College of Professional Studies

148 Wilson Hall
Telephone: 256.824.6013
Email: CPSDeansOffice@uah.edu (cpsdeansoffice@uah.edu)
Dean: Karen M. Clanton, Ed.D.

Mission
The mission of the College of Professional Studies is to increase student access, external partnerships, community outreach, and extended learning that leverage the University’s areas of expertise for the mutual benefit of the community and the institution.

Degrees
Bachelor of Arts in Professional Studies
Bachelor of Science in Professional Studies

The Bachelor of Arts or Bachelor of Science in Professional Studies (BPS) is designed for adults who have prior college and/or work experience, but have yet to obtain a four-year degree. The program offers a well-rounded education through an interdisciplinary curriculum with established concentration areas that provide a flexible pathway for adults to complete a bachelor’s degree. Concentration areas include Leadership Strategies and Dynamics; Organizational Studies; Technology, Science and Society; and Engineering Technology.

The program is structured to meet the needs of working professionals; balancing academic rigor with flexibility and value. The degree provides students the option of participating fully online, in the classroom or a combination. Students may transfer up to 75% of previously completed coursework, including up to 34 hours of technical credits, to this degree. The program also accepts ACE recommended credits for military training. An Academic Success Specialist will work with students to provide them with a clear pathway to success, starting with the admission process and on through graduation.

The College of Professional Studies provides adult learners the opportunity to expand their knowledge base across an array of academic disciplines to meet professional and personal goals. Graduates will learn how to communicate effectively, make informed decisions, and use analytical and critical thinking. For more details visit UAHComplete.uah.edu (https://www.uah.edu/pcs/uah-complete/).

Accreditation
The University of Alabama in Huntsville has institutional accreditation from the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award baccalaureate, masters, and doctoral degrees.

The College of Professional Studies offers the following degree programs:
Bachelor of Arts in Professional Studies (http://catalog.uah.edu/undergrad/colleges-departments/professional-studies/bachelors-ps/)
Bachelor of Science in Professional Studies (http://catalog.uah.edu/undergrad/colleges-departments/professional-studies/bachelors-ps/)
Bachelor of Science in Professional Studies - Engineering Technology Concentration (http://catalog.uah.edu/undergrad/colleges-departments/professional-studies/engineering-technology/)

Engineering Technology
Prepare to establish yourself as a successful, practicing Engineering Technologist. Graduates will use their math, science, and engineering skills to design products and systems, install and maintain products, and provide a wide range of services, such as implementation of the design, testing, calibration, and supervision of its operations.

Organizational Studies
Prepare for careers that involve finding solutions to human problems in organizations and communities. Coursework will focus on business (emphasis on management and information systems) and humanities/social sciences (emphasis on communications, philosophy, political science, psychology, education, and/or sociology). The curriculum will include organizational theory and behavior, professional ethics, management, information systems, individual and group dynamics, and communication skills. Students will acquire an understanding of human behavior in groups, organizations, and larger systems.

Leadership Strategies and Dynamics
Develop an understanding of foundational leadership theory in your chosen context. Focus on the nature of leadership in a variety of settings and prepare for leadership responsibility in the community and in your selected profession. Coursework will focus on business (emphasis on leadership and management) and social sciences/humanities (emphasis on communications, history, philosophy, political science, psychology, and/or sociology).
Courses will provide an educational experience in theories of motivation, leadership styles, organizational and group behavior, professional ethics, communication, theories of cultural difference and multicultural communication, human resources, and/or budgeting.

**Technology, Science and Society**

Integrate the study of science, engineering, and/or technology with its social and cultural impact on humanity. Focus on developing a broad understanding of the technical, historical and social dimensions of science and technology. Curriculum options include engineering, the natural sciences, computer science, information sciences, business, the social sciences, and/or humanities. The curriculum provides an interdisciplinary approach to explore the significance, challenges, and effects that science and technology present to society. Courses allow students to incorporate technical scientific knowledge with analytical thinking from a social perspective.

**B.A. or B.S. in Professional Studies Courses**

**PRO 101 - INTRO COLLEGE ACADEMY**  
Semester Hours: 3  
Focus is on learning theory, discovering learning style preferences and appropriate, effective study methods, understanding the issues facing college students today and strategies to overcome them, learning about available campus academic and student support resources and how to utilize them improving oral and written communication skills. Identifying UAH academic organizations and recognizing the importance of involvement and developing the skills. Must be part of College Academy. May not be used for Charger Foundations.

**PRO 280 - PRIVATE PILOT GROUND SCHOOL**  
Semester Hours: 3  
Prepares student for FAA Private Pilot written examination. Provides student with necessary knowledge to progress into primary pilot flight training. A kit for approximately $150 must be purchased.

**PRO 301 - THRY & PRAC ADULT LEARNING**  
Semester Hours: 3  
This course presents an overview of five foundational learning theories and related research in adult education and development. The conceptual framework is centered on discovering what motivates the adult learner and the impact social perspectives have on adult learning through analysis and discussion. Students will define competencies needed for success in academic study and professional leadership, in setting educational goals, and in planning a learning experience to achieve them. Emphasis is placed on issues unique to adult re-entry students and the university services available to support nontraditional students.

**PRO 310 - ACADEMIC WRITING PROFESS STUDI**  
Semester Hours: 3  
Students will learn academic writing skills by engaging in the process of academic inquiry and argument. The course will cover a broad perspective of writing by exploring various writing and research styles used through different academic professions. Prerequisites: EH 102 or EH 105.

**PRO 315 - ENGINEERING COMMUNICATION**  
Semester Hours: 3  
Students will learn to communicate professionally in an engineering/technical environment. Students will develop written communications such as letters, memos, reports and proposals, create clear process descriptions and instructions, and deliver persuasive and effective oral presentations. Prerequisite: EH 102 or EH 103 or EH 105.

**PRO 320 - INDS PERSPECT & CRITICAL THNKG**  
Semester Hours: 3  
Interdisciplinary studies fosters foundational knowledge acquisition by which individuals draw on multiple disciplinary perspectives and integrate their insights and modes of thinking to advance the studies and the fundamental development of critical and analytical thinking skills. Complex issues are addressed from multi-faceted perspectives that stimulate problem solving, problem defining and problem posing. Emphasis is placed on how to synthesize evidence drawn from multiple sources as a basis for informed decision-making.

**PRO 321 - MEDIA LITERACY**  
Semester Hours: 3  
Investigate the interdisciplinary nature of 21st-century media. Students analyze the combined influence of production methods, semiotics, politics, ethics, and psychology on our critical understanding of advertising, propaganda, conspiracy theories, social media, and the Internet of Things. Prerequisite: EH 102.
**PRO 325 - INDS RESEARCH & APPLICATIONS**  
Semester Hours: 3  
Interdisciplinary research is a contemporary decision-making process for transcending the scope of a single discipline or program to develop insights that offer bold advances in knowledge, solutions to urgent societal problems, an edge in technological innovations, and a more integrative knowledge of multidisciplinary theories and concepts. This course introduces the primary drivers for interdisciplinary research and examines the interdisciplinary research process. Students will apply an integrated model for conducting research that draws on multiple disciplines. Prerequisites: PRO 310 and PRO 320.

**PRO 331 - ENGINEERING TECH FNDNS I**  
Semester Hours: 3  
An introduction to the Engineering Technology profession, resources and skills. Students will learn about engineering design, communication, professional ethics, and basic principles and physical laws used to understand and solve engineering related problems. Prerequisites: MA 113 or higher, EH 102 or EH 105 and PH 102 or higher.

**PRO 332 - ENGINEERING TECH FNDNS II**  
Semester Hours: 3  
A follow-on to PRO 331, the course introduces the Engineering Technology profession, resources and skills. Students will learn about computational engineering tools, graphical communication, characteristics of materials, in addition to the mathematical and statistical methods used to understand and solve engineering-related problems. Co-requisite: PRO 331 (Grade of C- or better).

**PRO 333 - COMPUTER-AIDED DESIGN**  
Semester Hours: 3  
An introduction to Computer-Aided Design (CAD) using Creo Parametric. Covers basic concepts of 3D modeling techniques and frequently used commands required to advance from a novice to an intermediate user level of Creo Parametric. Prerequisite: PRO 332 (grade of C- or better), or special permission. MAE 211 accepted as a substitute. PRO 333 does not substitute for MAE 211.

**PRO 334 - PRINCIPLES OF STATICS**  
Semester Hours: 3  
Develop an undertaking of the principles of statics. Topics include resultant and equilibrium of noncurrent and concurrent forces, force analysis of structures and machines, force systems in space, friction, centers of gravity, centroids, and movement of inertia of areas. Prerequisites: PRO 332, MA 171, ENG 101 or equivalent and PH 102. PRO 334 can not be used as a substitute for MAE/CE 271.

**PRO 335 - STRENGTH OF MATERIALS**  
Semester Hours: 3  
Comprehend and compare the behavior of solid objects subjected to various stresses and strains. Topics include stress and strain for axial loads, shear stresses and strains in torsion members, bending and deflection of beams, combined stress using Mohr's circle columns, and structural connections. Prerequisite: PRO 334 or MAE 271 or CE 271 (all with grades of C- or better).

**PRO 336 - PRINCIPLES OF DYNAMICS**  
Semester Hours: 3  
Learn the principles of Dynamics based on two broad areas of study, Kinematics and Kinetics. Kinematics is the study of the geometry of motion. Kinetics is the study of the relation between the forces acting on a body, the mass of the body, and the motion of the body. Prerequisite: PRO 334 or MAE 271 or CE 271 (all with grades of C- or better).

**PRO 341 - ELECTRICAL CIRCUITS & SYSTEMS**  
Semester Hours: 3  
This course introduces the major topics related to electrical circuits and systems and demonstrates how electrical engineering concepts are applied in other fields and everyday products. Topics include basic circuit analysis, digital systems, electronic devices and circuits, and electromechanics. Prerequisites: PRO 332 (grade of C- or better), MA 171, PH 102, ENG 101 or equivalent, MSC 287 or equivalent.

**PRO 398 - SPEC TOPICS: INTERDISC STUDIES**  
Semester Hours: 3  
Course uses an interdisciplinary approach to draw on intersecting and divergent knowledge from a variety of scholarly disciplines in order to create an in-depth and multi-faceted understanding of a particular instructor chosen issue, topic or problem. Prerequisite: EH 102.

**PRO 399 - INDEP STUDY: INTERDISC STUDIES**  
Semester Hours: 3  
Course allows individual students to pursue an interdisciplinary topic of interest which is not otherwise available and may involve any combination of readings assignments, tutorials, lectures, papers, presentations, or field/laboratory study (determined in consultation with instructor). Prerequisite: PRO 325.
PRO 431 - FUNDAMENTALS OF MANUFACTURING  
Semester Hours: 3  
This course introduces the fundamentals of manufacturing, examining the selection and use of various materials, processes, and systems. Prerequisites: (PRO 333 or MAE 201) and (PRO 341 or EE 213) and (PRO 335 or MAE 370 or CE 370).

PRO 433 - INSTRUMENTATION & MEASUREMENT  
Semester Hours: 3  
This course introduces valuable topics that an engineering technologist needs to master in order to design measurement and instrumentation systems. Topic areas include the essential general characteristics of instruments, electrical measurement systems, and computerized data acquisition systems. Prerequisites: (PRO 335 or CE 270 or MAE 370) and (PRO 341 or EE 213).

PRO 498 - INQUIRY AND LEARNING  
Semester Hours: 3  
Inquiry-based learning accelerates understanding, fosters critical thinking skills, and facilitates self-direction and discovery. Using this method, students will identify an interdisciplinary problem related to their approved concentration area, perform the foundational research, and formulate a research proposal. This is the first of a two-semester progression to complete a Capstone research thesis/project in PRO 499. Prerequisite: PRO 325.

PRO 499 - CAPSTONE EXP: RSCH THESIS/PROJ  
Semester Hours: 3  
Students majoring in Professional Studies are required to complete a senior research thesis in their approved interdisciplinary concentration. This Capstone course requires the student to demonstrate his/her ability to integrate the core knowledge and skills gained in their interdisciplinary areas of study using inquiry-based learning methods. Research is conducted and a thesis-style paper is written and orally presented. Prerequisite: PRO 498 with minimum grade of C-.

Specialized Credit Courses  
UAH offers specialized credit courses that support various educational partnerships. The following courses have distinct admission and registration requirements. For details, email CPSprograms@uah.edu, phone 256.824.2808, or visit CPS.uah.edu/USSRC (https://www.uah.edu/pcs/conferences-special-programs/ussrc-partnership/).

ESS 100 - INTRODUCTION TO SPACE SCIENCE  
Semester Hour: 1  
Covers physiology in space, computer systems, and materials in space, robotics, thermodynamics, astrophysics, and solar physics. Laboratory experiments and simulated missions. Offered in cooperation with the U.S. Space & Rocket Center. Prerequisite: Available only to high school students with U.S. citizenship enrolled in Advanced Space Academy®.

ENG 105 - INTRODUCTION TO AERONAUTICS  
Semester Hour: 1  
Introduction to a variety of aviation subjects, including flight physiology, computer systems, aerodynamics, aeronautics, jet propulsion, thermodynamics, navigation, and survival skills. Lectures and simulated missions. Offered in cooperation with U.S. Space & Rocket Center. Prerequisite: Available only to high-school students with U.S. citizenship enrolled in Aviation Challenge® Mach III.

Non-Credit Programs  
UAH College of Professional Studies (CPS) provides access to quality education and training for individuals; partners with businesses and government for workforce development; enhances public awareness of the instructional and research strengths of the University; promotes lifelong learning fostering continued growth, human fulfillment, and positive social change; and supports economic development throughout North Alabama. These objectives are carried out through the following programming departments: Professional Development Solutions, Conferences and Special Programs, Osher Lifelong Learning Institute, and Testing and Certification Services. For more information about CPS programs, visit CPS.uah.edu (https://www.uah.edu/pcs/).

CPS Registration Services  
103 Wilson Hall  
Telephone: 256.824.6010 or 800.448.4031  
FAX: 256.824.6760  
Email: CPSreg@uah.edu  
Kathy Hosch, Senior Associate Director  
UAH College of Professional Studies (CPS) Registration Office provides registration services for non-credit programs and select credit courses. Registration options include online, phone, fax, or in person. There is no formal application process for non-credit courses and enrollments are taken
throughout the year. Transcripts for continuing education units (CEUs) are available upon written request for a $5 fee per transcript. Visit CPS.uah.edu (https://www.uah.edu/pcs/) for registration information and related policies.

Professional Development Solutions
140 Wilson Hall
Telephone: 256.824.4430
Email: pdsolutions@uah.edu

Mission
Professional Development Solutions develops and presents professional training and educational activities in areas including leadership, management, engineering, cybersecurity, information technology, and certification exam preps. Programs are designed to allow a participant the choice of attending individual courses of interest or completing a more structured certificate program leading to a Certificate of Professional Achievement. Programs are offered in an atmosphere conducive for meeting professional training needs, and available in various classroom and online formats. CPS maintains state-of-the-art computer labs and classrooms, and its instructors are known and respected industry practitioners and researchers in their respective fields.

Visit CPS.uah.edu/PDSolutions (https://uah.edu/pcs/professional-development/) for the current schedule of course offerings.

EXAM PREPS
A+
Certified Associate in Project Management (CAPM®)
Certified Authorization Professional (CAP®)
Certified Ethical Hacker (CEH™)
Certified Information Systems Security Professional (CISSP®)
Certified Network Defender (CND)
Certified Systems Engineering Professional (CSEP)
Cisco CCNA Certification
CompTIA® Advanced Security Practitioner (CASP+)
Drone Pilot License Test Prep
Linux+
Network+
PMP® Certification
Private Pilot Ground School
Security+

CERTIFICATE PROGRAMS
MANAGEMENT
Communication Skills
Earned Value Management
Federal Contract Management
Federal Costing
Federal Proposal Management
Interior Design Professional
Leadership Skills and Strategies
Life Cycle Logistics
Project Management/Agile
Supervisory Skills for Managers
Supply Chain Management
Team Building
Technical and Business Writing

ENGINEERING
Computer-Aided Design
DOORS® - Requirements Management Application
Geospatial
MATLAB for Engineers and Analysts
Missile Systems and Capabilities
Model-Based Systems Engineering with SysML
Modeling and Simulation
Rocket Propulsion
Rotorcraft Systems and Capabilities
Customized Training & Facilitation

UAH's customized training solutions offer organizations ways to seize new opportunities and systematically address key problems. Professional Development specialists work directly with corporate, government, and professional organizations to develop high quality certificate programs and short courses that meet specific training goals. These programs can be offered on site, on campus, or via online learning. Through targeted learning experiences, the individual or team can bring new tools and competencies back into the organization, providing an immediate on-the-job impact.

Outreach and Events

149 Wilson Hall
Telephone: 256.824.2808
Email: CPSprograms@uah.edu

Fathia Hardy, Associate Director

The Outreach and Event Management unit embodies collaborative projects and mutually beneficial partnerships among The University of Alabama in Huntsville and external groups that enrich both our academic and research missions and the communities we serve. Our management team hosts and co-hosts various conferences, training sessions, symposiums, continuing education, special events, meetings, and workshops. Visit CPS.uah.edu/Conferences for current information.

Osher Lifelong Learning Institute (OLLI)

113 Wilson Hall
Telephone: 256.824.6183
Email: OLLI.info@uah.edu

Ale Pacheco, OLLI Program Manager

Mission

The Osher Lifelong Learning Institute (OLLI) and the College of Professional Studies partner to provide lifelong learning courses and enrichment activities designed to fulfill the educational needs of adults 50 and above. OLLI at UAH is a member-led, non-profit, volunteer-based organization that advances the educational, cultural, and social interests of its members by sponsoring courses, socials, bonus presentations, industrial tours, and travel opportunities designed to fit the interests and needs of its members. CPS supports OLLI's efforts by providing support services and a safe, comfortable, and intellectually stimulating on-campus environment that supports adult lifelong learning and enhances community outreach.

Curriculum

Courses offered in a wide range of subject areas:
We offer three terms a year with a mini-term in the summer. Most courses meet 1.5 hours per class, once a week, for six to eight weeks. We also offer courses in our popular 'OLLI After Five' format. OLLI courses are taught by qualified volunteer instructors. Courses are not graded, and no tests are administered. Visit Osher.uah.edu (https://uah.edu/pcs/olli/) for current information.

### Testing and Certification Services

214 Wilson Hall  
Telephone: 256.824.6373  
Email: TaCS@uah.edu  
Maria Bricker, Assistant Director

### Mission

The University of Alabama in Huntsville Testing and Certification Services (TaCS) unit is committed to providing exceptional, accessible, and comprehensive testing services for students, graduates, professionals, and individuals from our surrounding communities. As a certified center of the National College Testing Association (NCTA), we are dedicated to upholding high standards of security and academic integrity by maintaining and adhering to their Standards and Guidelines.

### Tests

The TaCS office offers numerous testing opportunities to include:

- ACT  
- Alabama State Dept of Insurance Exam  
- BASF/DDI  
- CLEP/DANTES  
- GRE  
- HESI  
- Kryterion  
- MAT  
- National Center for Competency Testing  
- Pearson VUE Testing  
- Proctored Exams  
- PROV  
- Residual ACT  
- SAT  
- Scantron  
- SSAT

Visit CPS.uah.edu/TaCS (https://uah.edu/pcs/testing-certification-services/) for a full list of available tests, test schedule, policy and guidelines, and ways to register.