. Leave the course with an answer to “What is MBSE?” Learn the three pillars of MBSE—a modeling language, a modeling method, and a modeling tool. Discover how MBSE can help you better manage your customers’ expectations while delivering the return on investment that MBSE promises. Prerequisite: Undergraduate degree in a technical field, project management, or equivalent experience. Experience in SysML strongly recommended.

L. Baker, 21 hrs, $1095
Campus: Apr 9 – 11, 2018 | M – W | 8:30 am – 4:30 pm | C2318013
Campus: Nov 5 – 7, 2018 | M – W | 8:30 am – 4:30 pm | C2319001

Certified Systems Engineering Professional (CSEP) Exam Bootcamp

Achieve one of the most sought after certifications for engineering professionals. Validate your education, knowledge and experience in the highly competitive field of systems engineering with INCOSE CSEP recognition. A number of organizations, including the U.S. DoD, recognizes the value of the INCOSE CSEP. The certification requires passing an extensive exam based on the INCOSE Systems Engineering Handbook v4. Explore CSEP requirements and the INCOSE SE Handbook to cover all topic areas that might be on the CSEP exam. Interactive work, study plans, and sample exam questions provide the effective preparation needed for the exam. This course also prepares individuals to pass the ASEP (Associate Systems Engineering Professional) exam. Prerequisite: Degree in engineering discipline or equivalent experience in Systems Engineering.

The course fee includes: The Systems Engineering Handbook. Visit incose.org for exam information and eligibility requirements.

R. Leonard, 14 hrs, $795/$695*
Campus: May 3 – 4, 2018 | Th, F | 8:30 am – 4:30 pm | C2318023
Online: D2318002

*INCOSE Member Discount
**Exam voucher not included
MATLAB

MATLAB is a technical computing environment used by engineers, scientists, mathematicians, and financial analysts. It can be applied to virtually any problem requiring technical computation and is advertised as the world’s leading software for technical computing. Learn about scalars, vectors, matrices, strings, and structures. The MATLAB class will provide the skills needed to work with MATLAB interactively and as a programming language. **Prerequisite:** Familiarity with basic computer operations in any programming language.

*B. Stiltner, 20 hrs, $995*

**Campus:** Apr 17 – 19, 2018 | T – Th | 8:30 am – 4:10 pm | C2318014

**Campus:** Oct 16 – Nov 1, 2018 | T, Th | 5:00 – 8:20 pm | C2319002

---

**FEATURED INSTRUCTOR:**

**BRANDON STILTNER** is an aerospace engineer with 10 years of experience in the areas of flight dynamics and control, modeling and simulation, testing, and analysis. He is a certified Modeling and Simulation Professional as well as an associate member of the AIAA Modeling and Simulation Technical Committee. He earned his bachelor’s and master’s degrees in Aerospace Engineering from Virginia Tech in 2007 and 2011, respectively. Currently, Mr. Stiltner supports the development of the Space Launch System (SLS) as Guidance, Navigation, and Control Engineer at NASA’s Marshall Space Flight Center.

---

Opening the DOORS® to Requirements Management

DOORS® is a requirements management application for optimizing requirements communication, collaboration, and verification throughout your organization and supply chain. This scalable solution can help you meet business goals by managing project scope and cost while allowing you to capture, trace, analyze, and manage information changes in addition to maintaining compliance to regulations and standards. DOORS® offers a robust environment for importing, exporting, and relating a variety of requirement-related information. Rational DOORS can assist program managers to achieve an optimal requirements management process with strategies to ensure technical objectives are satisfied across entire program life cycles. Gain the knowledge and hands-on experience to effectively use this computer-based tool. **Prerequisite:** Experience with PCs, requirements development, management, and verification knowledge.

*C. Zolynsky, 21 hrs, $945*

**Campus:** Apr 24 – 26, 2018 | T – Th | 8:30 am – 4:30 pm | C2318014

**Campus:** Sep 25 – 27, 2018 | T – Th | 8:30 am – 4:30 pm | C2319002

---

WIOA TRAINING FUNDS ARE AVAILABLE.

If you meet income qualifications, WIOA (Workforce Investment Opportunity Act) may provide free career development services.

**WIOA FUNDING INFO:**

Contact any Alabama Career Center. Madison County residents call 256.851.0537.

**APPROVED PROGRAM INFO:**

Visit etpl.alabama.gov or call 256.824.4430.
ROCKET PROPULSION CERTIFICATE

Sharpen your technical understanding of rocket propulsion from first principles to practical case studies. Learn from subject-matter experts the foundation of rocket propulsion and missile basics, including the principles of conventional and advanced propulsion systems. Identify items critical in the development, operation, and sustainment of propulsion systems. These courses provide a wealth of technical materials and case studies relevant to both propulsion engineers and project managers. Prerequisite: Undergraduate degree in a technical field or equivalent experience.

SAVE $300 by taking the 3-course certificate series or take just one course.

Choose three of the following four courses:
- Rocket Propulsion Fundamentals
- Advanced Solid Rocket Propulsion
- Liquid Rocket Engineering
- Combustion Instability in Rockets

Rocket Propulsion Fundamentals

Gain a foundation in the complex factors that shape propulsion systems. Theory and practical design considerations are the focus. Grasp the essentials of common aerospace propulsion systems including rockets, air-breathing, thermal, and electric. Solid, liquid, and hybrid propulsion system content provides the range of propulsion propellant types and their use considerations.

M. Benfield, 12 hrs, $895
Campus: Jun 26 – 27, 2018  |  T, W  |  8:30 am – 3:30 pm  |  C2318019
Online: D2318011

Advanced Solid Rocket Propulsion

Developed in 2007, a joint NASA and UAH industry initiative resulted in bringing the national subject matter experts in solid rocket propulsion to UAH to educate the next generation of solid rocket motor engineers. Take advantage of this opportunity to engage in an extensive review of solid rocket propulsion. You will learn from recognized specialists about rocket component design, propellant properties, ballistic modeling and burn rate, and combustion. Leave the course with information you can apply in your work.

R. Frederick, 40 hrs, $1295
Online: D2318014

NEW Liquid Rocket Engineering

Learn from recognized propulsion experts and practitioners, Scott Claflin and Dr. Robert Frederick. Benefit from an overview of common liquid rocket engine power cycles, propellants, and components. Instructors will lead you to an understanding of the function, operation, and design considerations of the individual components which comprise a liquid rocket engine such as turbopumps, thrust chambers, preburners, gas generators, igniters, and valves. Learn the fundamentals of combustion stability and stabilization devices as well as combustion chamber heat transfer and cooling. You will be challenged to develop a preliminary design of a liquid rocket engine after learning enabling methodologies and analysis techniques.

S. Claflin/R. Frederick, 35 hrs, $1295
Campus: Jul 23 – 27, 2018  |  M – F  |  8:30 am – 4:30 pm  |  C2318020
Online: D2318013

NEW Combustion Instability in Solid Rockets

Build an appreciation and understanding of solid rocket combustion instability from internationally recognized solid propulsion experts and practitioners, Dr. Frederick Blomshield and Dr. Robert Frederick. Instructors will guide you through solid rocket combustion fundamentals. Learn background, empirical observations, and commonly performed computations. The class relies on real world motor data whenever possible to illustrate stability prediction methods, amplitude and frequency analysis, response function measurement techniques, and motor pulsing.

F. Blomshield/R. Frederick, 35 hrs, $1295
Online: D2318012

FEATURED INSTRUCTOR:
DR. ROBERT FREDERICK is the Director of the UAH Propulsion Research Center. He has directed over 10 million dollars of research, published extensively, and pioneered an international, team-based aerospace systems design lab. He is an Associate Fellow of the AIAA and former chairman of the AIAA Hybrid Rocket Technical Committee. He has also been a technical advisor to NATO in solid propulsion.
APPLIED SYSTEMS ENGINEERING CERTIFICATE

Equip yourself for success in today’s professional systems engineering (SE) environment. The Professional Certificate presents SE techniques focusing on how to design and manage complex engineering systems over the system life cycle. Participants can apply the techniques to a wide range of industries. Instructors are real-world practitioners and will arm you with knowledge of core processes, techniques, and tactics required to be an effective systems engineer. Concentrating on the principles of systems engineering management, the program validates participants’ knowledge of the systems engineering interdisciplinary approach. **Prerequisite:** Undergraduate degree in a technical field or equivalent experience.

Take the 5-course certificate series or take just one course.

- Systems Engineering Overview
- Applied System Design and Decision-Making
- Requirements Development
- Systems Analysis, Modeling, and Simulation
- System Validation and Verification

Systems Engineering Overview

Learn the fundamental concepts of systems engineering (SE), basic techniques that govern the SE process, how SE fits into the life cycle management process, and the problem-solving process. Discover the traditional techniques used and the analysis and control tools that provide balance to the SE process, as well as conflict resolution techniques.

G. Tackett, 14 hrs, $795
**Campus:** Jul 24 – 25, 2018 | T, W | 8:30 am – 4:30 pm | C2318021
**Online:** D2318006

Requirements Development

One of the most successful impacts a development team can have on a system is to ensure the successful identification, analysis, allocation, and verification of requirements. Learn to allocate the requirements to the system’s architecture and processes for conducting a requirements analysis. Go beyond the typical textbook process by applying experience-based instruction. Our subject-matter expert will guide you through interactive exercises to develop requirements and experience an entire requirements development process.

G. McPherson, 14 hrs, $795
**Campus:** Aug 28 – 29, 2018 | T, W | 8:30 am – 4:30 pm | C2319003
**Online:** D2318007
Also a core course for the Systems Test and Evaluation Certificate.

Applied System Design and Decision-Making

Perform trade studies to support decision-making at all stages of system development. Study how to master trade studies—the identification of alternatives and application of decision-making methodology. Learn valve and utility curve methods. Look at balancing performance, schedule, cost, and risk variables.

D. Gunther, 14 hrs, $795
**Campus:** Oct 2 – 3, 2018 | T, W | 8:30 am – 4:30 pm | C2319004
**Online:** D2318009

Systems Analysis, Modeling, and Simulation

Learn how SAMS plays a fundamental role in SE. Build your skill base in systems model development, the component model integration into a systems model, and model-based and hardware-in-the-loop simulation. Cover analytical methods that, with tests, provide the basis for systems V&V.

R. Alexander/J. Little, 14 hrs, $795
**Campus:** Nov 6 – 7, 2018 | T, W | 8:30 am – 4:30 pm | C2319006
**Online:** D2318008
Also an elective for the Modeling and Simulation Certificate.

System Validation and Verification

Ensure that you have a complete approach to the validation and verification (V&V) of your product. Learn the process to ensure that a new system works as designed and that the design fulfills its intended function. Hands-on cases illustrate developing metrics, team/management structures, and executing V&V activities.

D. Gunther, 14 hrs, $795
**Campus:** Dec 11 – 12, 2018 | T, W | 8:30 am – 4:30 pm | C2319007
**Online:** D2318010
Also an elective for the Systems Test and Evaluation Certificate.
NEW Test and Evaluation Principles

Learn how test and evaluation (T&E), acquisition, and requirements personnel integrate efforts to provide systems that perform as designed and required by the user. Grasp foundational concepts such as developing a team of key personnel, producing documents, and more. At the end of the course, you will be familiar with elements of a test program, test sites that will provide the best data to support your test requirement and mission, and confidence to proceed with assurance in your role.

G. Tackett/J. Whitehead, 14 hrs, $795
Campus: Feb 6 – 7, 2018 | T, W | 8:30 am – 4:30 pm | C2318016
Online: D2318015

NEW Test Planning and Conduct

Explore technology demonstrations, experimentation, and tests, all of which provide the opportunity to collect data to support both programmatic decisions, access Technical Readiness Levels (TRLs), and support the acquisition milestone determinations. Learn proper test planning and the conduct of those tests which are paramount to successful execution and evaluations. Learning will focus on initial planning techniques and issues, test plan development, rehearsals, test plan validation, test conduct, data collection, and after action reviews.

S. Mullins, 14 hrs, $795
Campus: Mar 6 – 7, 2018 | T, W | 8:30 am – 4:30 pm | C2318017
Online: Coming Spring 2018

Requirements Development

G. McPherson, 14 hrs, $795
Campus: Aug 28 – 29, 2018 | T, W | 8:30 am – 4:30 pm | C2319003
Online: D2318007

See Page 18. Also a core course for the Applied Systems Engineering Certificate.

NEW Test Evaluation and Assessment

Understand the planning, process, and products of system evaluation and system assessment through testing. Learn to build assessment plans and validation plans that map required system performance to test and analysis events. Understand the relationship between Modeling & Simulation (M&S) and test in a model-test-model approach, as well as in live-virtual-constructive environments. Learn the meaning and importance of operationally relevant environments as it relates to Technical Readiness Levels (TRLs) and how to assess threat and environmental realism for test design. Strategize how to evaluate reliability, availability, and maintainability (RAM).

G. Tackett, 14 hrs, $795
Campus: Apr 10 – 11, 2018 | T, W | 8:30 am – 4:30 pm | C2318018
Online: D2318017

Elective courses (Choose One)

System Validation and Verification

D. Gunther, 14 hrs, $795
Campus: Dec 11 – 12, 2018 | T, W | 8:30 am – 4:30 pm | C2319007
Online: D2318010

See Page 18. Also a core course for the Applied Systems Engineering Certificate.

Project Scope, Cost, and Schedule Management

R. Steele, 21 hrs, $895
Campus: Mar 6 – Apr 3, 2018 | T, Th | 5:30 – 8:30 pm | C2518032
Online: D2518012

See Page 24. Also a core course for the Project Management Certificate.
FEDERAL CONTRACT MANAGEMENT ESSENTIALS CERTIFICATE

Learn the U.S. Government acquisition life cycle process to acquire goods and services. Discover Uniform Contract Format (UCF) model contracts and how the UCF facilitates preparation of solicitations and contracts as well as their use. Understand roles of the buyer and seller in contract administration, and understand the functions of the Defense Contract Management Agency (DCMA) and Defense Contract Audit Agency (DCAA). Complete a Federal acquisition overview and FAR orientation. Study Federal contract management key elements that you can apply immediately in the work place, enhancing your career potential and the bottom line for your organization.

H. Cleaver, 40 hrs, $1295/$1245*
Campus: Oct 15 – 19, 2018 | M – F | 8:00 am – 5:00 pm | C2519005
Online: D2518020

*NCMA Member Discount

FEDERAL CONTRACT MANAGEMENT SPECIALIZATION CERTIFICATE

Explore current topics arising from the latest revisions to the Federal Acquisition System, such as an evolving issue like Performance-Based Services Acquisition (PBSA). Each topic is explained in terms of its context within the larger Federal acquisition process. Next, examine the complexities inherent when prime contractors seek value-added work or deliverables from subcontractor sources. Then, analyze the latest payment methodologies used in Federal contracting, and understand the cash flow implications inherent in each of these payment venues. Prerequisite: Completion of Federal Contract Management Essentials Certificate or equivalent Federal contract management experience.

H. Cleaver, 40 hrs, $1295/$1245*
Online: D2518021

*NCMA Member Discount

* NCMA Member Discount
Federal Contract Management Essentials and Specialization Certificates satisfy requirements for the National Contract Management Association Continuing Professional Education.

““The instructor is an exceptional instructor and is well-rehearsed in the subject matter. This course was above and beyond my expectations!”

““I benefited greatly from this course. As a Government employee handling budget and funding, it gave me a much broader and more complete picture of how the contract management process works.”
Federal Costing Essentials

Do you know the consequences of failure to understand and comply with Federal Government costing rules and cost accounting standards? For Government contracting professionals, take the time to gain basic knowledge of these procedures and rules and how the process works to minimize the potential for problems. Learn about Government requests for "certified" or "uncertified" cost or pricing data in bidding processes. Upon course completion, participants will have a clear understanding of the necessity for consistency in costing and cost accounting practices related to bidding, recording, reporting, and invoicing costs (CAS 401), as well as appropriate cost isolations in company records (CAS 402). The Federal Acquisition Regulation (FAR), the Contract Pricing Reference Guides (CPRG), and selected Defense Contract Audit Agency (DCAA) documents are the foundation for this course content.

H. Cleaver, 14 hrs, $495
Campus: Mar 12 – 13, 2018 | M, T | 8:30 am – 4:30 pm | C2518027
Online: 2518019

Basic Life Support for Healthcare Providers

The Basic Life Support (BLS) for Healthcare Providers is an American Heart Association certification that focuses on what rescuers need to know to perform high-quality CPR. After successfully completing the BLS course, you should be able to perform high-quality CPR for an adult, child, or infant, as well as demonstrate the appropriate use of an automated external defibrillator (AED). You will also be able to describe the importance of teams in multi-rescuer resuscitation.

B. Nation/C. Holland/A. Barnes/D. Spooner, 5 hrs, $60
Campus: Jan 11, 2018 | Th | 12:30 – 5:30 pm | C2518043
Campus: Apr 13, 2018 | F | 8:00 am – 1:00 pm | C2518040
Campus: May 25, 2018 | F | 8:00 am – 1:00 pm | C2518041
Campus: Jun 13, 2018 | W | 12:30 – 5:30 pm | C2518045
Campus: Jul 16, 2018 | M | 12:30 – 5:30 pm | C2518046
Campus: Aug 17, 2018 | F | 8:00 am – 1:00 pm | C2519010
Campus: Aug 29, 2018 | W | 12:30 – 5:30 pm | C2519012

LEARN TO MITIGATE AND ANALYZE RISKS

NEW Risk Management and Schedule Risk Analysis

Risk management plans are required for most Government contracts, and Schedule Risk Analysis (SRA) is required for all contracts that require earned value management. Since reducing risk is a critical factor distinguishing you from your competitors, you need to have a solid foundation in risk management. This course provides you with tools and templates to develop a simple, straightforward and meaningful risk management plan to manage risk successfully. Understand how to conduct SRA, and learn tips, techniques, and best practices to make SRA simple and meaningful. You will have the opportunity to perform SRA with MS Project and watch demonstrations of other risk management software tools.

What You Will Learn:
• Best practices for risk management
• Statistically determine the likelihood of completing your project on time and under budget
• Schedule activities that contribute the most risk to your project
• Effective risk response strategies to reduce schedule and budget risk
• MS Project add-ins for risk management, as well as stand-alone tools

W. Carswell, 14 hrs, $795
Campus: Mar 13 – 14, 2018 | T, W | 8:30 am – 4:30 pm | C2518042
EARNED VALUE MANAGEMENT CERTIFICATE

Understand a highly effective project control system that uses measurement tools such as breakdown structures, network diagrams, schedules, budgets, and Gantt charts to ensure that the parameters of a contract and its projects or tasks are on track. Learn Earned Value Management (EVM) guidelines and requirements to meet Government contract regulations. Gain its value as an essential tool for project managers and technical leads in supporting proactive decision-making.

Take the 3-course certificate series or take just one course:

- Earned Value Management Essentials
- Earned Value Management Analysis and Reporting
- Integrated Baseline Review Preparation and Execution

Earned Value Management Essentials

This course lays the foundation for novice specialists as well as helps refresh veteran Earned Value Management (EVM) practitioners in the tenets of work planned, work accomplished, and actual work cost. Discuss EVM terminology, formulae, and analysis. Apply methods learned through practical exercises demonstrating real world applicability to project cost, schedule, and technical performance.

R. Hycoop, 14 hrs, $795
Campus: Sep 17 – 18, 2018 | M, T | 8:30 am – 4:30 pm | C2519006
Online: D2518002

Earned Value Management Analysis and Reporting

Explore detailed, practical methods to facilitate compliance regardless of contract size or complexity. This course will assist novice analysts building a solid foundation while serving as a refresher for more experienced analysts. Learn to establish variance thresholds and to use indices for predictive analysis. Practical exercises will be used to demonstrate formulae, methods, and techniques covering problematic areas.

G. Smith, 14 hrs, $795
Campus: Oct 22 – 23, 2018 | M, T | 8:30 am – 4:30 pm | C2519007
Online: D2518003

Integrated Baseline Review Preparation and Execution

Many Government contracts contain a requirement for an Integrated Baseline Review (IBR). How and when should an IBR be conducted? This course is helpful for those who are being newly introduced to the IBR requirement, and also serves as a refresher for individuals with experience.

J. Little 14 hrs, $795
Campus: Dec 3 – 4, 2018 | M, T | 8:30 am – 4:30 pm | C2519008
Online: D2518004
INTERIOR DESIGN CERTIFICATE

Visualize beautiful and functional surroundings that you create. Whether you are searching for new career skills or knowledge for personal use, this program is certain to provide useful content and creative ideas.

Take the 5-course certificate series or take just one course:

- Building a Foundation in Interior Design
- Design and Architecture
- SketchUp Your Design
- Applying Design Principles and Elements
- Interior Space Planning

Course Materials:
Additional fees for textbooks and supplies may be required.

Please Note:
This program is not preparatory for the NCIDQ exam, nor does it provide individuals with the credentials to be identified as a Registered Interior Designer, a title awarded only by the Alabama State Board of Interior Design.

Building a Foundation in Interior Design
Learn the basics of design elements and principles that work together to create harmonious spaces through lecture, demonstrations and application examples. A comprehensive overview of color theory, furnishings, fixtures, finishes, the history of design and current design, trends will provide the knowledge to develop aesthetically pleasing and functional interiors.

G. Huffman, 20 hrs, $375
Campus: Oct 9 – Dec 4, 2018 | T | 5:30 – 8:00 pm | C2519009*
*Class will not meet November 20, 2018

Design and Architecture
Learn how architecture and interior design are interwoven and how architectural detailing makes a building unique. Explore residential and commercial architectural styles and types, including historical and contemporary design. You will be introduced to design history and theory, and basics of construction, materials and finishes, universal design, sustainability, and building systems.

D. Bird, 20 hrs, $375
Campus: Jan 23 – Mar 13, 2018 | T | 5:30 – 8:00 pm | C2518036

SketchUp Your Design
Learn to build computer-generated models of interior spaces in this hands-on course utilizing Google SketchUp to convey your design ideas and boost your design capabilities. Practice placing existing model assemblies of windows, doors, and more, while viewing and developing interior spaces in detail. Prerequisite: Fundamental experience with computers.

C. Green, 20 hrs, $375
Campus: Apr 3 – 26, 2018 | T, Th | 5:30 – 8:00 pm | C2518037

Applying Design Principles and Elements
Develop advanced design skills utilizing color schemes and patterns, furniture layouts, materials selection, and interior elevations. Large scale projects will allow for an in-depth study of interior details such as lighting, fabrics, windows, and flooring. Learn how to present design proposals and then how to successfully communicate with clients and contractors during the project. Prerequisite: Building a Foundation in Interior Design.

G. Huffman, 20 hrs, $375
Campus: May 8 – Jul 10, 2018 | T | 5:30 – 8:00 pm | C2518038*
*Class will not meet May 29 and July 3, 2018

Interior Space Planning
Instruction and practical hands-on training introduce you to the fundamentals of space planning and its application in solving design problems. Learn about scale, architectural drawing, and creative problem-solving. Discover how to convey your own design solutions. Prerequisite: Design and Architecture

D. Bird, 20 hrs, $375
Campus: Jul 24 – Sep 18, 2018 | T | 5:30 – 8:00 pm | C2518039*
*Class will not meet September 4

Interior Design Career Opportunities Include:
Assistant to professionals including interior designer, contractor, or architect in the implementation of interior designs; sales reps for paint, carpet, lighting, furniture, or fabric stores; office furnishings and space planning suppliers, etc.
PROJECT MANAGEMENT CERTIFICATE

Good project management ensures that projects run smoothly and clients’ expectations are met. Build a solid foundation of project management knowledge and ensure your projects are set up for success from the start. Aligned with the Project Management Institute’s (PMI®) framework, each course responds to the Project Management Book of Knowledge (PMBOK®) and focuses on the practical application of project management concepts, particularly in a Government/contractor environment. You will acquire knowledge and tools needed to manage your projects’ successful completion. Prerequisite: It is recommended to attend Project Management Foundation first or have equivalent experience, but not required

SAVE $400 by taking the 4-course certificate series or take just one course:

- Project Management Foundation
- Project Scope, Cost, and Schedule Management
- Project Quality and Risk Management
- Project Procurement and Contracting Management

Project Management Foundation

The fundamental project management processes such as defining requirements, schedules, agile project management, Work Breakdown Structure (WBS), and change control are explored. Participants gain an understanding of how the project management processes are used during each phase of a project to build a better and more effective project plan and to effectively communicate the results in performance reports. PMBOK® Knowledge Areas: Integration, Communication, and Human Resources

R. Hycoop, 21 hrs, $895
Campus: Jan 30 – Feb 20, 2018  |  T, Th  |  5:30 – 8:30 pm  |  C2518031
Online: D2518011

Blended Formats
Combine online and classroom courses to complete a certificate!

Project Scope, Cost, and Schedule Management

Was the project completed on time, aligned with the budget, and linked with customers’ requirements? Participants will become skilled with earned value measures, proficient with performance indexes, and build s-curve charts to interpret project trends. Gain the tools to monitor quality and measure performance. Learn scope controls with a WBS and components of deliverables. PMBOK® Knowledge Areas: Scope, Cost, and Time

R. Steele, 21 hrs, $895
Campus: Mar 13 – Apr 10, 2018  |  T, Th  |  5:30 – 8:30 pm  |  C2518032*
Online: D2518012

*Class will not meet March 27 & 29, 2018

Also an elective for the Systems Test and Evaluation Certificate

Project Quality and Risk Management

Performing good risk assessment is an essential requirement of a successful project management plan. Gain insight into assessment procedures and learn to apply them to decision-making situations. Focus on using a quality management plan and systematic quality controls to address issues and avoid costly reworking expenses. PMBOK® Knowledge Areas: Risk and Quality

C. Gardner, 21 hrs, $895
Campus: Apr 30 – May 21, 2018  |  M, W  |  5:30 – 8:30 pm  |  C2518033
Online: D2518013

Project Procurement and Contracting Management

Procurement and contracting have a strong presence in project management. Few projects are self-contained and require no contracting requirements. Understand the basic elements of contract, subcontract formation, and management and how they relate to project management activities. Learn about contract types and their influence on projects. Address contracting risks and complexities of contract administration associated with the goal of project completion. Learn how to prepare Statements of Work (SOWs) and how to bid and negotiate from a project perspective. Understand management aspects of both subcontractors and vendors. PMBOK® Knowledge Areas: Procurement and Stakeholder Management

H. Cleaver, 21 hrs, $895
Campus: Jun 19 – Jul 17, 2018  |  T, Th  |  5:30 – 8:30 pm  |  C2518034*
Online: D2518014

*Class will not meet July 3 & 5, 2018
NEW PMP® Certification Bootcamp

Enhance your skills, knowledge, and qualifications as you prepare for project management certification and related exams. Project Management Professional (PMP®) Certification Bootcamp is an intensive training program that will help you prepare to pass the Project Management Institute’s (PMI®) PMP® exam and provide you with the 40 required contact hours of project management education. The course also prepares individuals to pass the CAPM® (Certified Associate in Project Management) exam.

Course Includes:
- Additional project management knowledge not covered in the PMBOK® Guide but expected to be covered on the exam
- Key information from all chapters in the PMBOK® Guide
- Strategies for approaching exam questions
- Summary of important formulas and definitions
- Online PMP® exam simulator

M. Stettner/R. Steele, 40 hrs, $1295**

Campus: Jan 22 – 26, 2018 | M – F | 8:00 am – 5:00 pm | C2518004

Campus: Jun 18 – 22, 2018 | M – F | 8:00 am – 5:00 pm | C2518024

Campus: Oct 2 – Nov 15, 2018 | T, Th | 5:30 – 8:30 pm | C2519011

Online: D2518018

** PMI® exam voucher and registration fees are not included.

Textbooks Included for both courses:
A Guide to The Project Management Body of Knowledge | The PMP® Exam: How to Pass on Your First Try | PMP® Workbook

PLEASE NOTE: The PMP® Exam will be changing on March 26, 2018.
After this date, you may no longer take a 5th edition test. Only 6th edition tests will be administered.

---

NEW PMP® Platinum Bootcamp

Prepare to pass the Project Management Institute’s (PMI®) PMP® exam and obtain the required contact hours of project management education. In addition, PMP Platinum Bootcamp will prepare you to pass the CAPM® (Certified Associate Project Management) exam. This blended exam prep training course combines self-paced instruction, online instructor review sessions once a week, and a three-day in-class bootcamp.

Course Includes:
- 16 weeks of self-paced assignments and online Q&A sessions
- Online videos and quizzes per textbook chapter
- 3 days of classroom training
- Online PMP® Exam Simulator

M. Stettner, 47 hrs, $1395**

Spring/Summer 2018 | B2518002
Weekly Online Portion: Apr 3 – Jul 24, 2018 | T | 7:00 – 8:15 pm (CST)
Campus Portion: Aug 6 – 8, 2018 | M – W | 8:00 am – 6:00 pm | 3-day Bootcamp

Fall 2018 | B2519001
Weekly Online Portion: Aug 21 – Dec 11, 2018 | T | 7:00 – 8:15 pm (CST)
Campus Portion: Dec 17 – 19, 2018 | M – W | 8:00 am – 6:00 pm | 3-day Bootcamp

** PMI® exam voucher and registration fees are not included.

---

WHICH PMP® BOOTCAMP IS RIGHT FOR YOU?

PMP® Certification Bootcamp is a comprehensive five-day bootcamp designed for participants with little time commitment who want to prepare for the PMP® exam.

PMP® Platinum Bootcamp is designed for participants who want to take their time, without experiencing information overload, to learn all the material needed to pass the exam. Participants meet online once a week via online video conferencing.

Why Earn Your PMP® Certification?
The PMP® credential is one of the most valued credentials in project management. It assures employers that you are committed and verifies that you have a solid foundation in managing projects.

Project Management Professionals Earn 20% More.*

Who Should Attend:
Experienced project managers. Review exam eligibility criteria established by the PMI® at pmi.org.


---

LEADERSHIP | CYBERSECURITY | INFORMATION TECHNOLOGY | ENGINEERING | MANAGEMENT
Supply Chain Management Foundation

Gain an overview of integrated supply chains with an emphasis on business process integration for optimal supply chain performance. The SCOR model will be introduced for process modeling and diagnostics. This course provides a strong supply chain overview for senior managers and executives.

K. Sullivan, 14 hrs, $795
Online: D2518005

Supply Chain Relationship Management

Supply chains encompass end-to-end business processes, which include both suppliers and customers. Learn an essential for success—managing relationships with key business partners.

C. Gardner, 14 hrs, $795
Online: D2518006

Demand Management

Supply chain performance depends on an organization’s ability to synchronize its production rate with customer demand. Learn basic tools for forecasting and understanding demand patterns, along with techniques for measuring and managing inventory.

J. Paxton, 14 hrs, $795
Online: D2518007

Operations Systems Management

Explore how to develop a seamless process from supplier to organization and to customer segments. Consider cellular vs. modular manufacturing, process selection, line balancing, production layout, and making vs. buying.

N. Loyd, 14 hrs, $795
Online: D2518008

Research and Product Development

Discover the importance of product development process integration in reducing time and cost to market as product life cycles shorten. Develop the keys to successful product development taking into account form, fit, function, and process.

D. Gunther, 14 hrs, $795
Online: D2518009

Supply Chain Strategy Development

Grasp the steps to a supply chain operation strategy that “sees” itself as a customer-facing entity serving the competitive goals of the enterprise. Understand enterprise strategy, business strategy, and developing SC strategy for product demand characteristics. Learn to employ hybrid SC strategies for tailoring to product characteristics.

K. Sullivan, 14 hrs, $795
Online: D2518010

Online On Demand Learning

Register for an On Demand course at ANY time. Participants have one month to complete the course, or two months for IT courses and courses over 30 hours.
Federal Proposal Management

In this highly interactive and document development-focused course, gather techniques for preparing successful Federal prime contractor or subcontractor proposals. Understand the pre-solicitation phase, and learn how to conduct the critical pre-proposal preparation phase. Learn about activities and considerations during the solicitation release and proposal team kickoff. Learn how to develop the various proposal volumes to be responsive in both Lowest Price Technically Acceptable (LPTA) and Best Value bidding venues. Identify proposal requirements that are best responded to with high impact graphics and ways to create them. Combine lecture and exercises to understand the realities of actual proposal preparation activities in a page-limited and time-constrained environment.

H. Cleaver, 35 hrs, $695
Online: 02518017

NEW Effective Business Writing

Learn practical workplace writing strategies for developing documents that are clear, concise, complete, and correct. Topics include the professional writing process, audience awareness, document organization and design, and visuals. Learn to review key grammar, style, and sentence structure concepts that are essential to enhancing the readability of a document. Understand how to adapt messages to meet the needs of various audiences.

S. Gunn, 14 hrs, $595
Campus: Jun 19 – 20, 2018 | T, W | 8:30 am – 4:30 pm | C2518030

Communicating With Influence

Presentations are a daily part of doing business, whether formally or informally, to persuade your colleagues, a client, or influence a team. Learn how to create effective presentations with aids to achieve impact with your audience, to present yourself with “presence,” and to establish a connection with the audience. You will have the opportunity to practice public speaking and receive feedback to help perfect your presentation delivery style. Learn tips to control emotion and anxiety. With personal coaching, improve your style in a comfortable, non-threatening environment. Gain strategies to build and strengthen your communication skills with tact and poise while reducing prep time and emotional stress. Practice delivery methods that engage the audience and learn how to respond professionally to your audience. Your initial and refined presentations will be recorded and made available to you at the conclusion of the course.

K. Scroggin, 7 hrs, $395
Campus: May 30, 2018 | W | 8:30 am – 4:30 pm | C2518025

NEW PHR®/SPHR® and SHRM-CP/SCP Exam Prep

This course provides an overview of the HR Body of Knowledge (HRBoK™) and prepares individuals for the Professional in Human Resources (PHR) and Senior Professional in Human Resources (SPHR) offered by the Human Resources Certification Institute (HRCI). Course materials may also be used to prepare for the Society of Human Resources Management SHRM-CP/SCP exams. Demonstrate your HR knowledge and expertise through attaining the most widely recognized Human Resources certifications. Prerequisite: Working knowledge of the HR field through education and/or professional experience.

What You Will Learn:
- Business management and strategy
- Workforce planning and employment
- Human Resources development
- Compensation and benefits
- Employee and labor relations
- Risk management

R. Burroughs, 36 hrs, $995
Campus: Jan 27 – Apr 21, 2018 | S | 9:00 am – 12:00 pm | C2518044*
Campus: Sep 8 – Dec 1, 2018 | S | 9:00 am – 12:00 pm | C2519013**

*Class will not meet March 24 or 31, 2018
**Class will not meet November 24, 2018
LEADERSHIP

NEW Building Effective Leadership Skills

Managers who lead successfully increase productivity. Explore topics critical to developing effective management skills such as core interpersonal skills, differences in perception, motivation and motivational blockers, team development, transformational leadership, training and mentoring skills—everything you need to manage people effectively. Leaders who have the skills and tools to lead successfully increase an organization’s profitability and improve the bottom line. Upon completion, you will be able to improve on key weakness areas, play to your strengths, defuse conflict, build strong communication, and get the best results from every member of the team. Who Should Attend: Managers and Individuals Seeking Leadership Roles in their Organization.

B. Demange, 21 hrs, $995
Campus: Mar 20 – 22, 2018 | T – Th | 8:30 am – 4:30 pm | C2518023

*Each individual will complete an online assessment in advance and receive a personalized management and transformational leadership profile on the first day of the course.

Employee Management and Leadership

Recruiting and retaining employees is the most important job that managers do in an organization. Learn best practices on finding, interviewing, and hiring a superior workforce. Your expectations of people and their expectations of themselves are the key factors in how well people perform at work. Gain knowledge to perform practices that keep employees motivated and inspired to develop and attain goals. Learn how to address employee behavior and prevent predictable decision-making errors. Become the successful leader who makes a serious difference in the work life of employees and your organization.

K. Burton, 14 hrs, $595
Online: D2518015

Return On Your Investment

Our goal is to maximize your company investment by designing, developing, and delivering a customized program that best meets your organizational needs. Call Lane Fabby at 256.824.4430 to schedule a no-obligation meeting.

Why Choose UAH PD Solutions?
• High quality, relevant curriculum, and cost value
• Top-notch instructors with real-world experience
• Improved performance and results
• Nationally recognized university
• Convenience and flexibility

WHAT TO EXPECT

NEEDS ANALYSIS

IDENTIFY INTENDED OUTCOMES

PROPOSAL

PROGRAM DEVELOPMENT

DELIVER THE PROGRAM

EVALUATE & FOLLOW UP
CREATE A CUSTOMIZED LEADERSHIP PROGRAM FOR YOUR ORGANIZATION!

One day, one week, or once a month immersed interventions.

Customized leadership training from UAH Professional Development Solutions will produce sustainable, high-performance results.

By conducting pre-event personality and strengths assessments, facilitating with high-level expertise and professionalism, using experiential learning techniques, fostering critical thinking, promoting a rich learning environment, and conducting post-event one-on-one executive coaching, we ensure individuals and teams apply the skills they learn in the classroom after returning to the workplace.

It is affordable, customized to your organization’s specific training needs and goals, as well as hassle-free—we do all the work!

Pre-Event Assessments
Keirsey Temperament Sorter helps individuals discover their personality type and appreciate differences in one another.

Strengths Based Leadership concentrates on positive reinforcements and helps individuals to be aware of their top 5 personal strengths.

Learning Event
Choose any combination from the topics to the right to customize your specific program.

Post-Event Executive Coaching
One-on-one coaching sessions follow training to promote and support implementation of information for desired results.

I wish my training budget was larger so that I could use UAH for all my training needs! If you want to build a competent workforce, PD Solutions is the go-to training provider.

SAMPLE TOPICS:

**Building Trust** creates a culture of candor, speaking truth to power, and forms a sense of organizational transparency.

**Communicating with Influence** prepares you to deliver effective presentations while providing communication skills with tact and poise.

**Conflict Management** provides effective strategies to turn conflict avoidance into constructive collaboration and helps navigate through disruptive situations.

**Creating a High Performance Culture** creates an intellectual understanding of coaching and mentoring to the development of an actionable roadmap for change.

**Critical Thinking Skills** expands thinking capacity by logically analyzing situations, applying reasoning, and constructing logical arguments.

**Crucial Conversations** enables participants to be at their best when opinions vary, stakes are high, and emotions run strong.

**Driving Employee Engagement** explains how to implement employee practices that keep employees motivated and inspired to perform at their best.

**Effective Communication** enables participants to recognize the importance of verbal skills, listening skills, writing skills, timing, symbols, and body language.

**Effective Decision-Making** highlights proven techniques to make critical business decisions confidently, quickly, and correctly.

**Emotional Intelligence** provides a hearts and minds framework to better understand and assess people’s behaviors, attitudes, styles, and potential.

**High Performance Teams** identifies and discusses basic leadership theories and models, and describes the servant leadership philosophy.

**Leading Across Generations** explores the five generations currently in the workplace and their communication styles, mind sets, and work habits.

**Leveraging Polarities in Organizations** defines interdependent distinguished value pairs from “either/or” solvable problems to polarities that require “both/and” thinking.

**Multi-Cultural Environments** outlines behaviors, customs, beliefs, and values of various cultures and how they impact social and professional interaction in the workplace.

**Strategic Decision Management** deconstructs strategic decision-making processes using rational, descriptive, political, and uncertainty models.

**Vision to Action** explores your own personal mission and your organization’s vision in order to create alignment and implement strategy.

**Create Your Own** – If you don’t see a topic you are interested in above, we can design a course tailored to you, utilizing our Subject Matter Experts. Call us to discuss at 256.824.4430!
CORPORATE CLIENTS

Professional Development Solutions at UAH delivers impactful results to our corporate training partners featuring:

- Pre-Event Assessment Tools
- Post-Event Executive Coaching

The Lighting Talents Program is a talent development program for selected Magneti Marelli employees designed to challenge their thinking and build their leadership skills.

Redstone Test Center members in this training are already leaders but wanted to improve skills in critical thinking, technical writing, and effective decision-making.

Executive Facilitation for Senior Executive Service (SES) members in the Engineering Directorate enabled them to lead better at an executive level resulting in better team alignment, delegation skills, and accountability.

A leadership development program for four levels of leadership within the company that is aimed at improving performance of individuals and teams, as well as strengthening the organizational culture.

Supported the Senior Service College Fellowship program in areas of building team cohesion, as well as improving research practices and technical writing skills.

Join these organizations which have achieved stronger teams, sustained change, and improved effectiveness by calling Lane Fabby at 256.824.4430 today to learn how we can build a customized learning event for you!
CAMPUS PARKING REGULATIONS
See page 1 for ways to register. Payment by cash, check, credit card, or written employer billing authorization is required at time of registration.

Many employers’ tuition plans cover UAH CPCS courses.Mail, fax, or email your company purchase order, tuition voucher, or other billing authorization to the CPCS Registration Office.

Full Program Discounts will be forfeited with any course withdrawal. Full course fees will be charged for courses withdrawn or eligible for tuition assistance program funds. For select courses, participants must be U.S. citizens and provide verification of citizenship to register. To register, call 256.824.6010.

Online On Demand course withdrawal requests must be received prior to logging onto the course and no more than 10 business days from the initial date of registration. Inclement Weather

UAH CPCS classes will not meet if UAH closes due to inclement weather. Check local radio/television broadcasts for closing announcements.

ACCEPTABLE PROOF OF U.S. CITIZENSHIP
For select courses, participants must be U.S. citizens and provide verification of citizenship. Visit PCS.uah.edu/Campus for more details.

COURSE CANCELLATION
Non-credit course grades are ‘satisfactory’ and are subject to cancellation if there is insufficient enrollment. In the event of course cancellation, participants will be notified in a timely manner and will have the option of applying fees paid to another course or receiving a course fee refund.

MISPRINTS
UAH CPCS shall not be held responsible for misprints in printed or electronic media. We apologize for any inconvenience.

SERVICES FOR STUDENTS WITH DISABILITIES
UAH Disability Support Services (DSS) provides special accommodations for students with disabilities. Individuals should contact DSS at 256.824.1997 or uah.edu/dss at least one month prior to the start date of class to allow advanced preparation. Official documentation of stated disability is required.

STATE AND ASSOCIATION REQUIREMENTS
To determine whether CEUs may be applied toward professional certification, licensing requirements, or other required training or continuing education hours, consult your training department or licensing authority.

TAX DEDUCTION
Treasury regulations may permit an income tax deduction for educational and training expenses (registration fees, travel, meals, and lodging). Check the IRS website for more information.

TRAINING ENVIRONMENT
Courses are presented in the CPCS Executive Training Center, unless otherwise noted. Computer technology courses are conducted in state-of-the-art, one-to-one computer labs. Classroom courses are held in rooms designed for the adult learner.

POLICIES
For a complete list of policies, visit PCS.uah.edu.

NON-CREDIT REGISTRATION AND PAYMENT POLICIES
See page 1 for ways to register. Payment by cash, check, credit card, or written employer billing authorization is required at time of registration.

Many employers’ tuition plans cover UAH CPCS courses. Mail, fax, or email your company purchase order, tuition voucher, or other billing authorization to the CPCS Registration Office.

You will receive confirmation after your registration has been processed. Please review your confirmation letter carefully for the latest course information.

The registration fee for non-credit courses includes any required text, course materials, lab fees, and short-term parking decals unless otherwise noted.

WITHDRAWAL POLICY
Failure to participate in a course or program does not constitute withdrawal. Substitutions are permitted with prior notice. For a full refund, notify the UAH CPCS Registration Office directly at least one full business day prior to the course start date. A processing fee may be deducted from refund requests.

Online On Demand course withdrawal requests must be received prior to logging onto the course and no more than 10 business days from the initial date of registration. Inclement Weather

UAH CPCS classes will not meet if UAH closes due to inclement weather. Check local radio/television broadcasts for closing announcements.

ACCEPTABLE PROOF OF U.S. CITIZENSHIP
For select courses, participants must be U.S. citizens and provide verification of citizenship to register. To register, call 256.824.6010.

Online On Demand course withdrawal requests must be received prior to logging onto the course and no more than 10 business days from the initial date of registration. Inclement Weather

UAH CPCS classes will not meet if UAH closes due to inclement weather. Check local radio/television broadcasts for closing announcements.

ACCEPTABLE PROOF OF U.S. CITIZENSHIP
For select courses, participants must be U.S. citizens and provide verification of citizenship. Visit PCS.uah.edu/Campus for more details.

COURSE CANCELLATION
Non-credit course grades are ‘satisfactory’ and are subject to cancellation if there is insufficient enrollment. In the event of course cancellation, participants will be notified in a timely manner and will have the option of applying fees paid to another course or receiving a course fee refund.

MISPRINTS
UAH CPCS shall not be held responsible for misprints in printed or electronic media. We apologize for any inconvenience.

SERVICES FOR STUDENTS WITH DISABILITIES
UAH Disability Support Services (DSS) provides special accommodations for students with disabilities. Individuals should contact DSS at 256.824.1997 or uah.edu/dss at least one month prior to the start date of class to allow advanced preparation. Official documentation of stated disability is required.

STATE AND ASSOCIATION REQUIREMENTS
To determine whether CEUs may be applied toward professional certification, licensing requirements, or other required training or continuing education hours, consult your training department or licensing authority.

TAX DEDUCTION
Treasury regulations may permit an income tax deduction for educational and training expenses (registration fees, travel, meals, and lodging) undertaken to maintain and improve professional skills.

TRAINING ENVIRONMENT
Courses are presented in the CPCS Executive Training Center, unless otherwise noted. Computer technology courses are conducted in state-of-the-art, one-to-one computer labs. Classroom courses are held in rooms designed for the adult learner.

PARTNERSHIPS
Government and licensing/certifying organizations accept some UAH CPCS courses as equivalent credit within their internal systems.

ALABAMA STATE BOARD OF PUBLIC ACCOUNTANCY (ASBO)
Many certificates and courses are approved for ASBO Certified Professional Education (CPE) units. 1 hour of class time is equal to 1 CPE unit.

BOEING LEARNING TOGETHER PROGRAM
As a preferred provider with The Boeing Learning Together Program, UAH CPCS offers quality educational opportunities to enhance job performance and improve skill sets. Our courses address the professional needs of the aerospace and defense industry and provide you with the knowledge, skills, and hands-on experience to succeed.

COMPtIA®
CPCS is a CompTIA Academy Partner Preem for benefits are: A+, Linux+, Network+, Security+, and CASP.

DEFENSE ACQUISITION WORKFORCE — CONTINUOUS LEARNING POLICY
Acquisition workforce employees must earn 80 Continuous Learning Points (CLPs) every 2 years. All certificates (except Interior Design) are approved for the CLP rate of 1 CEU = 10 CLPs. Defense Acquisition University (DAU) and The UAH Strategic Alliance is a strategic alliance between UAH CPCS and DAU, which makes it easy for AT&L employees who have completed DAU ACQ101, Fundamentals of Systems Acquisition Management, to complete some of our courses. Courses eligible for ACQ101 equivalency are: Systems Engineering Overview.

EC-COUNCIL
UAH CPCS is now an EC-Council Accredited Training Center. Courses eligible for benefits: Certified Ethical Hacker (CEH™) and Certified Network Defender (CND).

EDAssIST™
Partnered together, EdAssist and UAH CPCS can help you advance your education and take your career to the next level. Enjoy partnership benefits such as: 5% off the regular registration rate and an easy registration process, with no application fee.

THE INTERNATIONAL COUNCIL ON SYSTEMS ENGINEERING (INCOSE)
INCOSE Huntsville Regional Chapter and UAH CPCS partner to offer Certified Systems Engineering Professional examination preparation. Systems Engineering and Test and Evaluation programs satisfy the requirements for INCOSE Professional Development Units (PDUs). Programs eligible for the INCOSE discount are: CSEP Exam Bootcamp.

INFORMATION SYSTEMS SECURITY ASSOCIATION (ISSA) UAH CPCS is proud to offer North Alabama Chapter ISSA members (NACISSA) a 10% discount on select security and information systems security courses: A+, Security+, Network+, Linux+, CND, CEH™, CISSP® , CASP®, and CAP®.

To learn more about NACISSA membership, visit nacissa.org.

NATIONAL CONTRACT MANAGEMENT ASSOCIATION (NCMA)

WORKFORCE INVESTMENT OPPORTUNITY ACT (WIOA) — TUITION ASSISTANCE
Many certificates are approved for tuition assistance through the WIOA. For information on WIOA funding, visit etpl.alabama.gov, or contact your local Alabama Career Center. Madison County residents call 256.851.0537. For information on programs, contact 256.824.4430 or Lane.Fabby@uah.edu. Available programs include: Test and Evaluation, Systems Engineering, Federal Contract Management Essentials, Federal Contract Management Specialization, Supply Chain Management, Project Management, C+1 Developer, and Java Developer.

* Contact Lane.Fabby@uah.edu or 256.824.4430 for additional information.
The UAH BA or BS in Professional Studies is a degree completion program designed to meet the needs of working professionals and adult students, balancing academic rigor with flexibility and value. Earn your UAH degree on your terms!

- Flexible Schedules
- Transfer up to 75% of Credits
- Financial Aid Available

Contact us today to discuss your academic pathway!

256.824.6673 | UAHComplete.uah.edu

Continuing Education Units (CEUs)

UAH CPCS courses meet requirements for providing CEUs. Please note the following conversion rates into Professional Development Hours (PDH), Continuous Learning Points (CLP), Professional Development Units (PDU), and Certified Professional Education Units (CPE).

- One CEU = 10 clock hours of instruction
- One PDH, CLP, PDU, or CPE = one clock hour of instruction
- One CEU = 10 PDH, CLP, PDU, or CPE

Course completion requires participants to attend 80% of scheduled class meetings (and complete associated exams or projects, if applicable). Participants receive a certificate indicating the number of CEUs earned.

CEUs provide a permanent record of an individual's educational accomplishments in an organized continuing education experience under responsible sponsorship, capable direction, and qualified instruction. UAH's use of the CEU follows the accepted criteria and guidelines established by Southern Association of Colleges and Schools Commission on Colleges (SACSCOC), which complies with internationally recognized standards of The International Association for Continuing Education and Training (IACET).
Attend Class Anytime and Anywhere with 24/7 Streaming.

UAH PD Solutions offers you the flexibility to participate in programs wherever you have a computer and internet connection. Audio/video and personalized support through the Canvas Learning Management System provide a classroom-like experience by connecting all the digital tools you need in one easy place. Participants have one month to complete the course, or two months for IT courses and courses over 30 hours. Build real-world knowledge and skills that advance your career while fulfilling your professional commitments.

CERTIFICATES
- C++, Java, and Python
- Federal Contract Management
- Earned Value Management
- Master Programmer
- Modeling and Simulation
- Project Management
- Rocket Propulsion
- Supply Chain Management
- Systems Engineering
- Test and Evaluation

SHORT COURSES AND EXAM PREPS
- A+ Exam Prep
- Certified Systems Engineering Professional (CSEP)
- HTML5 and CSS3
- JavaScript
- Missile System Fundamentals
- Monte Carlo (Coming Spring 2018)
- PMP® Bootcamp
- Requirements Development
- Security+ Exam Prep

System Requirements: PCS.uah.edu/OnlineLearning
Let PD Solutions customize a program that targets your organization's specific training goals. Select an existing topic or let us develop a specialized program for your organization. Our highly-respected programs help your organization master the latest techniques and best practices through:

- High-Quality Curriculum
- Subject Matter Experts
- Executive Training Center
- Convenient Locations

Check out a full listing of courses inside or schedule an appointment for customized training!

FEATURED PROGRAMS:

**MANAGEMENT AND LEADERSHIP**
- Effective Leadership
- Contract Management
- Project Management and PMP®
- Earned Value Management
- Interior Design
- PHR®/SPHR® and SHRM-CP
- Risk Management and Schedule Risk Analysis
- Supply Chain Management

**CYBERSECURITY AND IT**
- A+, Linux+, Network+ and Security+
- CAP®, CEH™, and CND
- CASP™ and CISSP®
- Microsoft and QuickBooks
- HTML5 and JavaScript
- C++, Java, and Python
- Oracle and VMware vSphere

**ENGINEERING**
- Modeling and Simulation
- MATLAB and DOORS
- R Programming
- Rocket Propulsion
- Unmanned Aerial Vehicles
- Systems Engineering
- Test and Evaluation