World-Class
Training Provider

2017/2018 COURSE CATALOG

CYBERSECURITY | ENGINEERING | IT | LEADERSHIP | MANAGEMENT

- Classroom
- Online
- Customized

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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 at convenient times. Our programs complement a degree and validate your professional capabilities.

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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.

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Enjoy flexibility as far as the internet will go. Complete 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.*

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

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

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GENERAL INFO

LEADERSHIP
Leadership Essentials and Executive Leadership ........................................... 2

MANAGEMENT
Federal Contract Management ................................................................. 6
Critical Incident Management ................................................................. 6
Federal Costing Essentials ....................................................................... 6
Earned Value Management ....................................................................... 7
Interior Design ......................................................................................... 8
Management of Engineering and Technology .......................................... 9
Project Management and PM® ............................................................... 10
Integrated Supply Chain Management ..................................................... 12
Increasing Donor and Customer Satisfaction ............................................. 13
Federal Proposal Management ............................................................... 13
Basic Life Support for Healthcare Providers .......................................... 13
Effective Business Writing ....................................................................... 13

CYBERSECURITY
A+ and Cloud+ Exam Preps ..................................................................... 14
Network+ and Security+ Exam Preps ....................................................... 15
CEH and CND Exam Preps ...................................................................... 16
CAP® Exam Prep and CISSP Bootcamp .................................................. 17

INFORMATION TECHNOLOGY
Microsoft ................................................................................................. 18
Android Mobile Developer ....................................................................... 20
HTML5 and CSS3 and JavaScript for Beginners .................................... 20
QuickBooks ............................................................................................ 20
Oracle Applications Developer ................................................................. 21
Using VMware vSphere ......................................................................... 21
Master Programmer ................................................................................ 22
C++ Developer ....................................................................................... 22
Java Developer and Python Programming .............................................. 23

ENGINEERING
Aegis Combat Systems ............................................................................. 24
Rotorcraft Systems Fundamentals ............................................................ 25
Missile System Fundamentals ................................................................ 25
Principles of Radar, Sensors, and Tracking ............................................ 25
Principles of Unmanned Aerial Vehicles (UAVs) .................................... 25
Modeling and Simulation ....................................................................... 26
Rocket Propulsion ................................................................................... 27
Certified Systems Engineering Professional (CSEP) Bootcamp .......... 28
MATLAB ................................................................................................ 28
Opening the DOORS® to Requirements Management ....................... 28
Fundamentals of Model-Based Systems Engineering with SysML ..... 28
Applied Systems Engineering ................................................................. 29
Test and Evaluation ................................................................................ 30

GENERAL
Policies, Partnerships, and WIOA Funding ........................................... 31
Continuing Education Units .................................................................... 32
Campus Map .......................................................................................... 32

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 PCS, 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:
Sep 4, 2017  |  Nov 23 – 24, 2017
Dec 22, 2017 – Jan 1, 2018  |  Mar 26 – 30, 2018
LEADERSHIP ESSENTIALS CERTIFICATE

The Leadership Essentials Certificate focuses on skills required for effective leadership in the areas of communication, relationship building, team building, conflict management, self-awareness, and influencing others. Participants will obtain fundamentals on how to integrate their leadership ability or style to optimize teamwork, excellence, responsibility, strengths, and weaknesses throughout an organization.

SAVE $250 by taking the 3-course certificate series or take just one course:
• Building Effective Leadership Skills
• Employee Management and Leadership

Choose One Elective Course:
• Strengths Based Leadership
• Communicating With Influence

NEW Building Effective Leadership Skills

Managers who lead successfully increase their organization’s productivity. The role of the leader is rapidly changing from a traditional model to a “leading in a work team” model. Both seasoned and new leaders require a new set of skills to be successful in driving results from their teams while creating a positive environment within their teams. 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. After completing this course, 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

D. McGee, 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

Managing 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 with your guidance. 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, $895
Campus: Apr 25 – 26, 2018 | W, Th | 8:30 am – 4:30 pm | C2518024
Online: D2518015

Also a core course for the Management of Engineering and Technology Certificate.

FEATURED INSTRUCTOR: DEBBIE MCGEE is a veteran finance and international human resources (IHR) executive with experience in consulting, finance, manufacturing, and other industries. As a CPA, a GPHR, A SHRM-SCP, and a LP for Insights Discovery, Debbie is a recognized authority on achieving organizational effectiveness through the optimization of human capital assets. Having led IHR functions for both European and Asian corporations for the past 10 years, Debbie is currently President of PZI International Consulting, Inc. She was the sole recipient of the 2013 National Foreign Trade Council’s Global Human Resources Innovation Award.
Elective courses (Choose One)

Strengths Based Leadership

For all levels of professionals, learn about your top five strengths and how to leverage them within your team to obtain high-performance results. In this course, you will receive a personalized strengths results booklet with your top five strengths categorized into four leadership domains (i.e. Executing, Influencing, Relationship Building, and Strategic Thinking). Gain an understanding of your personal strengths, how to work better in teams, and how to become a better leader. Learn how to capitalize on your strengths and leverage the strengths of others. Learn to concentrate on positive reinforcements and best practices in your organization instead of focusing on the negative.

L. Fabby, 7 hrs, $395
Campus: Jul 11, 2018 | W | 8:30 am – 4:30 pm | C2518026

*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.

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 provided to you at the conclusion of the course for your archive.

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

Also Available:
- Appreciating Personality Diversity
- Driving Employee Engagement
- Leading Across Generations
- Conflict Management

Call 256.824.4430 for details.

“Presenters made participants comfortable and made each individual feel valued. A new way of thinking and I will use it to improve myself and team. Easy to understand concepts, but powerful. I was very impressed with the program and cannot wait to go back to work and apply the concepts learned.”

– Building Effective Leadership Skills Participant
EXECUTIVE LEADERSHIP CERTIFICATE

The Executive Leadership Certificate focuses on enhancing and improving leadership tools and skills. Participants will gain strategies on how to become better leaders when making decisions, providing feedback, resolving conflicts, improving employee performance, building teams, increasing commitment, enhancing communication, coaching and mentoring individuals, and motivating others throughout an organization.

SAVE $250 by taking the 3-course certificate series or take just one course:

- Creating a High Performing Culture
- Critical Thinking Skills

Choose One Elective Course:
- Effective Decision Making Skills
- Leveraging Polarities in Organizations

NEW Creating a High Performing Culture

Disengaged. Unmotivated. Uninspired. Isolated. Just showing up. Planning the next move or the next vacation? These are just some of the descriptors of well over 50% of today’s American workforce. Job longevity is decreasing, while the costs of finding suitable replacements, especially for the most talented and experienced, is dramatically increasing. Creative, forward-looking organizations and leaders are seeking to create positive, affirming, and high performing cultures through excellent coaching and mentoring. This course is designed to guide public and private, for-profit and non-profit organizational and functional leaders from an intellectual understanding of coaching and mentoring to the development of an actionable road map for change. This is a practitioner’s course grounded in theory, best practices, and lessons learned.

P. Risher, 21 hrs, $995
Campus: Oct 3 – 5, 2017 | T – Th | 8:30 am – 4:30 pm | C2518006
Campus: Sep 11 – 13, 2018 | T – Th | 8:30 am – 4:30 pm | C2519001
Online: D2518001

NEW Critical Thinking Skills

This course is designed for busy professionals who wish to enhance their skills in critical thinking. Improve your decision-making skills by enhancing your ability to logically analyze situations, apply reasoning, construct logical arguments, evaluate the strength of opinions made by others, and formulate conclusions that lead to sound decisions. You will learn techniques and strategies to employ in understanding current issues, belief systems, and ethical positions. Included will be case study discussions on individual and group decision making techniques.

K. Burton, 14 hrs, $895
Campus: Oct 25 – 26, 2017 | W, Th | 8:30 am – 4:30 pm | C2518018
Campus: Oct 10 – 11, 2018 | W, Th | 8:30 am – 4:30 pm | C2519002
Online: Coming Fall 2017

Also Available:
- Appreciating Personality Diversity
- Driving Employee Engagement
- Leading Across Generations
- Conflict Management

Call 256.824.4430 for details.

Excellent experience. It was more beneficial than I expected. The instructor was very pleasant, professional, and knowledgeable of topics. Examples used were applicable and helpful.

– Executive Leadership Participant
Elective courses (Choose One)

**NEW Effective Decision Making Skills**

Effective decision-making is the key to much of what we do in our short and long-term personal and work experiences. You will gain understanding in how to make the best decisions and how to avoid traps that decision makers face. You will discuss several straightforward, proven techniques and how they can be applied in your environment. Recognize how decisions are currently made at your workplace, identify rapid change environments of information overload, and improve your critical business decisions confidently, quickly, and correctly.

*J. Little, 7 hrs, $395*

*Campus: Nov 9, 2017 | Th | 8:30 am – 4:30 pm | C2518003*

*Campus: Nov 15, 2018 | Th | 8:30 am – 4:30 pm | C2519003*

**Leveraging Polariies in Organizations**

Leaders tend to approach challenges using traditional gap-analysis/problem-solving methods alone. This “Polarity Thinking” workshop will supplement this approach through an awareness of inherently unsolvable and unavoidable challenges referred to in business literature as tensions, paradoxes, and polarities. Developing competency to see and leverage polarities supports leaders, teams, and organizations to attain their preferred future faster and more sustainably. Learn to recognize the differences between problems to solve and polarities to leverage. Identify action steps to gain the upside benefits and early warning signs of polarity thinking, and gain a competitive advantage in your organization.

*L. Fabby, 7 hrs, $395*

*Campus: Nov 16, 2017 | Th | 8:30 am – 4:30 pm | C2518016*

*Campus: Dec 13, 2018 | Th | 8:30 am – 4:30 pm | C2519004*

*Each individual will be provided a mapping tool.

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**FEATURED INSTRUCTORS:**

**LANE FABBY** specializes in executive and leadership development, training and facilitation, curriculum design, team development, communication development, and executive coaching. Lane holds an MS in Global Leadership and a certification in Appreciative Inquiry, Polarity Thinking, Project Management, Strengths Advocacy, and she is a Temperament Certified Professional. She is also a qualified Executive Coach through the Center for Executive Coaching (International Coach Federation Accredited).

**GEN PAULETTE RISHER (RET.)** is the Program Director for Veteran Job Placement at Still Serving Veterans. She also has a private organizational and learning consulting practice. She holds a Master’s degree in Education with a specialization in Educational Technology and Adult Learning as well as a Master’s degree in Organizational Psychology and a Bachelors in Psychology. Paulette is a graduate of the Army War College and the Air War College.

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**WE OFFER FACILITATION AND EXECUTIVE COACHING.**

Call 256.824.4430 for details.
NEW Critical Incident Management

Organizations need leaders who can refine or develop and implement an organizational management emergency preparedness structure. The Critical Incident Management (CIM) program provides best practices that align with National Preparedness Goals. Gain insight on efficient, effective tools and management practices that align organizations with the Department of Homeland Security recommendations to prevent, protect against, mitigate, respond to, and recover from threats and hazards that pose risks. From human caused incidents like “active shooter,” to technology (cyber), meteorological, geological, and Bio, CIM gives insight on tools and techniques to identify risks, threats and hazards and establishes a fundamental process to enact plans, policies, and procedures.

J. Still, 21 hrs, $495
Campus: Sep 26 – 28, 2017  |  T – Th  |  8:30 am – 4:30 pm  |  C2518009

* NCMA Member Discount

Federal Contract Management Essentials and Specialization programs satisfy requirements for the National Contract Management Association Continuing Professional Education.

Federal Contract Management Essentials and 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*
Campus: Oct 15 – 19, 2018  |  M – F  |  8:00 am – 5:00 pm  |  C2519005
Online: D2518020

*NCMA Member Discount

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 course content.

H. Cleaver, 14 hrs, $495
Campus: Mar 5 – 6, 2018  |  M, T  |  8:30 am – 4:30 pm  |  C2518027
Online: D2518021

*NCMA Member Discount
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 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.

SAVE $300 by taking 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 EVM practitioners in the tenets of work planned, work accomplished, and actual work cost. Discuss Earned Value Management 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, $895
Campus: Sep 18 – 19, 2017 | M, T | 8:30 am – 4:30 pm | C2518013
Campus: Sep 17 – 18, 2018 | M, T | 8:30 am – 4:30 pm | C2519006
Online: D2518002

Also an elective for the Management of Engineering and Technology Certificate.

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 to build 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 formulæ, methods, and techniques covering problematic areas.

G. Smith, 14 hrs, $895
Campus: Oct 30 – 31, 2017 | M, T | 8:30 am – 4:30 pm | C2518014
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, as well as serving as a refresher for individuals with experience.

J. Little 14 hrs, $895
Campus: Nov 27 – 28, 2017 | M, T | 8:30 am – 4:30 pm | C2518015
Campus: Dec 3 – 4, 2018 | M, T | 8:30 am – 4:30 pm | C2519008
Online: D2518004

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.
INTERIOR DESIGN CERTIFICATE

Visualize beautiful and functional surroundings created by you. Whether you are searching for new career skills or knowledge for personal use, this program is certain to provide the solutions.

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 are 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 10 – Dec 5, 2017  |  T  |  5:30 – 8:00 pm  |  C2518017*
Campus: Oct 9 – Dec 4, 2018  |  T  |  5:30 – 8:00 pm  |  C2519009**
*Class will not meet Nov 21, 2017
**Class will not meet Nov 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.

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 Sep 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.
MANAGEMENT OF ENGINEERING AND TECHNOLOGY CERTIFICATE

Engineering and technical managers plan, lead, and coordinate the direction of design, research, development, and production in organizations. As competitive pressures reshape the typical role of the engineer to one that encompasses management, individuals with skills that bridge that gap have a distinct advantage over competitors. This program is designed for early and mid-career engineers who want to prepare for management roles in technically focused organizations. **Prerequisite:** Undergraduate degree in a technical field, business management, or equivalent experience.

**SAVE $500 by taking the 5-course certificate series or take just one course:**

- Employee Management and Leadership
- Strategic Decision Management

Choose Three Elective Courses:
- Systems Engineering Overview
- Supply Chain Relationship Management
- Project Quality and Risk Management
- Operations Systems Management
- Earned Value Management Essentials

### Employee Management and Leadership

Learn best practices on finding, interviewing, and hiring a superior workforce. Gain knowledge to keep employees motivated, inspired, and focused to attain goals with your guidance. Become the successful manager who makes a difference in the work life of employees and for your organization. Course topics include team building, effective delegation, decision-making errors, human behaviors at work, and human resources and management tips.

**K. Burton, 14 hrs, $895**
**Campus:** Apr 25 – 26, 2018 | W, Th | 8:30 am – 4:30 pm | C2518024
**Online:** D2518015

Also a core course for the Leadership Essentials Certificate.

### Strategic Decision Management

Learn decision-making methodologies that influence alignment between the manager’s technical decision processes and the company’s organizational strategy. Discuss normative and descriptive approaches to strategic thinking. Explore how to structure strategic decision-making processes, and learn how to assess effectiveness with the performance measurement systems. Investigate links between strategy, organizational structure, and value chain with technical decision-making.

**J. Fortune, 14 hrs, $895**
**Campus:** Jun 6 – 7, 2018 | W, Th | 8:30 am – 4:30 pm | C2518035
**Online:** D2518016

### Elective courses (Choose Three)

#### Project Quality and Risk Management

**C. Gardner, 21 hrs, $895**
**Campus:** Apr 16 – May 7, 2018 | M, W | 5:30 – 8:30 pm | C2518033
**Online:** D2518013

See Page 10. Also a core course for the Project Management Certificate.

#### Systems Engineering Overview

**G. Tackett, 14 hrs, $895**
**Campus:** Jul 24 – 25, 2018 | T, W | 8:30 am – 4:30 pm | C2518021
**Online:** D2318006

See Page 29. Also a core course for the Applied Systems Engineering Certificate.

#### Earned Value Management Essentials

**R. Hycoop, 14 hrs, $895**
**Campus:** Sep 17 – 18, 2017 | M, T | 8:30 am – 4:30 pm | C2518013
**Campus:** Sep 18 – 19, 2017 | M, T | 8:30 am – 4:30 pm | C2519006
**Online:** D2518002

See Page 7. Also a core course for the Earned Value Management Certificate.

#### Supply Chain Relationship Management

**C. Gardner, 14 hrs, $895**
**Online:** D2518006

See Page 12. Also a core course for the Integrated Supply Chain Management Certificate.

#### Operations Systems Management

**N. Loyd, 14 hrs, $895**
**Online:** D2518008

See Page 12. Also a core course for the Integrated Supply Chain Management Certificate.
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 is responsive to the Project Management Book of Knowledge (PMBOK®) and is specifically designed to focus on the practical application of project management concepts, particularly in a Government/contractor environment. You will immediately acquire knowledge and tools needed to manage your projects’ successful completion.

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 Scope, Cost, and Schedule Management

Was the project completed on time, aligned with the budget, and did it meet the customer’s 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, measure performance, and communicate the results in performance reports. Learn scope controls with a WBS and components of deliverables. PMBOK® Knowledge Areas: Scope, Cost, Time, Integration, and Communication

R. Steele, 21 hrs, $895
Campus: Mar 6 – Apr 3, 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, Quality, and Scope

C. Gardner, 21 hrs, $895
Campus: Apr 16 – May 7, 2018 | M, W | 5:30 – 8:30 pm | C2518033
Online: D2518013
Also an elective for the Management of Engineering and Technology Certificate

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: Risk, Procurement, and Integration

H. Cleaver, 21 hrs, $895
Campus: Jun 5 – 26, 2018 | T, Th | 5:30 – 8:30 pm | C2518034
Online: D2518014

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

Fall 2017 | B2518001
Weekly Online Portion: Aug 22 – Dec 12, 2017 | T | 7:00 – 8:15 pm (CST)
Campus Portion: Dec 18 – 20, 2017 | M – W | 8:00 am – 6:00 pm | 3-day Bootcamp

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

** 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 their time to learn all the material needed to pass the exam without experiencing information overload. 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.

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, $895
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, $895
Online: D2518008

Also an elective for the Management of Engineering and Technology Certificate.

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, $895
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, $895
Online: D2518010

Also an elective for the Management of Engineering and Technology Certificate.

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.
**New Increasing Donor and Customer Satisfaction**

Whether you are selling a product or service, seeking donations for your nonprofit, or simply need to motivate your employees, there are ways you can be more effective with less effort. In a world where customer relationships, employee morale, and customer loyalty are at all-time lows, there are simple things you can do to improve all and increase the bottom line while growing employee satisfaction. Gain insight into how you can relate better to your customers and employees to improve results in your organization. One of the prime benefits is increased sales, more signed contracts, and if you are a nonprofit organization, more donations.

W. Olson, 7 hrs, $395  
**Campus:** Oct 25, 2017 | W | 8:30 am – 4:30 pm | C2518002  
**Campus:** Apr 25, 2018 | W | 8:30 am – 4:30 pm | C2518029  
**Online:** D2518025

**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:** D2518017

**Basic Life Support for Healthcare Providers**

Basic Life Support (BLS) for Healthcare Providers is an American Heart Association certification that is required for all Nursing students and is recognized by most hospitals. It is intended to provide healthcare professionals the ability to recognize life-threatening emergencies, provide CPR, use an AED, and relieve choking, as well as other lifesaving skills.

5 hrs, $60  
**Campus:** Aug 18, 2017 | F | 8:00 am – 1:00 pm | C2518010  
**Campus:** Aug 22, 2017 | T | 8:00 am – 1:00 pm | C2518011  
**Campus:** Oct 19, 2017 | Th | 12:30 – 5:30 pm | C2518019  
**Campus:** Nov 18, 2017 | S | 8:00 am – 1:00 pm | C2518020  
**Campus:** Dec 9, 2017 | S | 8:00 am – 1:00 pm | C2518021  
**Campus:** Dec 13, 2017 | W | 12:30 – 5:30 pm | C2518022

**NEW Effective Business Writing**

Learn practical workplace writing strategies to assist you in developing documents that are clear, concise, complete, and correct. Topics that will be discussed 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.

**On Completion, You Will Be Able To:**
- Understand the importance of professional workplace communication
- Develop documents that are styled to accommodate your workplace
- Adapt messages to meet the needs of different audiences
- Use document design and visuals to enhance readability

S. Gunn, 14 hrs, $895  
**Campus:** Jun 19 – 20, 2018 | T, W | 8:30 am – 4:30 pm | C2518030
In order to provide our participants with a more insightful and accurate career direction, we have created a certification path for both cybersecurity practitioners and managers at each of the beginner, intermediate, and advanced levels. This certification path categorizes and describes cybersecurity work, and also ties each specific course within the cybersecurity discourse to a precise set of skills, which are essential to maximum performance and effectiveness.

BEGINNER

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.

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

D. Spooner, 24 hrs, $1295/$1495*
Campus: Jul 9 – Aug 1, 2018 | M, W | 5:30 – 8:30 pm | C2118042

*With exam voucher

Cloud+ Exam Prep

Validate the understanding and best practices required of IT professionals working in cloud computing environments. Acquire the skills to understand basic cloud terminologies and methodologies, relate cloud implementation and virtualization application to industry best practices, and learn to implement, maintain and deliver cloud technologies and infrastructures. Prepare for CompTIA’s Cloud+ Certification Exam CVO-001 and validate the knowledge required for many cloud-related IT positions. The exam is intended for individuals with two or more years of work experience in IT networking, network storage, or data center administration and a familiarity with any major hypervisor technology pertaining to server virtualization. Go to comptia.org for complete information.

Prerequisites: Experience with any major hypervisor and two to three years’ work experience in IT networking, network storage, or data center administration.

J. Cuneo, 28 hrs, $1295/$1495*
Campus: Sep 20 – Oct 16, 2017 | M, W | 5:00 – 8:30 pm | C2118007
Campus: Sep 17 – Oct 10, 2018 | M, W | 5:00 – 8:30 pm | C2119004

*With exam voucher

The instructor really encouraged participation, which helped us learn. He also seemed to want us to succeed in the course. It was useful to have a professional teaching as he could provide real-life examples and answer more advanced technical questions.
**INTERMEDIATE**

**Network+ Exam Prep**  
*Meets DoD Directive 8140*

Prepare for the CompTIA Network+ Exam N10-006**, recognized by the U.S. Department of Defense. Many companies and organizations 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:** 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  
**The course content will be updated to reflect latest exam.

**Security+ Exam Prep**  
*Meets DoD Directive 8140*

CompTIA’s Security+ Exam SYO-401** is the premier vendor-neutral security certification. It is included in the approved list of certifications to meet DoD Directive 8140.1 requirements, 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:** Technical networking experience with an emphasis on security. Network+ or equivalent experience recommended.

J. Hairston, 28 hrs, $1295/$1495*  
**Campus:** Dec 11 – 14, 2017 | M - Th | 8:30 am – 4:30 pm | C2118006

*With exam voucher  
**The course content will be updated to reflect latest exam.

**NOW OPEN**

**UAH TESTING AND CERTIFICATION SERVICES**

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

**View a full listing of exams available at**  
[PCS.uah.edu/TaCS](http://PCS.uah.edu/TaCS) or call 256.824.6373

**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™, and CAP® Exam Preps

**THE UNIVERSITY OF ALABAMA IN HUNTSVILLE**  
**TESTING AND CERTIFICATION SERVICES**
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. Prepare for the EC-Council Certified Ethical Hacker v9 exam and gain 35 hours of class time with an optional 4 hours to complete the CEH™ v9 exam at our location and at your convenience after completion of the course. Go to eccouncil.org for complete certification information.

Prerequisite: Programming and networking experience with an emphasis on security. Network+ and Security+ certifications are beneficial.

J. Hairston/R. Ward, 35 hrs, $2195/$2495*
Campus: Dec 11 – 15, 2017 | M – F | 8:30 am – 4:30 pm | C2118005
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 the intensive, hands-on, lab-based Certified Network Defender (CND) 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: Networking Fundamentals

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

Proud Partners With CompTIA® and EC-Council

As an 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+, and Cloud+.

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.

FEATURED INSTRUCTOR:
ROBERT (BOB) SPEE is a technical analyst with SAIC, supporting the Army Headquarters Materiel Command (AMC) CIO in the areas of system engineering and architecture with an emphasis on the Risk Management Framework (RMF) for management and administration efforts. Spee earned his M.S. in Information Assurance and Security with specialization in Computer Forensics. He is currently enrolled in the Ph.D. program in Information Technology, specializing in Information Assurance and Security. Spee is certified in CISSP, CAP, A+, and Security+.
Certified Information Systems Security Professional (CISSP®) Exam Bootcamp
Meets DoD Directive 8140

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. Understand information security best practices and prepare for the CISSP® Exam. 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: Security+ certification or equivalent professional experience is highly recommended.

K. Williams/R. Beavers, 35 hrs, $2195**
Campus: Sep 18 – Oct 18, 2017  |  M, W  |  5:00 – 8:30 pm  |  C2118003
Campus: April 2 – May 2, 2018  |  M, W  |  5:00 – 8:30 pm  |  C2118040
Campus: Sep 17 – Oct 17, 2018  |  M, W  |  5:00 – 8:30 pm  |  C2119011

**Exam voucher not included

Certified Authorization Professional (CAP®) Exam Prep
Meets DoD Directive 8140

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. Organizations require CAP®s to monitor and protect their network infrastructure and information systems. 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: 1-2 years’ IT security, risk management, systems, and network experience.

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: Sep 12 – 15, 2017  |  T – F  |  8:30 am – 4:30 pm  |  C2118002
Campus: Apr 10 – May 3, 2018  |  T, Th  |  5:00 – 8:30 pm  |  C2118032
Campus: Sep 17 – 14, 2018  |  T – F  |  8:30 am – 4:30 pm  |  C2119003

**Exam voucher not included

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™, and CAP® Exam Preps
INFORMATION TECHNOLOGY

MICROSOFT EXCEL CERTIFICATE

Move from novice to confident Excel specialist. This program also prepares you for the Excel 2013 exam (77-420).

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: Fundamental experience with PCs and Windows.

A. Spain/J. Barnes, 7 hrs, $265
Campus: Oct 10, 2017 | T | 8:30 am – 4:30 pm | C2118011
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: Oct 17, 2017 | T | 8:30 am – 4:30 pm | C2118012
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. 
Prerequisites: ‘MS Excel Essentials’ and ‘Intermediate’ or equivalent experience.

A. Spain/J. Barnes, 7 hrs, $265
Campus: Oct 24, 2017 | T | 8:30 am – 4:30 pm | C2118013
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. This program also prepares you for the Word 2013 exam (77-418).

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: Fundamental experience with PCs and Windows.

S. Steinhauser, 7 hrs, $265
Campus: Nov 8, 2017 | W | 8:30 am – 4:30 pm | C2118014
Campus: Mar 2, 2018 | F | 8:30 am – 4:30 pm | C2118050
Campus: Jul 10 – 12, 2018 | T, Th | 5:00 – 8:30 pm | C2118061
Campus: Nov 14, 2018 | W | 8:30 – 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. Steinhauser, 7 hrs, $265
Campus: Nov 15, 2017 | W | 8:30 am – 4:30 pm | C2118015
Campus: Mar 9, 2018 | F | 8:30 am – 4:30 pm | C2118052
Campus: Jul 17 – 19, 2018 | T, Th | 5:00 – 8:30 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. 
Prerequisites: ‘MS Word Essentials’ and ‘Intermediate’ or equivalent experience.

S. Steinhauser, 7 hrs, $265
Campus: Nov 29, 2017 | W | 8:30 am – 4:30 pm | C2118016
Campus: Mar 23, 2018 | F | 8:30 am – 4:30 pm | C2118054
Campus: Jul 24 – 26, 2018 | T, Th | 5:00 – 8:30 pm | C2118064
Campus: Dec 5, 2018 | W | 8:30 am – 4:30 pm | C2119024
Using Project

Build a solid foundation and learn to effectively manage your Projects. 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. **Prerequisites:** Fundamental experience with PCs and Windows.

- **J. Barnes/P. Tatum, 12 hrs, $425**
  - Campus: Oct 4 – 5, 2017  |  W, Th  |  8:30 am – 3:30 pm  |  C2118021
  - Campus: Jan 29 – 30, 2018  |  M, T  |  8:30 am – 3:30 pm  |  C2118043
  - Campus: Jul 16 – 25, 2018  |  M, W  |  5:00 – 8:00 pm  |  C2118062
  - Campus: Oct 10 – 11, 2018  |  W, Th  |  8:30 am – 3:30 pm  |  C2119017

Project Power User

Maximize your ability to manage tasks and projects. Learn to handle delays and conflicts, consolidate project files, and share 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, $425**
  - Campus: Oct 18 – 19, 2017  |  W, Th  |  8:30 am – 3:30 pm  |  C2118023
  - Campus: Feb 12 – 13, 2018  |  M, T  |  8:30 am – 3:30 pm  |  C2118047
  - Campus: Jul 30 – Aug 8, 2018  |  M, W  |  5:00 – 8:00 pm  |  C2118065
  - Campus: Oct 31 – Nov 1, 2018  |  W, Th  |  8:30 am – 3:30 pm  |  C2119021

**Access Essentials**

Learn the basics of planning, creating, and manipulating databases using tables. Master data entry rules and properties using them to your advantage. **Prerequisites:** Fundamental experience with PCs and Windows.

- **B. McCall, 7 hrs, $265**
  - Campus: Oct 3 – 5, 2017  |  T, Th  |  5:00 – 8:30 pm  |  C2118010
  - 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: Oct 2 – 4, 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. **Prerequisites:** Fundamental experience with PCs and Windows.

- **S. Steinhauser, 7 hrs, $265**
  - Campus: Sep 13, 2017  |  W  |  8:30 am – 4:30 pm  |  C2118019
  - Campus: Feb 9, 2018  |  F  |  8:30 am – 4:30 pm  |  C2118046
  - Campus: Jun 11 – 13, 2018  |  M, W  |  5:00 – 8:30 pm  |  C2118057
  - Campus: Oct 10, 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. **Prerequisites:** Fundamental experience with PCs and Windows.

- **K. Counselman, 14 hrs, $495**
  - Campus: Apr 2 – 3, 2018  |  M, T  |  8:30 am – 4:30 pm  |  C2118055
  - Campus: Aug 6 – 15, 2018  |  M, W  |  5:00 – 8:30 pm  |  C2118066

**SAVE WHILE TRAINING YOUR EMPLOYEES**

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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.
Introduction to Android™ Application Development

Create an Android app using the latest development technology, and learn to prepare and present it for the retail market. Through in-depth lectures and exercises, gain a foundation for efficiently designing and programming functional Android™ applications that can be applied to a multitude of supported devices.

**Prerequisite:** Basic programming experience required. Object-Oriented programming language experience recommended.

J. Busby, 21 hrs, $945

**Campus:**
- Sep 5 – 21, 2017 | T, Th | 5:00 – 8:30 pm | C2118008
- Feb 27 – Mar 22, 2018 | T, Th | 5:00 – 8:30 pm | C2118031*

**Online:** D2118008

*Class will not meet March 13 & 15, 2018

Android™: Beyond the Basics

Unleash the hidden power of Android applications with a deeper understanding of Android internals. Discover and practice proven techniques to create robust, stable, secure, scalable, and feature-rich Android™ applications. **Prerequisite:** 'Intro to Android Application Development' or equivalent experience.

J. Busby, 21 hrs, $945

**Campus:**
- Oct 10 – 26, 2017 | T, Th | 5:00 – 8:30 pm | C2118009
- May 8 – 24, 2018 | T, Th | 5:00 – 8:30 pm | C2118035

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. **Prerequisites:** Basic computer skills and knowledge of accounting terms.

A. White, 7 hrs, $265

**Campus:**
- Oct 25, 2017 | W | 8:30 am – 4:30 pm | C2118001
- Mar 20, 2018 | T | 8:30 am – 4:30 pm | C2118053
- Oct 23, 2018 | W | 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 DCAAs 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.

A. White, 7 hrs, $265

**Campus:**
- Feb 6, 2018 | T | 8:30 am – 4:30 pm | C2118044
- Aug 7, 2018 | T | 8:30 am – 4:30 pm | C2118067
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; and 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 $300 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, $945
Campus: Feb 20 – Mar 8, 2018 | T, Th | 5:00 – 8:30 pm | C2118027

Oracle PL/SQL Programming

The 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, $945
Campus: Apr 3 – 19, 2018 | T, Th | 5:00 – 8:30 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, $945
Campus: May 1 – 17, 2018 | T, Th | 5:00 – 8:30 pm | C2118033

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 12 – 14, 2017 | T – Th | 8:30 am – 4:30 pm | C2118025
Campus: Sep 18 – 20, 2018 | T – Th | 8:30 am – 4:30 pm | C2119012

vmware®
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, 21 hrs, $945
* **Campus:** Sep 21 – Sep 17, 2017 | M, W | 5:00 – 8:30 pm | C2118017
* **Campus:** Mar 5 – 21, 2018 | M, W | 5:00 – 8:30 pm | C2118003
* **Online:** D2118001

**Class will not meet Sep 4, 2017**

Advanced C++ Programming

Building on your knowledge of basic C++ syntax, 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, 21 hrs, $945
* **Campus:** Sep 12 – 28, 2017 | T, Th | 5:00 – 8:30 pm | C2118018
* **Campus:** Mar 5 – 21, 2018 | M, W | 5:00 – 8:30 pm | C2118028
* **Campus:** Sep 10 – 26, 2018 | M, W | 5:00 – 8:30 pm | C2119001
* **Online:** D2118002
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. **Prerequisites:** Fundamental experience with PCs and programming concepts.

*D. Layman/C. Cantrell, 28 hrs, $1095*

**Campus:** Sep 25 – 28, 2017 | M – Th | 8:30 am – 4:30 pm | C2118020

**Campus:** Apr 2 – 5, 2018 | M, W | 5:00 – 8:30 pm | C2118029

**Campus:** Oct 8 – 11, 2018 | M, W | 5:00 – 8:30 pm | C2119005

**Online:** D2118003

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. Your Java application will be able to run on any operating system with Java support, including Windows, Linux, and Mac. **Prerequisites:** 'Introduction to Java Programming’ or equivalent experience.

*D. Layman/C. Cantrell, 28 hrs, $1095*

**Campus:** Oct 16 – 19, 2017 | M – Th | 8:30 am – 4:30 pm | C2118022

**Campus:** May 7 – Jun 4, 2018 | M, W | 5:00 – 8:30 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 Nov 21, 2018

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:** Fundamental experience with PCs and familiarity with programming concepts.

*D. Layman, 21 hrs, $945*

**Campus:** Oct 30 – Nov 1, 2017 | M – W | 8:30 am – 4:30 pm | C2118024

**Campus:** Mar 19 – Apr 11, 2018 | M, W | 5:00 – 8:30 pm | C2118039**

**Campus:** Oct 1 – 3, 2018 | M – W | 8:30 am – 4:30 pm | C2119008

**Online:** D2118005

**Class will not meet Mar 26, 2018

Virtual Desktops

Utilize the Virtual Desktop tool to enhance your course experience. Feel confident that you can apply your newly attained knowledge!
ENGINEERING

AEGIS COMBAT SYSTEM CERTIFICATE

Gain a comprehensive foundation in the history, deployment, and future of the Aegis Combat System (ACS). ACS was developed over the last fifty years as a multi-warfare system-of-systems, integrating sensors, command and control, weapons, electronic warfare, navigation, and more. With the Navy and MDA’s interest for a land-based alternative to Aegis afloat, accelerate your ability to understand and use naval vocabulary. Become familiar with the Aegis Combat and Weapon System elements. Participants must be a U.S. Citizen and provide verification of citizenship. See page 31 for details.

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

- Aegis Combat and Weapon Systems Overview
- Aegis Combat Systems Engineering
- Aegis Ballistic Missile Defense

Aegis Combat and Weapon Systems Overview

Discover how Aegis systems have adapted to change and enabled our sailors to command the sea, control the littorals, project power ashore, and safeguard our troops from the growing threat of ballistic missiles. Navy terms, concepts, and key events in the Aegis Program are introduced. Gain a historical perspective that led to the initiation of Aegis.

J. Carter, 24 hrs, $1150
Online: D2318022

Aegis Combat Systems Engineering

Study the three systems engineering process phases: concept definition, design, and implementation. Examine how the SE process ensures that systems are developed to meet affordable, operationally effective, and timely mission objectives. Focus on engineering the weapon system including standard missile and Aegis Combat System integration.

J. Parnell, 24 hrs, $1150
Online: D2318023

Aegis Ballistic Missile Defense

Naval sea engagements can be divided into three major functions: detect, control, engage. The central integrating element of the ACS is the Aegis Weapon System (AWS), which is the foundation for developing Aegis Ballistic Missile Defense (BMD). Understand how Aegis Combat System was upgraded to include the additional BMD mission while maintaining existing Aegis operational warfare capabilities.

J. Parnell, 32 hrs, $1350
Online: D2318021

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.

The course content was well put together and flowed well as the instructors taught. The instructor knew the material well and were great presenters.
NEW Principles of Unmanned Aerial Vehicles (UAVs)

Expand your knowledge of Unmanned Aerial Vehicles (UAVs) and drone aircraft. Explore the concepts of fixed wing (airplane) and rotary wing (helicopter) flight principles, flight control, and major structural and electronic components of UAVs. This course is designed for managers who want to better understand employee projects, engineers wanting to shift to the UAV field, or those with a technical background who want to learn about UAVs. Gain hands-on exposure with radio-controlled (RC) aircraft to illustrate concepts discussed. Upon completion, identify major components of any UAV, understand the functions of those components and how they work, and know industry jargon.

What You Will Learn:
• Unmanned Aerial Vehicle jargon and buzzwords
• Autopilot information
• Avionics and common flight sensors
• Ground station or ground flight computer
• Control actuators and servomotors
• Autonomous flight and GPS waypoint navigation
• Different types of propulsion systems
• Current rules and regulations for UAV use (FAA)
• Future of UAVs

Prerequisite: Familiarity with mathematics and engineering is a plus, but not required.

B. Stiltner, 14 hrs, $695
Campus: Oct 3 – 5, 2017 | T – Th | 8:30 am – 4:30 pm | C2318005

Rotorcraft Systems Fundamentals

Understand the history, fundamental aerodynamics, and design considerations of rotorcraft systems. Explore how the increasing complexity of rotorcraft and their subsystems require a rigorous systems engineering approach to designing, delivering, and sustaining an affordable rotorcraft system. Learn how a rotorcraft’s ability to hover provides a unique capability to perform manned and unmanned missions requiring vertical takeoffs, landings, and maneuvering within a confined area. Prerequisite: Undergraduate degree in a technical field or equivalent experience.

B. Marshall, 20 hrs, $1195
Online: D2318019
Customized Training: 256.824.4430

Missile System Fundamentals

Learn a 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. The course is designed for employees in government, program management, and contractor offices seeking introductory or deeper practical knowledge. Prerequisite: Undergraduate degree in a technical field or equivalent experience. Participants must be a U.S. citizen and provide verification of citizenship. See page 31 for details.

D. Gunther, 35 hrs, $1295
Online: D2318001
Customized Training: 256.824.4430

Principles of Radar, Sensors, and Tracking

Develop a foundation radar design from the electromagnetic theory for the antenna, transmitter, receiver components, passive sensors (including IR), range measurement, angle estimation, and signal processing for detection will be reviewed. Review MTI/Pulse Doppler fundamentals. Explore optimal track filter design (Kalman Filter Theory) beginning with simple cases and moving towards combining data from multiple sensors. Realistic problems such as treatment of sensor bias, modeling errors, and tracking requirements imposed by discrimination will be reviewed. Emphasis will be placed on understanding the models underlying the algorithms and mathematical derivations.

R. Morris, 21 hrs, $1095
Campus: Oct 10 – 26, 2017 | T, Th | 5:00 – 8:30 pm | C2318011
Online: D2318018
MODELING AND SIMULATION CERTIFICATE

Build a foundation in modeling and simulation, and learn the benefits of using models and their simulation to improve engineering processes. **Prerequisite:** Undergraduate degree in a technical field or equivalent experience.

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

Choose four of the following five courses:
- Fundamentals of Modeling and Simulation
- Simulation Verification, Validation, and Accreditation
- Developing Simulations
- Systems Analysis, Modeling, and Simulation
- Monte Carlo Simulation

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. Includes developing simple simulations.

**M. Petty, 14 hrs, $895**
**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, $895**
**Online:** D2318004

Simulation Verification, Validation, and Accreditation

A range of verification and validation (V&V) methods including informal, static, dynamic, and formal methods are described, and guidelines for selecting the best method for a given model are discussed. Specific procedures for performing important V&V methods and interpreting their results are explained.

**M. Petty, 14 hrs, $895**
**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.

**J. Little, 14 hrs, $895**
**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:** Some background in probability or statistics and MS Excel is recommended. Examples will be given in both Excel and R.

**M. Petty, 14 hrs, $895**
**Campus:** Jun 12 – 13, 2018 | T, W | 8:30 am – 4:30 pm | C2318015
**Online:** Coming Spring 2018

FEATURED INSTRUCTOR:

**DR. MIKEL PETTY** is the Director of the UAH Center for Modeling, Simulation, and Analysis. He has worked in modeling and simulation research and development since 1990 in areas that include simulation interoperability and composability, computer generated forces, multiresolution simulation, and verification and validation methods.
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

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**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

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**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

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**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

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**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

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**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.
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. In two days, explore CSEP requirements and the INCOSE SE Handbook to cover all topical areas that might be on the CSEP exam. Interactive work, study plans, and sample exam questions provide the effective preparation needed for the exam. The course also prepares individuals to pass the ASEP (Associate Systems Engineering Professional) exam. **Prerequisites:** 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.

*J. Whitehead, 14 hrs, $895/$695*

**Public:**

- **Campus:** Apr 24 – 26, 2018 | T – Th | 8:30 am – 4:30 pm | C2318022
- **Campus:** Oct 2 – 4, 2018 | T – Th | 8:30 am – 4:30 pm | C2319005

**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 and exposure to programming in any language.

*B. Stiltnner, 20 hrs, $995*

**Campus:**

- Oct 10 – 26, 2017 | T, Th | 5:00 – 8:20 pm | C2318007
- Apr 17 – 19, 2018 | T – Th | 8:30 am – 4:10 pm | C2318014
- Oct 9 – 25, 2018 | T, Th | 5:00 – 8:20 pm | C2319002

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:** Fundamental experience with PCs and it is recommended to have requirements development, management, and verification knowledge.

*C. Zolynsky, 21 hrs, $945*

**Campus:**

- Apr 24 – 26, 2018 | T – Th | 8:30 am – 4:30 pm | C2318022
- Oct 2 – 4, 2018 | T – Th | 8:30 am – 4:30 pm | C2319005

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:**

- Nov 6 – 8, 2017 | M – W | 8:30 am – 4:30 pm | C2318010
- Apr 9 – 11, 2018 | M – W | 8:30 am – 4:30 pm | C2318013
- Nov 5 – 7, 2018 | M – W | 8:30 am – 4:30 pm | C2319001
**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.

**SAVE $500 by taking 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

**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.

**G. Gunther, 14 hrs, $895**

**Campus:** Oct 2 – 3, 2018 | T, W | 8:30 am – 4:30 pm | C2319004

**Online:** D2318009

**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. Participate in interactive exercises to develop requirements and experience an entire requirements development process.

**G. McPherson, 14 hrs, $895**

**Campus:** Oct 18 – 19, 2018 | W, Th | 8:30 am – 4:30 pm | C2318009

**Campus:** Aug 28 – 29, 2018 | T, W | 8:30 am – 4:30 pm | C2319003

**Online:** D2318007

Also an elective for the Systems Test and Evaluation Certificate.

**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, $895**

**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, $895**

**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, documents, and more. At the end of the course, you will be familiar with elements of a test program, test sites that will provide you the best data to support your test requirement and mission, and confidence to proceed with assurance in your role.

J. Whitehead/G. Tackett, 14 hrs, $895
Campus: Sep 20 – 21, 2017 | W, Th | 8:30 am – 4:30 pm | C2318001
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 which all 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, $895
Campus: Nov 15 – 16, 2017 | W, Th | 8:30 am – 4:30 pm | C2318002
Campus: Mar 6 – 7, 2018 | T, W | 8:30 am – 4:30 pm | C2318017
Online: Coming Spring 2018

Requirements Development

G. McPherson, 14 hrs, $895
Campus: Oct 18 – 19, 2017 | W, Th | 8:30 am – 4:30 pm | C2318009
Campus: Aug 28 – 29, 2018 | T, W | 8:30 am – 4:30 pm | C2319003
Online: D2318007

See Page 29. 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 on how to evaluate reliability, availability, and maintainability (RAM).

G. Tackett, 14 hrs, $895
Campus: Dec 13 – 14, 2017 | W, Th | 8:30 am – 4:30 pm | C2318003
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, $895
Campus: Dec 11 – 12, 2018 | T, W | 8:30 am – 4:30 pm | C2319007
Online: D2318010

See Page 29. 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 10. Also a core course for the Project Management Certificate.
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 PCS courses. Mail, fax, or email your company purchase order, tuition voucher, or other billing authorization to the PCS 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 PCS 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. Full Program Discounts will be forfeited with any course withdrawal. Full course fees will be charged for all courses completed and the course in progress, if applicable.

Campus Parking Regulations
A parking permit is included in the course fee for on-campus non-credit courses lasting less than 15 weeks and will be issued at the opening session. Please arrive 15 minutes early to allow time to attach your decal. Campus parking information may be found at PCS.uah.edu/Parking.

Continuing Education Units (CEUs)
CEUs are nationally recognized non-academic credit for professional development and granted for professional development courses. Earn one CEU for ten clock hours of class time. Attend 80% of the class clock hours to receive CEUs. See page 32 for additional information.

Transcripts and Grades
CEUs earned through PCS are recorded in the attendee’s name. A transcript is available for $5 by submitting your request to the PCS Registration Office.

The non-credit course grading system is Pass/Fail. Assignments and quizzes may be given for courses preparing for professional exams and in online learning courses.

Certificate Program Completion
Participants must complete all of the certificate program courses in a professional field within a five-year period. Upon completion of the final course, submit a Certificate Completion Form to receive an official certificate.

If a certificate program is updated or retired during this five-year period, the PCS staff will work with active participants to provide the best alternatives for program completion.

Inclement Weather
UAH PCS 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 a U.S. Citizen and provide verification of citizenship. Visit PCS.uah.edu/Citizenship for more details.

Course Cancellation
Non-credit courses are self-supporting and classes 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 PCS 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 PCS 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 PCS courses as equivalent credit within their internal systems.

Alabama State Board of Public Accountancy (ASBPA) Many certificates and courses are approved for ASBPA 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 PCS 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
PCS is a CompTIA Academy Partner. Exam preps eligible for benefits are: A+, Cloud+, Network+, and Security+

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 are an strategic alliance between UAH PCS 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 PCS is now an EC-Council Accredited Training Center. Courses eligible for benefits: Certified Ethical Hacker (CEH™)

EdAssist™
Partnered together, EdAssist and UAH PCS 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 PCS partnered to offer Certified Systems Engineering Professional exam 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)
ISSA UAH PCS is proud to offer North Alabama Chapter members (NACISSA) a 10% discount on select cyber-related and information systems security courses. A+, Security+, Network+, Cloud+, CEH™, CISSP®, and CAP®

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

National Contract Management Association (NCMA)
Federal Contract and Federal Proposal Management programs meet requirements for NCMA continuing professional education. Certificates eligible for the NCMA discount are: Federal Contract Management Essentials and Specialization

Incorporated 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

National Association of State Boards of Public Accountancy (NASBA) Many certificates in the certificate at once

National Contract Management Association (NCMA)
Federal Contract and Federal Proposal Management programs meet requirements for NCMA continuing professional education. Certificates eligible for the NCMA discount are: Federal Contract Management Essentials and Specialization

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+ Driver, and Java Developer.

* Contact Lane.Fabby@uah.edu or 256.824.4430 for additional information.
The UAH BA or BS in Professional Studies
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Continuing Education Units (CEUs)

UAH PCS 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.

Visit PCS.uah.edu/OnlineLearning for information and course descriptions.

CERTIFICATES

- Aegis Combat System
- Android™ Mobile Developer
- C++ and Java
- Contract and Proposal Management
- Earned Value Management
- Federal Costing Essentials
- Management of Engineering and Technology
- Master Programmer
- Modeling and Simulation
- Project Management
- Rocket Propulsion
- Supply Chain Management
- Systems Engineering
- Test and Evaluation

SHORT COURSES AND EXAM PREPS

- Certified Systems Engineering Professional (CSEP)
- HTML5 and CSS3
- JavaScript
- Missile System Fundamentals
- PMP® Bootcamp
- Python Programming
- Radar, Sensors, and Tracking
- Rotorcraft Systems

System Requirements: PCS.uah.edu/OnlineLearning
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