EMBRY-RIDDLE
Aeronautical University

ALUMNI SURVEY
One Year After Graduation

Directions: Be sure to read all options before selecting an answer. All responses are confidential. When you are finished with the entire survey, click the "SUBMIT" button at the bottom of the form. If you make a mistake or wish to start over, click the "RESET" button also at the bottom of the form.

Note: It is important to let your responses navigate you through the survey and not use the "back" or "forward" buttons of your browser.

Please type your colleague ID number in the space provided below. (Refer to cover letter)
Note: Colleague ID is used only to remove your information for follow-up reminders and to retrieve demographic information. It will not be used to identify individual responses.

Colleague ID _____

Major

- BS Aeronautical Science
- BS Aeronautical Systems Maintenance
- BS Aeronautics
- BS Aerospace Electronics
- BS Aerospace Studies
- BS Air Traffic Management
- BS Applied Meteorology
- BS Aviation Maintenance Science
- BS Aviation Management
- BS Business Admin
- BS Communication
- BS Computational Mathematics
- BS Engineering Physics
- BS Homeland Security
- BS Human Factors Psychology
- BS Interdisciplinary Studies
- BS Safety Science
- BS Space Physics
- MS Aeronautics
- M Business Admin
- MS Engineering Physics
- MS Human Factors and Systems (Human Factors Engr)
- MS Human Factors and Systems (Systems Engr)
- PhD Engineering Physics

EMPLOYMENT PLANS

What is your present employment status?

- ○ Employed full-time
- ○ Employed part-time
- ○ Not employed

Read ALL of the following options. Which one category BEST describes your current employment status in the past year or since you graduated from ERAU?

- ○ Out of the work force due to continuing education
- ○ Out of the work force and actively seeking employment
- ○ Out of the work force due to other reasons

If due to other reason, please state the reason: _____

How closely related is your present position to your degree?

- ○ Closely related
- ○ Somewhat related
- ○ Not related

Did the degree you received from ERAU lead directly to a:
(Please select all that apply)

- ☐ New Job
- ☐ Promotion
- ☐ Pay Raise
- ☐ Other:

If other, please specify: _____

Which area best describes your field of work? (choose one)

- ○ Aerospace
- ○ Air Cargo
- ○ Air Traffic Control
- ○ Aircraft Sales
- ○ Airline (Major)
- ○ Airline (Regional)
- ○ Airport
- ○ Avionics
- ○ Charter/Fractional/Non-121 Ops
- ○ Commercial Space
- ○ Consulting
- ○ Corporate/Business Aviation
- ○ Education (flight instructor excluded)*
- ○ Flight School
- ○ General Aviation/FBO
- ○ Government Services (Federal)
- ○ Government Services (State/Local)
- ○ Human Factors
- ○ Insurance
- ○ Logistics
- ○ Maintenance Facility/MRO
- ○ Manufacturing (Aerospace)
- ○ Manufacturing (Aviation)
- ○ Meteorology
- ○ Military*
- ○ Professional Association/Organization
- ○ Robotics
- ○ Sales/Customer Service
- ○ Security/Intelligence
- ○ Simulation/Training
- ○ UAV
- ○ Other (aviation):

  [ ]

- ○ Other (non-aviation):

  [ ]

*Includes aviation and non-aviation jobs

What is your annual starting salary at your present position BEFORE taxes?

$ [ ]

Please specify your position and employer information:

Your Title:	
Employer /Company:	
Name of Direct Supervisor:	
Department:	
Supervisor's Email:	
Street:	
City:	

State: --Click Here--

- Alabama
- Alaska
- Arizona
- Arkansas
- California
- Colorado
- Connecticut
- Delaware
- District of Columbia
- Georgia
- Florida
- Hawaii
- Idaho
- Illinois
- Indiana
- Iowa
- Kansas
- Kentucky
- Louisiana
- Maine
- Maryland
- Massachusetts
- Michigan
- Minnesota
- Mississippi
- Missouri
- Montana
- Nebraska
- Nevada
- New Hampshire
- New Jersey
- New Mexico
- New York
- North Carolina
- North Dakota
- Ohio
- Oklahoma
- Oregon
- Pennsylvania
- Rhode Island
- South Carolina
- South Dakota
- Tennessee
- Texas
- Utah
- Virginia
- Washington
- West Virginia
- Wisconsin
- Wyoming

Zip Code:

EDUCATIONAL PLANS

Are you currently attending or have you attended school at any time after you received your degree from ERAU?

- ○ I have received a graduate degree
- ○ Currently attending graduate school
- ○ I have been accepted but not yet started
- ○ I plan to attend in the future
- ○ I have no plans to attend graduate or professional school

In what school/program did you enroll in after you received your degree from ERAU? (choose one)

- ○ Arts and Sciences
- ○ Aeronautical/Aviation/Aerospace (Excluding Engineering programs)
- ○ Business
- ○ Education
- ○ Engineering
- ○ Other

What degree or certificate are you working towards at this school? (choose one)

- ○ Courses not leading to a degree/certificate
- ○ Baccalaureate degree
- ○ Master's degree
- ○ Doctoral degree
- ○ Other

On what basis are you PRIMARILY enrolled?

- ○ Full-time
- ○ Part-time

How closely is your course work related to your field of study at ERAU?

- ○ Closely related
- ○ Somewhat related
- ○ Not related

How would you rate the PREPARATION you received at ERAU for your continuing education?

- Excellent
- Good
- Average
- Poor
- Very Poor

RESEARCH SKILLS

Usefulness to current job/goal

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Define and/or articulate a research problem	○	○	○	○
Design a course of action to solve a research problem	○	○	○	○
Apply ethical principles in research methodologies and in the application of research results	○	○	○	○
Conduct research independently and/or collaboratively	○	○	○	○
Reach decisions or conclusions based on the analysis and synthesis of evidence	○	○	○	○
Communicate research results	○	○	○	○

Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Define and/or articulate a research problem	○	○	○	○
Design a course of action to solve a research problem	○	○	○	○
Apply ethical principles in research methodologies and in the application of research results	○	○	○	○
Conduct research independently and/or collaboratively	○	○	○	○
Reach decisions or conclusions based on the analysis and synthesis of evidence	○	○	○	○
Communicate research results	○	○	○	○

GENERAL SKILLS

Usefulness to current job/goal

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Apply knowledge of college-level mathematics	○	○	○	○
Construct effective written documents for technical and non-technical audiences	○	○	○	○
Communicate ideas in non-written forms (oral and visual)	○	○	○	○
Conduct and report research in accordance with professional standards	○	○	○	○
Recognize the importance of ethical responsibility	○	○	○	○
Identify some important results of scientific inquiry and use scientific information in critical thinking and decision-making	○	○	○	○
Use technology to communicate ideas	○	○	○	○
Apply economic principles to identify and solve problems	○	○	○	○
Demonstrate an understanding of the values communicated through the humanities	○	○	○	○
Describe some of the historical and contemporary issues that affect societies	○	○	○	○
Recognize the complexity of human experience from a variety of perspectives	○	○	○	○

Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Apply knowledge of college-level mathematics	○	○	○	○
Construct effective written documents for technical and non-technical audiences	○	○	○	○
Communicate ideas in non-written forms (oral and visual)	○	○	○	○
Conduct and report research in accordance with professional standards	○	○	○	○
Recognize the importance of ethical responsibility	○	○	○	○
Identify some important results of scientific inquiry and use scientific information in critical thinking and decision-making	○	○	○	○
Use technology to communicate ideas	○	○	○	○
Apply economic principles to identify and solve problems	○	○	○	○
Demonstrate an understanding of the values communicated through the humanities	○	○	○	○
Describe some of the historical and contemporary issues that affect societies	○	○	○	○
Recognize the complexity of human experience from a variety of perspectives	○	○	○	○

BS Aeronautical Science
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
An ability to apply knowledge of mathematics, science, and applied sciences	○	○	○	○
An ability to analyze and interpret data	○	○	○	○
An ability to function on multi-disciplinary teams	○	○	○	○
An understanding of professional and ethical responsibility	○	○	○	○
An ability to communicate effectively, including both written and verbal communication skills	○	○	○	○
A recognition of the need for, and an ability to engage in, life-long learning	○	○	○	○
A knowledge of contemporary issues	○	○	○	○
An ability to use the techniques, skills, and modern technology necessary for professional practice	○	○	○	○
An understanding of the national and international aviation environment	○	○	○	○
An ability to apply pertinent knowledge in identifying and solving problems	○	○	○	○

BS Aeronautical Science
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
An ability to apply knowledge of mathematics, science, and applied sciences	○	○	○	○
An ability to analyze and interpret data	○	○	○	○
An ability to function on multi-disciplinary teams	○	○	○	○
An understanding of professional and ethical responsibility	○	○	○	○
An ability to communicate effectively, including both written and verbal communication skills	○	○	○	○
A recognition of the need for, and an ability to engage in, life-long learning	○	○	○	○
A knowledge of contemporary issues	○	○	○	○
An ability to use the techniques, skills, and modern technology necessary for professional practice	○	○	○	○
An understanding of the national and international aviation environment	○	○	○	○
An ability to apply pertinent knowledge in identifying and solving problems	○	○	○	○

BS Aeronautics
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Knowledge and understanding of aviation law and the regulatory process	○	○	○	○
Understanding and application of management theory/concepts	○	○	○	○
Knowledge and understanding of economic principles	○	○	○	○
Use of statistical/quantitative techniques to solve problems	○	○	○	○
Knowledge and understanding of aviation, technology and operations, concepts, theory and applications	○	○	○	○
Knowledge and understanding of the many facets of the aviation industry	○	○	○	○
Dealing with integrity issues	○	○	○	○
Development of moral character	○	○	○	○
Assertiveness in a leadership or subordinate role	○	○	○	○
Knowledge and understanding of basic computer skills such as email, word processing, presentations, and spreadsheet software	○	○	○	○
Knowledge of scientific principles	○	○	○	○
Distinguish themselves as valuable employees in the varied employment areas available	○	○	○	○
Identify the influence and importance of the history of aviation	○	○	○	○
Illustrate their preparedness in technical writing skills	○	○	○	○

BS Aeronautics
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Knowledge and understanding of aviation law and the regulatory process	○	○	○	○
Understanding and application of management theory/concepts	○	○	○	○
Knowledge and understanding of economic principles	○	○	○	○
Use of statistical/quantitative techniques to solve problems	○	○	○	○
Knowledge and understanding of aviation, technology and operations, concepts, theory and applications	○	○	○	○
Knowledge and understanding of the many facets of the aviation industry	○	○	○	○
Dealing with integrity issues	○	○	○	○
Development of moral character	○	○	○	○
Assertiveness in a leadership or subordinate role	○	○	○	○
Knowledge and understanding of basic computer skills such as email, word processing, presentations, and spreadsheet software	○	○	○	○
Knowledge of scientific principles	○	○	○	○
Distinguish themselves as valuable employees in the varied employment areas available	○	○	○	○
Identify the influence and importance of the history of aviation	○	○	○	○
Illustrate their preparedness in technical writing skills	○	○	○	○

BS Aerospace Electronics
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Knowledge of math and physical science.	○	○	○	○
Ability to communicate effectively, including both written and verbal communication skills.	○	○	○	○
Ability to function in teams.	○	○	○	○
Conduct experiments and interpret experimental data.	○	○	○	○
Knowledge of circuits, electronics and instrumentation.	○	○	○	○
Identify and solve electrical and electronic circuit problems.	○	○	○	○
Use computer aided circuit analysis tools. Knowledge of contemporary issues.	○	○	○	○
Understand professional and ethical responsibility.	○	○	○	○
A recognition of, and the ability to engage in, lifelong learning.	○	○	○	○

BS Aerospace Electronics
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Knowledge of math and physical science.	○	○	○	○
Ability to communicate effectively, including both written and verbal communication skills.	○	○	○	○
Ability to function in teams.	○	○	○	○
Conduct experiments and interpret experimental data.	○	○	○	○
Knowledge of circuits, electronics and instrumentation.	○	○	○	○
Identify and solve electrical and electronic circuit problems.	○	○	○	○
Use computer aided circuit analysis tools. Knowledge of contemporary issues.	○	○	○	○
Understand professional and ethical responsibility.	○	○	○	○
A recognition of, and the ability to engage in, lifelong learning.	○	○	○	○

BS Air Traffic Management
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Understanding the history, mission, purpose and duty priority of air traffic control	○	○	○	○
Understanding the principles of flight and the pilot's environment	○	○	○	○
Knowledge of basic communications and air traffic control phraseology	○	○	○	○
Knowledge of Instrument Approach Procedure (IAP), Departure Procedure (DP), and Standard Arrival Route (STAR) Charts	○	○	○	○
Knowledge of VFR Sectional Charts, VFR Terminal Charts, IFR Enroute Low Altitude Charts, IFR Enroute High Altitude Charts	○	○	○	○
Understanding of basic weather fundamentals, weather systems, and hazardous weather	○	○	○	○
Knowledge and ability to interpret meteorological reports: METARs, Terminal Area Forecasts, AIRMETs, SIGMETs, and PIREPs	○	○	○	○
Knowledge of air traffic control strip marking: enroute and terminal	○	○	○	○
Understanding of Radar separation procedures, airspace to be protected speed adjustments, vectoring techniques and traffic coordination applicable to Air traffic Control operations	○	○	○	○
Knowledge of basic VFR Control Tower operations, including duties and responsibilities associated with the operating positions of local control, ground control, and flight data/clearance delivery	○	○	○	○
Knowledge of Federal Aviation Regulations as they pertain to Air Traffic Control	○	○	○	○
Understanding of Air Route Traffic Control Center operations as they pertain to radar separation of aircraft	○	○	○	○
Understanding of Air Route Traffic Control Center operations as they pertain to non-radar separation of aircraft	○	○	○	○

BS Air Traffic Management
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Understanding the history, mission, purpose and duty priority of air traffic control	○	○	○	○
Understanding the principles of flight and the pilot's environment	○	○	○	○
Knowledge of basic communications and air traffic control phraseology	○	○	○	○
Knowledge of Instrument Approach Procedure (IAP), Departure Procedure (DP), and Standard Arrival Route (STAR) Charts	○	○	○	○
Knowledge of VFR Sectional Charts, VFR Terminal Charts, IFR Enroute Low Altitude Charts, IFR Enroute High Altitude Charts	○	○	○	○
Understanding of basic weather fundamentals, weather systems, and hazardous weather	○	○	○	○
Knowledge and ability to interpret meteorological reports: METARs, Terminal Area Forecasts, AIRMETs, SIGMETs, and PIREPs	○	○	○	○
Knowledge of air traffic control strip marking: enroute and terminal	○	○	○	○
Understanding of Radar separation procedures, airspace to be protected speed adjustments, vectoring techniques and traffic coordination applicable to Air traffic Control operations	○	○	○	○
Knowledge of basic VFR Control Tower operations, including duties and responsibilities associated with the operating positions of local control, ground control, and flight data/clearance delivery	○	○	○	○
Knowledge of Federal Aviation Regulations as they pertain to Air Traffic Control	○	○	○	○
Understanding of Air Route Traffic Control Center operations as they pertain to radar separation of aircraft	○	○	○	○
Understanding of Air Route Traffic Control Center operations as they pertain to non-radar separation of aircraft	○	○	○	○

BS Applied Meteorology
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Ability to apply knowledge of meteorology, math, and the sciences in general to projects, services and assignments	○	○	○	○
Knowledge and ability to utilize techniques, skills, and computer resources for weather data gathering, analysis, interpretation, and product generation	○	○	○	○
Ability to function in teams	○	○	○	○
An understanding of professional and ethical responsibilities	○	○	○	○
Ability to express complex weather concepts in terms that others can understand using both written and verbal communication methods	○	○	○	○
A recognition of the need for, and an ability to engage in, life-long learning	○	○	○	○
A knowledge of contemporary meteorological problems, issues, and programs for both research and user applications	○	○	○	○
Ability to use techniques, skills, and modern technology for meteorological professional practices	○	○	○	○
An understanding of the national and international aviation environment which relate to weather	○	○	○	○
Ability to apply pertinent meteorological knowledge in identifying and solving problems for both yourself and for customers	○	○	○	○

BS Applied Meteorology
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Ability to apply knowledge of meteorology, math, and the sciences in general to projects, services and assignments	○	○	○	○
Knowledge and ability to utilize techniques, skills, and computer resources for weather data gathering, analysis, interpretation, and product generation	○	○	○	○
Ability to function in teams	○	○	○	○
An understanding of professional and ethical responsibilities	○	○	○	○
Ability to express complex weather concepts in terms that others can understand using both written and verbal communication methods	○	○	○	○
A recognition of the need for, and an ability to engage in, life-long learning	○	○	○	○
A knowledge of contemporary meteorological problems, issues, and programs for both research and user applications	○	○	○	○
Ability to use techniques, skills, and modern technology for meteorological professional practices	○	○	○	○
An understanding of the national and international aviation environment which relate to weather	○	○	○	○
Ability to apply pertinent meteorological knowledge in identifying and solving problems for both yourself and for customers	○	○	○	○

BS Aviation Maintenance Science
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
An ability to apply knowledge of mathematics, science, and applied sciences	○	○	○	○
An ability to analyze and interpret data	○	○	○	○
An ability to function on multi-disciplinary teams	○	○	○	○
An understanding of professional and ethical responsibility	○	○	○	○
An ability to communicate effectively, including both written and verbal communication skills	○	○	○	○
A recognition of the need for, and an ability to engage in, life-long learning	○	○	○	○
A knowledge of contemporary issues	○	○	○	○
An ability to use the techniques, skills, and modern technology necessary for professional practice	○	○	○	○
An understanding of the national and international aviation environment	○	○	○	○
An ability to apply pertinent knowledge in identifying and solving problems.	○	○	○	○

BS Aviation Maintenance Science
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
An ability to apply knowledge of mathematics, science, and applied sciences	○	○	○	○
An ability to analyze and interpret data	○	○	○	○
An ability to function on multi-disciplinary teams	○	○	○	○
An understanding of professional and ethical responsibility	○	○	○	○
An ability to communicate effectively, including both written and verbal communication skills	○	○	○	○
A recognition of the need for, and an ability to engage in, life-long learning	○	○	○	○
A knowledge of contemporary issues	○	○	○	○
An ability to use the techniques, skills, and modern technology necessary for professional practice	○	○	○	○
An understanding of the national and international aviation environment	○	○	○	○
An ability to apply pertinent knowledge in identifying and solving problems.	○	○	○	○

BS Business Administration
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Applying management theory/concepts into a dynamic organizational environment	○	○	○	○
Applying accounting and financial information for decision making in a for-profit and not-for-profit entity	○	○	○	○
Integrate knowledge of macro- and micro-economics into managerial decision making	○	○	○	○
Applying statistical and/or quantitative techniques to problem solving in organizations	○	○	○	○
Integrate marketing concepts/practices into executing global market strategies	○	○	○	○
Formulate business decisions by incorporating ethical standards and principles	○	○	○	○
Access, analyze, and communicate information using multiple means/media	○	○	○	○
Understands the nature of business ethics and the role of social responsibility	○	○	○	○

BS Business Administration
Rate ERAU preparation

	Very High Pre paration	*High Pre paration*	*Moderate Preparati on*	*Little Pre paration*
Applying management theory/concepts into a dynamic organizational environment	○	○	○	○
Applying accounting and financial information for decision making in a for-profit and not-for-profit entity	○	○	○	○
Integrate knowledge of macro- and micro-economics into managerial decision making	○	○	○	○
Applying statistical and/or quantitative techniques to problem solving in organizations	○	○	○	○
Integrate marketing concepts/practices into executing global market strategies	○	○	○	○
Formulate business decisions by incorporating ethical standards and principles	○	○	○	○
Access, analyze, and communicate information using multiple means/media	○	○	○	○
Understands the nature of business ethics and the role of social responsibility	○	○	○	○

BS Communication
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Develop effective news and information gathering skills using interviews, print documents and Internet materials.	○	○	○	○
Develop professional writing skills directed at general and specific audiences.	○	○	○	○
Develop effective speaking skills appropriate for both small group discussions and large audience presentations.	○	○	○	○
Develop teamwork communication skills appropriate to group projects.	○	○	○	○
Develop digital skills for delivery of visual designs as well as Internet presentations.	○	○	○	○
Understand the development, principles and goals of mass communication media, with emphasis on twenty-first century media.	○	○	○	○
Understand specific legal and ethical environments unique to mass media communication.	○	○	○	○
Garner knowledge and skills from a minor that enhanced those developed in the major.	○	○	○	○
Complete an internship that enhanced knowledge and skills gained in the classroom.	○	○	○	○

BS Communication
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Develop effective news and information gathering skills using interviews, print documents and Internet materials.	○	○	○	○
Develop professional writing skills directed at general and specific audiences.	○	○	○	○
Develop effective speaking skills appropriate for both small group discussions and large audience presentations.	○	○	○	○
Develop teamwork communication skills appropriate to group projects.	○	○	○	○
Develop digital skills for delivery of visual designs as well as Internet presentations.	○	○	○	○
Understand the development, principles and goals of mass communication media, with emphasis on twenty-first century media.	○	○	○	○
Understand specific legal and ethical environments unique to mass media communication.	○	○	○	○
Garner knowledge and skills from a minor that enhanced those developed in the major.	○	○	○	○
Complete an internship that enhanced knowledge and skills gained in the classroom.	○	○	○	○

BS Computational Mathematics
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Apply knowledge of mathematics to an area of application	○	○	○	○
Write a mathematical proof	○	○	○	○
Analyze and interpret data	○	○	○	○
Model physical phenomena using differential equations	○	○	○	○
Use mathematical packages and software to solve scientific problems	○	○	○	○
Understand the impact of mathematics in developing technologies	○	○	○	○
Function on a multi-disciplinary team	○	○	○	○
Orally communicate mathematical ideas	○	○	○	○
Use numerical techniques to solve applied problems	○	○	○	○
Write computer code to implement a given mathematical algorithm	○	○	○	○

BS Computational Mathematics
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Apply knowledge of mathematics to an area of application	○	○	○	○
Write a mathematical proof	○	○	○	○
Analyze and interpret data	○	○	○	○
Model physical phenomena using differential equations	○	○	○	○
Use mathematical packages and software to solve scientific problems	○	○	○	○
Understand the impact of mathematics in developing technologies	○	○	○	○
Function on a multi-disciplinary team	○	○	○	○
Orally communicate mathematical ideas	○	○	○	○
Use numerical techniques to solve applied problems	○	○	○	○
Write computer code to implement a given mathematical algorithm	○	○	○	○

BS Engineering Physics
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Apply knowledge of mathematics, science, and engineering	○	○	○	○
Design and conduct experiments	○	○	○	○
Analyze and interpret data	○	○	○	○
Design a system, component, or process to meet desired needs	○	○	○	○
Function on multi-disciplinary teams	○	○	○	○
Identify, formulate, and solve engineering problems	○	○	○	○
Understand professional and ethical responsibility	○	○	○	○
Communicate effectively	○	○	○	○
Understand the impact of engineering solutions in a global and societal context	○	○	○	○
Recognize and engage in life-long learning	○	○	○	○
Knowledge of contemporary issues	○	○	○	○
Use the techniques, skills, and modern engineering tools necessary for engineering practice	○	○	○	○
Knowledge of classical mechanics	○	○	○	○
Knowledge of engineering electricity and magnetism	○	○	○	○
Knowledge of space physics	○	○	○	○
Knowledge of quantum physics	○	○	○	○
Knowledge of space systems engineering and design	○	○	○	○
Knowledge of electro-optical engineering	○	○	○	○
Knowledge of microcomputers and electronic instrumentation	○	○	○	○

BS Engineering Physics
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Apply knowledge of mathematics, science, and engineering	○	○	○	○
Design and conduct experiments	○	○	○	○
Analyze and interpret data	○	○	○	○
Design a system, component, or process to meet desired needs	○	○	○	○
Function on multi-disciplinary teams	○	○	○	○
Identify, formulate, and solve engineering problems	○	○	○	○
Understand professional and ethical responsibility	○	○	○	○
Communicate effectively	○	○	○	○
Understand the impact of engineering solutions in a global and societal context	○	○	○	○
Recognize and engage in life-long learning	○	○	○	○
Knowledge of contemporary issues	○	○	○	○
Use the techniques, skills, and modern engineering tools necessary for engineering practice	○	○	○	○
Knowledge of classical mechanics	○	○	○	○
Knowledge of engineering electricity and magnetism	○	○	○	○
Knowledge of space physics	○	○	○	○
Knowledge of quantum physics	○	○	○	○
Knowledge of space systems engineering and design	○	○	○	○
Knowledge of electro-optical engineering	○	○	○	○
Knowledge of microcomputers and electronic instrumentation	○	○	○	○

BS Homeland Security
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Capability for students to work collaboratively and effectively on teams.	○	○	○	○
Capability to deliver professional presentations and briefs.	○	○	○	○
Demonstrate the ability to recognize transnational and global homeland security or defense issues, strategies and operations.	○	○	○	○
Demonstrate the ability to design, conduct and evaluate exercises applicable to the disciplines of homeland security or defense.	○	○	○	○
Demonstrate knowledge of contemporary or emergent threats, challenges or issues including natural, manmade and technological hazards.	○	○	○	○
Demonstrate the ability to identify, describe and critically evaluate applicable homeland security or defense technologies.	○	○	○	○
Demonstrate an understanding of terrorism, its origins, ideologies and goals.	○	○	○	○
Demonstrate an understanding of infrastructures critical to the US and how best to protect them.	○	○	○	○
Provide the ability for students to understand and apply risk management tools to homeland security issues.	○	○	○	○
Demonstrate the ability to analyze environmental sources that destabilize regions and to characterize their relationship to US national security.	○	○	○	○

BS Homeland Security
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Capability for students to work collaboratively and effectively on teams.	○	○	○	○
Capability to deliver professional presentations and briefs.	○	○	○	○
Demonstrate the ability to recognize transnational and global homeland security or defense issues, strategies and operations.	○	○	○	○
Demonstrate the ability to design, conduct and evaluate exercises applicable to the disciplines of homeland security or defense.	○	○	○	○
Demonstrate knowledge of contemporary or emergent threats, challenges or issues including natural, manmade and technological hazards.	○	○	○	○
Demonstrate the ability to identify, describe and critically evaluate applicable homeland security or defense technologies.	○	○	○	○
Demonstrate an understanding of terrorism, its origins, ideologies and goals.	○	○	○	○
Demonstrate an understanding of infrastructures critical to the US and how best to protect them.	○	○	○	○
Provide the ability for students to understand and apply risk management tools to homeland security issues.	○	○	○	○
Demonstrate the ability to analyze environmental sources that destabilize regions and to characterize their relationship to US national security.	○	○	○	○

BS Human Factors Psychology
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Knowledge of human psycho physiological, cognitive, and perceptual functioning	○	○	○	○
Knowledge of human factors involving analytic methods, models, and human capabilities and limitations	○	○	○	○
Knowledge of basic statistical procedures, including analysis of variance	○	○	○	○
Research methods and design skills	○	○	○	○
Effective oral and written communication skills	○	○	○	○
Ability to read, comprehend, and analyze results of published empirical studies in the human factors field	○	○	○	○
Understanding of the application of human factors and psychological knowledge in aviation and other applied domains	○	○	○	○

BS Human Factors Psychology
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Knowledge of human psycho physiological, cognitive, and perceptual functioning	○	○	○	○
Knowledge of human factors involving analytic methods, models, and human capabilities and limitations	○	○	○	○
Knowledge of basic statistical procedures, including analysis of variance	○	○	○	○
Research methods and design skills	○	○	○	○
Effective oral and written communication skills	○	○	○	○
Ability to read, comprehend, and analyze results of published empirical studies in the human factors field	○	○	○	○
Understanding of the application of human factors and psychological knowledge in aviation and other applied domains	○	○	○	○

BS Aerospace Studies/Interdisciplinary Studies
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Understand basic concepts in several areas of study, such as aeronautical science, business administration, and social sciences.	○	○	○	○
Understand the complex history and culture of one or more world regions.	○	○	○	○
Develop vocabulary and writing skills that apply to specific communication contexts.	○	○	○	○
Appreciate and understand the complexity and magnitude of human production in literature, the visual arts, architecture, religion, and myth.	○	○	○	○
Develop skills in analytical interpretations of works in the humanities.	○	○	○	○
Appreciate and understand human moral, religious, or philosophical thinking and belief systems.	○	○	○	○
Garner skills and knowledge from intersecting minors to form a coherent body of knowledge.	○	○	○	○
Conduct analytical research that intersects with at least two areas of study or complete a co-operative experience that enhanced knowledge and skills gained in the classroom.	○	○	○	○

BS Aerospace Studies/Interdisciplinary Studies
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Understand basic concepts in several areas of study, such as aeronautical science, business administration, and social sciences.	○	○	○	○
Understand the complex history and culture of one or more world regions.	○	○	○	○
Develop vocabulary and writing skills that apply to specific communication contexts.	○	○	○	○
Appreciate and understand the complexity and magnitude of human production in literature, the visual arts, architecture, religion, and myth.	○	○	○	○
Develop skills in analytical interpretations of works in the humanities.	○	○	○	○
Appreciate and understand human moral, religious, or philosophical thinking and belief systems.	○	○	○	○
Garner skills and knowledge from intersecting minors to form a coherent body of knowledge.	○	○	○	○
Conduct analytical research that intersects with at least two areas of study or complete a co-operative experience that enhanced knowledge and skills gained in the classroom.	○	○	○	○

BS Safety Science
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Identify, evaluate and control health and safety hazards in the workplace	○	○	○	○
Demonstrate competency in the principles of fire prevention, suppression, and life safety	○	○	○	○
Demonstrate competency in the fundamentals of industrial hygiene and toxicology	○	○	○	○
Apply systems safety analysis techniques to identify, prioritize, and control hazards in human-machine systems	○	○	○	○
Demonstrate knowledge of aviation safety reporting systems and safety data sources	○	○	○	○
Deal with the threat of violence and other international harmful acts in the workplace	○	○	○	○
Develop, test, and maintain an airport emergency plan, including Aircraft Rescue and Fire Fighting	○	○	○	○
Develop an understanding of federal human resources statutes and legal torts and contracts as it relates to safety/risk management in aviation law	○	○	○	○
Develop and maintain a comprehensive workplace safety program	○	○	○	○
Demonstrate competency in applying OSHA and EPA regulations to the workplace	○	○	○	○
Apply DOT regulations to the application of different classes of hazardous materials	○	○	○	○
Discuss the federal regulations pertaining to aircraft operations, rulemaking and certification	○	○	○	○
Evaluate an airport's compliance with federal regulations	○	○	○	○
Explain the application of workers' compensation practices	○	○	○	○
Initiate, develop, conduct and manage aircraft accident investigations in accordance with all the requirements of the NTSB FAA and other relevant regulatory bodies	○	○	○	○
Apply SHELL and Reason's model to understanding accident causation and prevention	○	○	○	○
Evaluate the role of human factors issues (fatigue, body rythms, vision, etc.) as they relate to human performance and accident causation and prevention	○	○	○	○
Apply principles of crash survival to the design and outfitting of aircraft	○	○	○	○
Complete a "Crash Survival Analysis" rating for various fixed-wing rotor aircraft	○	○	○	○
Demonstrate the ability to work in teams	○	○	○	○
Write and formulate a technical report	○	○	○	○
Possess professional presentation skills	○	○	○	○

BS Safety Science
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Identify, evaluate and control health and safety hazards in the workplace	○	○	○	○
Demonstrate competency in the principles of fire prevention, suppression, and life safety	○	○	○	○
Demonstrate competency in the fundamentals of industrial hygiene and toxicology	○	○	○	○
Apply systems safety analysis techniques to identify, prioritize, and control hazards in human-machine systems	○	○	○	○
Demonstrate knowledge of aviation safety reporting systems and safety data sources	○	○	○	○
Deal with the threat of violence and other international harmful acts in the workplace	○	○	○	○
Develop, test, and maintain an airport emergency plan, including Aircraft Rescue and Fire Fighting	○	○	○	○
Develop an understanding of federal human resources statutes and legal torts and contracts as it relates to safety/risk management in aviation law	○	○	○	○
Develop and maintain a comprehensive workplace safety program	○	○	○	○
Demonstrate competency in applying OSHA and EPA regulations to the workplace	○	○	○	○
Apply DOT regulations to the application of different classes of hazardous materials	○	○	○	○
Discuss the federal regulations pertaining to aircraft operations, rulemaking and certification	○	○	○	○
Evaluate an airport's compliance with federal regulations	○	○	○	○
Explain the application of workers' compensation practices	○	○	○	○
Initiate, develop, conduct and manage aircraft accident investigations in accordance with all the requirements of the NTSB FAA and other relevant regulatory bodies	○	○	○	○
Apply SHELL and Reason's model to understanding accident causation and prevention	○	○	○	○
Evaluate the role of human factors issues (fatigue, body rythms, vision, etc.) as they relate to human performance and accident causation and prevention	○	○	○	○
Apply principles of crash survival to the design and outfitting of aircraft	○	○	○	○
Complete a "Crash Survival Analysis" rating for various fixed-wing rotor aircraft	○	○	○	○
Demonstrate the ability to work in teams	○	○	○	○
Write and formulate a technical report	○	○	○	○
Possess professional presentation skills	○	○	○	○

BS Space Physics
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Apply knowledge of mathematics and science	○	○	○	○
Design and conduct experiments	○	○	○	○
Analyze and interpret data	○	○	○	○
Identify, formulate, and solve scientific problems	○	○	○	○
Understand professional and ethical responsibility	○	○	○	○
Communicate effectively	○	○	○	○
Recognize and engage in life-long learning	○	○	○	○
Knowledge of contemporary issues	○	○	○	○
Knowledge of classical mechanics	○	○	○	○
Knowledge of electricity and magnetism	○	○	○	○
Knowledge of space physics	○	○	○	○
Knowledge of quantum mechanics	○	○	○	○
Knowledge of planetary science	○	○	○	○
Knowledge of astrophysics	○	○	○	○

BS Space Physics
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Apply knowledge of mathematics and science	○	○	○	○
Design and conduct experiments	○	○	○	○
Analyze and interpret data	○	○	○	○
Identify, formulate, and solve scientific problems	○	○	○	○
Understand professional and ethical responsibility	○	○	○	○
Communicate effectively	○	○	○	○
Recognize and engage in life-long learning	○	○	○	○
Knowledge of contemporary issues	○	○	○	○
Knowledge of classical mechanics	○	○	○	○
Knowledge of electricity and magnetism	○	○	○	○
Knowledge of space physics	○	○	○	○
Knowledge of quantum mechanics	○	○	○	○
Knowledge of planetary science	○	○	○	○
Knowledge of astrophysics	○	○	○	○

MS Aeronautics
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not At All Useful*
Work collaboratively as a team with individual accountability and team building skills	○	○	○	○
Demonstrate problem-solving skills using scientific research methods	○	○	○	○
Demonstrate graduate level writing ability using APA format	○	○	○	○
Demonstrate professional communication and oral presentation skills using appropriate media	○	○	○	○
Demonstrate the ability to evaluate current industry issues or problems using critical thinking skills.	○	○	○	○
Demonstrate the use of technology appropriate to industry requirements.	○	○	○	○
Apply an ethical and professional framework to decision making.	○	○	○	○

MS Aeronautics
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Work collaboratively as a team with individual accountability and team building skills	○	○	○	○
Demonstrate problem-solving skills using scientific research methods	○	○	○	○
Demonstrate graduate level writing ability using APA format	○	○	○	○
Demonstrate professional communication and oral presentation skills using appropriate media	○	○	○	○
Demonstrate the ability to evaluate current industry issues or problems using critical thinking skills.	○	○	○	○
Demonstrate the use of technology appropriate to industry requirements.	○	○	○	○
Apply an ethical and professional framework to decision making.	○	○	○	○

M Business Administration
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Apply key organizational concepts of group dynamics, leadership, conflict resolution, ethics and motivation in implementing organizational goals	○	○	○	○
Apply the concepts and strategies involved in planning, implementing and controlling, a marketing plan with special emphasis on aviation/aerospace organizations	○	○	○	○
Analyze financial statements and utilize corporate finance concepts and techniques in decision making within organizations	○	○	○	○
Access, analyze, and communicate information using multiple means/media	○	○	○	○
Apply statistical and quantitative analysis to solve business problems	○	○	○	○
Integrate knowledge of macro- and micro-economic concepts to support aviation/aerospace operations	○	○	○	○
Formulate and execute strategies and policies required to achieve organizational goals in the competitive environment of airlines, airports, aerospace, manufacturing, and government	○	○	○	○

M Business Administration
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Apply key organizational concepts of group dynamics, leadership, conflict resolution, ethics and motivation in implementing organizational goals	○	○	○	○
Apply the concepts and strategies involved in planning, implementing and controlling, a marketing plan with special emphasis on aviation/aerospace organizations	○	○	○	○
Analyze financial statements and utilize corporate finance concepts and techniques in decision making within organizations	○	○	○	○
Access, analyze, and communicate information using multiple means/media	○	○	○	○
Apply statistical and quantitative analysis to solve business problems	○	○	○	○
Integrate knowledge of macro- and micro-economic concepts to support aviation/aerospace operations	○	○	○	○
Formulate and execute strategies and policies required to achieve organizational goals in the competitive environment of airlines, airports, aerospace, manufacturing, and government	○	○	○	○

MS Engineering Physics
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Ability to identify, formulate and solve space science and engineering problems	○	○	○	○
Understanding and ability to apply advanced numerical methods	○	○	○	○
Understanding and ability to apply advanced space physics concepts	○	○	○	○
Understanding and ability to apply experimental methods in space science	○	○	○	○
Knowledge of advanced spacecraft dynamics and control	○	○	○	○
Knowledge of spacecraft power and thermal design	○	○	○	○

MS Engineering Physics
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Ability to identify, formulate and solve space science and engineering problems	○	○	○	○
Understanding and ability to apply advanced numerical methods	○	○	○	○
Understanding and ability to apply advanced space physics concepts	○	○	○	○
Understanding and ability to apply experimental methods in space science	○	○	○	○
Knowledge of advanced spacecraft dynamics and control	○	○	○	○
Knowledge of spacecraft power and thermal design	○	○	○	○

MS Human Factors and Systems (Human Factors Engr)
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Ability to identify human factors problems in operational environments	○	○	○	○
Knowledge of general systems concepts	○	○	○	○
Ability to apply the knowledge of human perception, cognition, and memory to operational and design problems	○	○	○	○
Understanding and ability to apply statistical and quantitative techniques	○	○	○	○
Understanding and ability to apply the strategies involved in planning, implementing, and controlling a research plan	○	○	○	○

MS Human Factors and Systems (Human Factors Engr)
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Ability to identify human factors problems in operational environments	○	○	○	○
Knowledge of general systems concepts	○	○	○	○
Ability to apply the knowledge of human perception, cognition, and memory to operational and design problems	○	○	○	○
Understanding and ability to apply statistical and quantitative techniques	○	○	○	○
Understanding and ability to apply the strategies involved in planning, implementing, and controlling a research plan	○	○	○	○

MS Human Factors and Systems (Systems Engr)
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Knowledge of general systems concepts	○	○	○	○
Ability to apply the knowledge of reliability, maintainability, logistics, safety, and producibility to operational and design problems	○	○	○	○
Ability to identify human factors problems in operational environments	○	○	○	○
Ability to balance operational, behavioral, economic, and logistical factors in operations and design	○	○	○	○
Understanding and ability to apply statistical and quantitative techniques	○	○	○	○
Understanding and ability to apply the strategies involved in planning, implementing, and controlling a research plan	○	○	○	○

MS Human Factors and Systems (Systems Engr)
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Knowledge of general systems concepts	○	○	○	○
Ability to apply the knowledge of reliability, maintainability, logistics, safety, and producibility to operational and design problems	○	○	○	○
Ability to identify human factors problems in operational environments	○	○	○	○
Ability to balance operational, behavioral, economic, and logistical factors in operations and design	○	○	○	○
Understanding and ability to apply statistical and quantitative techniques	○	○	○	○
Understanding and ability to apply the strategies involved in planning, implementing, and controlling a research plan	○	○	○	○

PhD Engineering Physics
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Identify, formulate and solve space science and spacecraft engineering problems	○	○	○	○
Develop and apply expertise in advanced spacecraft engineering	○	○	○	○
Develop a mastery of scientific and engineering research techniques	○	○	○	○
Extend the knowledge base by producing and communicating original research	○	○	○	○

PhD Engineering Physics
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Identify, formulate and solve space science and spacecraft engineering problems	○	○	○	○
Develop and apply expertise in advanced spacecraft engineering	○	○	○	○
Develop a mastery of scientific and engineering research techniques	○	○	○	○
Extend the knowledge base by producing and communicating original research	○	○	○	○

What courses, projects, or experiences in your degree program have been the most valuable to you?

What weaknesses do you see in your degree program?

Additional comments about your time at ERAU or needs as an alumnus:

BS Aerospace Engineering
Usefulness to current job/goal

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Engineering responsibilities and methodology	○	○	○	○
Professional activity and development	○	○	○	○
Technical communication	○	○	○	○
General education	○	○	○	○
Basic science and mathematics	○	○	○	○
Engineering mechanics	○	○	○	○
Aerodynamics and aeronautics	○	○	○	○
Thermal sciences and propulsion	○	○	○	○
Structures and materials	○	○	○	○
Electronics	○	○	○	○
Astronautics	○	○	○	○
Laboratories and data interpretation	○	○	○	○
Design	○	○	○	○
Support hardware and software	○	○	○	○

BS Aerospace Engineering
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Engineering responsibilities and methodology	○	○	○	○
Professional activity and development	○	○	○	○
Technical communication	○	○	○	○
General education	○	○	○	○
Basic science and mathematics	○	○	○	○
Engineering mechanics	○	○	○	○
Aerodynamics and aeronautics	○	○	○	○
Thermal sciences and propulsion	○	○	○	○
Structures and materials	○	○	○	○
Electronics	○	○	○	○
Astronautics	○	○	○	○
Laboratories and data interpretation	○	○	○	○
Design	○	○	○	○
Support hardware and software	○	○	○	○

BS Civil Engineering
Usefulness to current job/goal

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
An ability to apply knowledge of mathematics, science, and engineering	○	○	○	○
An ability to design and conduct experiments, as well as analyze and interpret data	○	○	○	○
An ability to design and realize a civil engineering system, component or process to meet desires/needs	○	○	○	○
An ability to function on multi-disciplinary teams	○	○	○	○
An ability to identify, formulate, and solve engineering problems	○	○	○	○
An understanding of professional and ethical responsibility	○	○	○	○
An ability to communicate effectively	○	○	○	○
An understanding of the impact of engineering solutions in a global and societal context	○	○	○	○
A recognition of, and an ability to engage in, life-long learning	○	○	○	○
A knowledge of contemporary issues	○	○	○	○
An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice	○	○	○	○

BS Civil Engineering
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
An ability to apply knowledge of mathematics, science, and engineering	○	○	○	○
An ability to design and conduct experiments, as well as analyze and interpret data	○	○	○	○
An ability to design and realize a civil engineering system, component or process to meet desires/needs	○	○	○	○
An ability to function on multi-disciplinary teams	○	○	○	○
An ability to identify, formulate, and solve engineering problems	○	○	○	○
An understanding of professional and ethical responsibility	○	○	○	○
An ability to communicate effectively	○	○	○	○
An understanding of the impact of engineering solutions in a global and societal context	○	○	○	○
A recognition of, and an ability to engage in, life-long learning	○	○	○	○
A knowledge of contemporary issues	○	○	○	○
An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice	○	○	○	○

BS Computer Engineering
Usefulness to current job/goal

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
An ability to apply knowledge of mathematics, science, and engineering	○	○	○	○
An ability to design and conduct experiments, as well as to analyze and interpret data	○	○	○	○
An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability	○	○	○	○
An ability to function on multi-disciplinary teams	○	○	○	○
An ability to identify, formulate, and solve engineering problems	○	○	○	○
An understanding of professional and ethical responsibility	○	○	○	○
An ability to communicate effectively	○	○	○	○
An understanding of the impact of engineering solutions in a global and societal context	○	○	○	○
A recognition of the need for, and an ability to engage in life-long learning	○	○	○	○
An understanding of contemporary issues in computer engineering	○	○	○	○
An ability to use the techniques, skills, and modern engineering tools necessary to engineering practice	○	○	○	○
An understanding of real-time embedded computer systems	○	○	○	○

BS Computer Engineering
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
An ability to apply knowledge of mathematics, science, and engineering	○	○	○	○
An ability to design and conduct experiments, as well as to analyze and interpret data	○	○	○	○
An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability	○	○	○	○
An ability to function on multi-disciplinary teams	○	○	○	○
An ability to identify, formulate, and solve engineering problems	○	○	○	○
An understanding of professional and ethical responsibility	○	○	○	○
An ability to communicate effectively	○	○	○	○
An understanding of the impact of engineering solutions in a global and societal context	○	○	○	○
A recognition of the need for, and an ability to engage in life-long learning	○	○	○	○
An understanding of contemporary issues in computer engineering	○	○	○	○
An ability to use the techniques, skills, and modern engineering tools necessary to engineering practice	○	○	○	○
An understanding of real-time embedded computer systems	○	○	○	○

BS Computer Science
Usefulness to current job/goal

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
An ability to apply knowledge of computing and mathematics appropriate to the discipline				
An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution				
An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs				
An ability to function effectively on teams to accomplish a common goal				
An understanding of professional, ethical, legal, security and social issues and responsibilities				
An ability to communicate effectively with a range of audiences				
An ability to analyze the local and global impact of computing on individuals, organizations, and society				
Recognition of the need for and an ability to engage in continuing professional development				
An ability to use current techniques, skills, and tools necessary for computing practice.				
An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling				
An ability to apply design and development principles in the construction of software systems of varying complexity.				

BS Computer Science
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
An ability to apply knowledge of computing and mathematics appropriate to the discipline				
An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution				
An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs				
An ability to function effectively on teams to accomplish a common goal				
An understanding of professional, ethical, legal, security and social issues and responsibilities				
An ability to communicate effectively with a range of audiences				
An ability to analyze the local and global impact of computing on individuals, organizations, and society				
Recognition of the need for and an ability to engage in continuing professional development				
An ability to use current techniques, skills, and tools necessary for computing practice.				
An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling				
An ability to apply design and development principles in the construction of software systems of varying complexity.				

BS Electrical Engineering
Usefulness to current job/goal

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
An ability to apply knowledge of mathematics (including multivariable calculus, differential equations, linear algebra and statistics), science (including chemistry and in-depth calculus-based physics), and engineering.	○	○	○	○
An ability to design and conduct experiments, as well as analyze and interpret data.	○	○	○	○
An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic., environment, social, political, ethical, health and safety, manufacturability, and sustainability.	○	○	○	○
An ability to function on multi-disciplinary teams.	○	○	○	○
An ability to identify, formulate, and solve engineering problems.	○	○	○	○
An understanding of professional and ethical responsibility	○	○	○	○
An ability to communicate effectively.	○	○	○	○
The broad education necessary to understand the impact of engineering solutions in a global and societal context.	○	○	○	○
A recognition of the need for, and an ability to engage in life-long learning.	○	○	○	○
Knowledge of contemporary issues.	○	○	○	○
An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice	○	○	○	○

BS Electrical Engineering
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
An ability to apply knowledge of mathematics (including multivariable calculus, differential equations, linear algebra and statistics), science (including chemistry and in-depth calculus-based physics), and engineering.	○	○	○	○
An ability to design and conduct experiments, as well as analyze and interpret data.	○	○	○	○
An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic., environment, social, political, ethical, health and safety, manufacturability, and sustainability.	○	○	○	○
An ability to function on multi-disciplinary teams.	○	○	○	○
An ability to identify, formulate, and solve engineering problems.	○	○	○	○
An understanding of professional and ethical responsibility	○	○	○	○
An ability to communicate effectively.	○	○	○	○
The broad education necessary to understand the impact of engineering solutions in a global and societal context.	○	○	○	○
A recognition of the need for, and an ability to engage in life-long learning.	○	○	○	○
Knowledge of contemporary issues.	○	○	○	○
An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice	○	○	○	○

BS Mechanical Engineering
Usefulness to current job/goal

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
An ability to apply knowledge of mathematics, science, and engineering	○	○	○	○
An ability to design and conduct experiments, as well as analyze and interpret data	○	○	○	○
An ability to design and realize a thermal or mechanical system, component or process to meet desires needs	○	○	○	○
An ability to function on multi-disciplinary teams	○	○	○	○
An ability to identify, formulate, and solve engineering problems	○	○	○	○
An understanding of professional and ethical responsibility	○	○	○	○
An ability to communicate effectively	○	○	○	○
An understanding of the impact of engineering solutions in a global and societal context	○	○	○	○
A recognition of, and an ability to engage in, life-long learning	○	○	○	○
A knowledge of contemporary issues	○	○	○	○
An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice	○	○	○	○

BS Mechanical Engineering
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
An ability to apply knowledge of mathematics, science, and engineering	○	○	○	○
An ability to design and conduct experiments, as well as analyze and interpret data	○	○	○	○
An ability to design and realize a thermal or mechanical system, component or process to meet desires needs	○	○	○	○
An ability to function on multi-disciplinary teams	○	○	○	○
An ability to identify, formulate, and solve engineering problems	○	○	○	○
An understanding of professional and ethical responsibility	○	○	○	○
An ability to communicate effectively	○	○	○	○
An understanding of the impact of engineering solutions in a global and societal context	○	○	○	○
A recognition of, and an ability to engage in, life-long learning	○	○	○	○
A knowledge of contemporary issues	○	○	○	○
An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice	○	○	○	○

BS Software Engineering
Usefulness to current job/goal

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
An ability to apply knowledge of mathematics, science, and engineering	○	○	○	○
An ability to design and conduct experiments, and an ability to analyze the data	○	○	○	○
An ability to design and implement a software system, component, or process to meet desired needs	○	○	○	○
An ability to function on multi-disciplinary teams	○	○	○	○
An ability to identify, formulate, and solve engineering problems	○	○	○	○
An understanding of professional and ethical responsibility	○	○	○	○
An ability to communicate effectively	○	○	○	○
An understanding of the impact of engineering solutions in a global and societal context	○	○	○	○
A recognition of the need for, and an ability to engage in life-long learning	○	○	○	○
An understanding of contemporary issues in software engineering	○	○	○	○
An ability to use the techniques, skills, and modern engineering tools necessary to engineering practice	○	○	○	○
An understanding of real-time, safety-critical, embedded computer systems	○	○	○	○

BS Software Engineering
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
An ability to apply knowledge of mathematics, science, and engineering	○	○	○	○
An ability to design and conduct experiments, and an ability to analyze the data	○	○	○	○
An ability to design and implement a software system, component, or process to meet desired needs	○	○	○	○
An ability to function on multi-disciplinary teams	○	○	○	○
An ability to identify, formulate, and solve engineering problems	○	○	○	○
An understanding of professional and ethical responsibility	○	○	○	○
An ability to communicate effectively	○	○	○	○
An understanding of the impact of engineering solutions in a global and societal context	○	○	○	○
A recognition of the need for, and an ability to engage in life-long learning	○	○	○	○
An understanding of contemporary issues in software engineering	○	○	○	○
An ability to use the techniques, skills, and modern engineering tools necessary to engineering practice	○	○	○	○
An understanding of real-time, safety-critical, embedded computer systems	○	○	○	○

M Aerospace Engineering/MS Aerospace Engineering
Usefulness to current job/goal

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Ability to analyze and solve engineering problems	○	○	○	○
In one or more of the following subject areas: aerodynamics, aerospace materials, computational methods, controls, propulsion and structures	○	○	○	○
Preparation for a career in the aerospace industry	○	○	○	○
Preparation for further study	○	○	○	○

M Aerospace Engineering/MS Aerospace Engineering
Rate ERAU preparation?

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Ability to analyze and solve engineering problems	○	○	○	○
In one or more of the following subject areas: aerodynamics, aerospace materials, computational methods, controls, propulsion and structures	○	○	○	○
Preparation for a career in the aerospace industry	○	○	○	○
Preparation for further study	○	○	○	○

MS Electrical/Computer Engineering
Usefulness to current job/goal

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Ability to apply fundamental computer engineering and electrical engineering professional practices to analysis, design, and implementation of electrical and/or computer systems.	○	○	○	○
Ability to apply knowledge of advanced topics in electrical engineering or computer engineering, as appropriate to chosen concentration.	○	○	○	○
Ability to communicate effectively and to perform successfully as part of a team.	○	○	○	○
Ability to complete and document either a master's capstone project or a master's thesis, as appropriate to choice of the professional or research option	○	○	○	○

MS Electrical/Computer Engineering
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Ability to apply fundamental computer engineering and electrical engineering professional practices to analysis, design, and implementation of electrical and/or computer systems.	○	○	○	○
Ability to apply knowledge of advanced topics in electrical engineering or computer engineering, as appropriate to chosen concentration.	○	○	○	○
Ability to communicate effectively and to perform successfully as part of a team.	○	○	○	○
Ability to complete and document either a master's capstone project or a master's thesis, as appropriate to choice of the professional or research option	○	○	○	○

M Software Engineering
Usefulness to current job/goal

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Ability to apply software engineering processes appropriate to the analysis or development of highly reliable software systems.	○	○	○	○
Ability to use software engineering methods, techniques, and tools as they relate to the following areas: analysis and specification of requirements, architecture, design, construction, and verification and validation.	○	○	○	○
Ability to communicate effectively and to perform successfully as part of a team.	○	○	○	○
Ability to use software engineering methods, techniques, and tools as they relate to the management of software development	○	○	○	○

M Software Engineering
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Ability to apply software engineering processes appropriate to the analysis or development of highly reliable software systems.	○	○	○	○
Ability to use software engineering methods, techniques, and tools as they relate to the following areas: analysis and specification of requirements, architecture, design, construction, and verification and validation.	○	○	○	○
Ability to communicate effectively and to perform successfully as part of a team.	○	○	○	○
Ability to use software engineering methods, techniques, and tools as they relate to the management of software development	○	○	○	○

BS Aeronautical Science
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Understanding aerodynamic performance of aircraft powered by reciprocating and turbine engines	○	○	○	○
Use of electronic navigation and flight control systems	○	○	○	○
Crew coordination (cockpit resource management)	○	○	○	○
Knowledge of flight physiology, awareness of flight psychology (human factors)	○	○	○	○
Understanding of safety issues, employment of accident prevention techniques, safety program practices and management, and mishap investigation	○	○	○	○
Understanding the concepts and process of meteorology	○	○	○	○
Instrument flight skill	○	○	○	○
Multi-engine/high performance aircraft operations	○	○	○	○
Knowledge of Federal Aviation Regulations	○	○	○	○
Aeronautical decision making (judgment skills)	○	○	○	○
Actions, attitudes, and knowledge of security considerations	○	○	○	○
Dealing with integrity issues	○	○	○	○
Development of moral character	○	○	○	○
Assertiveness in a leadership or subordinate role	○	○	○	○
Ground/Flight training aptitude	○	○	○	○
Ability to adapt to and understand Ground/Flight training for initial aviation position	○	○	○	○
Foundation for understanding complex aircraft systems/navigation/operation in future aviation positions	○	○	○	○

BS Aeronautical Science
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Understanding aerodynamic performance of aircraft powered by reciprocating and turbine engines	○	○	○	○
Use of electronic navigation and flight control systems	○	○	○	○
Crew coordination (cockpit resource management)	○	○	○	○
Knowledge of flight physiology, awareness of flight psychology (human factors)	○	○	○	○
Understanding of safety issues, employment of accident prevention techniques, safety program practices and management, and mishap investigation	○	○	○	○
Understanding the concepts and process of meteorology	○	○	○	○
Instrument flight skill	○	○	○	○
Multi-engine/high performance aircraft operations	○	○	○	○
Knowledge of Federal Aviation Regulations	○	○	○	○
Aeronautical decision making (judgment skills)	○	○	○	○
Actions, attitudes, and knowledge of security considerations	○	○	○	○
Dealing with integrity issues	○	○	○	○
Development of moral character	○	○	○	○
Assertiveness in a leadership or subordinate role	○	○	○	○
Ground/Flight training aptitude	○	○	○	○
Ability to adapt to and understand Ground/Flight training for initial aviation position	○	○	○	○
Foundation for understanding complex aircraft systems/navigation/operation in future aviation positions	○	○	○	○

BS Aeronautics
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Knowledge and understanding of aviation law and regulations	○	○	○	○
Understanding and application of management theory/concepts	○	○	○	○
Knowledge and understanding of economic principles	○	○	○	○
Use of statistical/quantitative techniques to solve problems	○	○	○	○
Knowledge and understanding of aviation, technology and operations, concepts, theory and applications	○	○	○	○
Knowledge and understanding of the many facets of the aviation industry	○	○	○	○
Dealing with integrity issues	○	○	○	○
Development of moral character	○	○	○	○
Assertiveness in a leadership or subordinate role	○	○	○	○
Knowledge and understanding of basic computer skills such as email, word processing, presentations, and spreadsheet software	○	○	○	○
Knowledge of scientific principles	○	○	○	○

BS Aeronautics
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Knowledge and understanding of aviation law and regulations	○	○	○	○
Understanding and application of management theory/concepts	○	○	○	○
Knowledge and understanding of economic principles	○	○	○	○
Use of statistical/quantitative techniques to solve problems	○	○	○	○
Knowledge and understanding of aviation, technology and operations, concepts, theory and applications	○	○	○	○
Knowledge and understanding of the many facets of the aviation industry	○	○	○	○
Dealing with integrity issues	○	○	○	○
Development of moral character	○	○	○	○
Assertiveness in a leadership or subordinate role	○	○	○	○
Knowledge and understanding of basic computer skills such as email, word processing, presentations, and spreadsheet software	○	○	○	○
Knowledge of scientific principles	○	○	○	○

BS Aerospace Engineering
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Knowledge of mathematics and physical science	○	○	○	○
Knowledge of fundamental engineering sciences	○	○	○	○
Design and conduct experiments	○	○	○	○
Analyze and interpret experimental data	○	○	○	○
Knowledge of aerodynamics	○	○	○	○
Knowledge of aircraft performance	○	○	○	○
Knowledge of flight mechanics or spacecraft dynamics	○	○	○	○
Knowledge of aerospace materials	○	○	○	○
Knowledge of aircraft or spacecraft structures	○	○	○	○
Knowledge of propulsion	○	○	○	○
Knowledge of orbital mechanics	○	○	○	○
Knowledge of control systems	○	○	○	○
Knowledge of circuits, electronics, or instrumentation	○	○	○	○
Identify, formulate, and solve engineering problems	○	○	○	○
Use computer aided engineering and programming tools	○	○	○	○
Design an aircraft or spacecraft system, component, or mission to meet desired needs	○	○	○	○
Understand the impact of engineering decisions on society and the environment	○	○	○	○
Understand professional and ethical responsibility	○	○	○	○
Recognize the need to continue professional development throughout one's career	○	○	○	○

BS Aerospace Engineering
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Knowledge of mathematics and physical science	○	○	○	○
Knowledge of fundamental engineering sciences	○	○	○	○
Design and conduct experiments	○	○	○	○
Analyze and interpret experimental data	○	○	○	○
Knowledge of aerodynamics	○	○	○	○
Knowledge of aircraft performance	○	○	○	○
Knowledge of flight mechanics or spacecraft dynamics	○	○	○	○
Knowledge of aerospace materials	○	○	○	○
Knowledge of aircraft or spacecraft structures	○	○	○	○
Knowledge of propulsion	○	○	○	○
Knowledge of orbital mechanics	○	○	○	○
Knowledge of control systems	○	○	○	○
Knowledge of circuits, electronics, or instrumentation	○	○	○	○
Identify, formulate, and solve engineering problems	○	○	○	○
Use computer aided engineering and programming tools	○	○	○	○
Design an aircraft or spacecraft system, component, or mission to meet desired needs	○	○	○	○
Understand the impact of engineering decisions on society and the environment	○	○	○	○
Understand professional and ethical responsibility	○	○	○	○
Recognize the need to continue professional development throughout one's career	○	○	○	○

BS Applied Meteorology
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Demonstrate knowledge of math and science	○	○	○	○
Knowledge and skills expected for the field of meteorology	○	○	○	○
Analyze and Interpret data from modern meteorological datasets	○	○	○	○
Skill in computer programming and applications	○	○	○	○
Apply meteorology theory to generate a weather forecast	○	○	○	○
Plan and implement a research project	○	○	○	○
Communicate effectively	○	○	○	○
Understand professional and ethical responsibility	○	○	○	○
Understand contemporary issues in atmospheric science	○	○	○	○

BS Applied Meteorology
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Demonstrate knowledge of math and science	○	○	○	○
Knowledge and skills expected for the field of meteorology	○	○	○	○
Analyze and Interpret data from modern meteorological datasets	○	○	○	○
Skill in computer programming and applications	○	○	○	○
Apply meteorology theory to generate a weather forecast	○	○	○	○
Plan and implement a research project	○	○	○	○
Communicate effectively	○	○	○	○
Understand professional and ethical responsibility	○	○	○	○
Understand contemporary issues in atmospheric science	○	○	○	○

BS Aviation Business Administration
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Understanding and having the ability to apply management theory and concepts within an organization	○	○	○	○
Understanding and having the ability to apply marketing concepts in business and/or in the creation of a strategic marketing plan	○	○	○	○
Understanding and having the ability to apply financial concepts in business decision making	○	○	○	○
Understanding and integrating knowledge of microeconomics into managerial decision making	○	○	○	○
Understanding and integrating knowledge of macroeconomics into national and international policy decision making	○	○	○	○
Understanding and having the ability to apply accounting concepts in business operations and/or managerial decision making	○	○	○	○
Recognizing and considering ethical issues and social responsibility in managerial decision making	○	○	○	○
Understanding team member roles and experiencing team dynamics (challenges and opportunities), such that future team-based ventures can be confidently undertaken	○	○	○	○
Recognizing legal issues and applying legal concepts in managerial decision making	○	○	○	○
Understanding the complexities associated with the aviation industry, from the perspective of an aviation and/or business professional	○	○	○	○
Understanding the challenges and opportunities associated with the global dimensions of business (including marketing, economics and management)	○	○	○	○
Utilizing technology, software (word processing, presentations, spreadsheets, website design, etc.) and information systems to create and communicate a message	○	○	○	○

BS Aviation Business Administration
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Understanding and having the ability to apply management theory and concepts within an organization	○	○	○	○
Understanding and having the ability to apply marketing concepts in business and/or in the creation of a strategic marketing plan	○	○	○	○
Understanding and having the ability to apply financial concepts in business decision making	○	○	○	○
Understanding and integrating knowledge of microeconomics into managerial decision making	○	○	○	○
Understanding and integrating knowledge of macroeconomics into national and international policy decision making	○	○	○	○
Understanding and having the ability to apply accounting concepts in business operations and/or managerial decision making	○	○	○	○
Recognizing and considering ethical issues and social responsibility in managerial decision making	○	○	○	○
Understanding team member roles and experiencing team dynamics (challenges and opportunities), such that future team-based ventures can be confidently undertaken	○	○	○	○
Recognizing legal issues and applying legal concepts in managerial decision making	○	○	○	○
Understanding the complexities associated with the aviation industry, from the perspective of an aviation and/or business professional	○	○	○	○
Understanding the challenges and opportunities associated with the global dimensions of business (including marketing, economics and management)	○	○	○	○
Utilizing technology, software (word processing, presentations, spreadsheets, website design, etc.) and information systems to create and communicate a message	○	○	○	○

BS Computer Engineering
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Apply knowledge of mathematics, science, and engineering	○	○	○	○
Design and conduct experiments	○	○	○	○
Analyze and interpret data	○	○	○	○
Design a computer system or component to meet desired needs	○	○	○	○
Implement computer programs and computational processes to meet desired needs	○	○	○	○
Function on multi-disciplinary teams	○	○	○	○
Identify, formulate, and solve engineering problems	○	○	○	○
Understand professional and ethical responsibility	○	○	○	○
Communicate effectively	○	○	○	○
Understand the impact of engineering solutions in a global and societal context	○	○	○	○
Engage in life-long learning	○	○	○	○
Understand contemporary issues in computer engineering	○	○	○	○
Use modern engineering tools	○	○	○	○

BS Computer Engineering
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Apply knowledge of mathematics, science, and engineering	○	○	○	○
Design and conduct experiments	○	○	○	○
Analyze and interpret data	○	○	○	○
Design a computer system or component to meet desired needs	○	○	○	○
Implement computer programs and computational processes to meet desired needs	○	○	○	○
Function on multi-disciplinary teams	○	○	○	○
Identify, formulate, and solve engineering problems	○	○	○	○
Understand professional and ethical responsibility	○	○	○	○
Communicate effectively	○	○	○	○
Understand the impact of engineering solutions in a global and societal context	○	○	○	○
Engage in life-long learning	○	○	○	○
Understand contemporary issues in computer engineering	○	○	○	○
Use modern engineering tools	○	○	○	○

BS Computer Science
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Understand and apply object-oriented programming concepts to the development of software modules	○	○	○	○
Understand and apply algorithm design concepts and techniques to the design of software modules	○	○	○	○
Understand and apply data structures theory to the design of software modules	○	○	○	○
Apply theory of modularity, abstraction, and information hiding to the design of software systems	○	○	○	○
Understand the fundamental concepts of computer organization and architecture	○	○	○	○
Understand the fundamental concepts of real-time computing	○	○	○	○
Understand the theory and use of operating systems	○	○	○	○
Apply software engineering concepts to specify, design, construct, and test a software product	○	○	○	○
Understand the interrelationship between computer hardware and software fundamentals	○	○	○	○
Apply scientific, mathematical, and engineering concepts, methods, and tools to the solution of software engineering problems	○	○	○	○
Use defined life-cycle engineering processes designed to produce software systems that meet functional, quality, economic, and schedule requirements	○	○	○	○
Understand and appreciate an engineer's professional and ethical responsibilities	○	○	○	○
Understand and appreciate the importance of life-long learning	○	○	○	○

BS Computer Science
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Understand and apply object-oriented programming concepts to the development of software modules	○	○	○	○
Understand and apply algorithm design concepts and techniques to the design of software modules	○	○	○	○
Understand and apply data structures theory to the design of software modules	○	○	○	○
Apply theory of modularity, abstraction, and information hiding to the design of software systems	○	○	○	○
Understand the fundamental concepts of computer organization and architecture	○	○	○	○
Understand the fundamental concepts of real-time computing	○	○	○	○
Understand the theory and use of operating systems	○	○	○	○
Apply software engineering concepts to specify, design, construct, and test a software product	○	○	○	○
Understand the interrelationship between computer hardware and software fundamentals	○	○	○	○
Apply scientific, mathematical, and engineering concepts, methods, and tools to the solution of software engineering problems	○	○	○	○
Use defined life-cycle engineering processes designed to produce software systems that meet functional, quality, economic, and schedule requirements	○	○	○	○
Understand and appreciate an engineer's professional and ethical responsibilities	○	○	○	○
Understand and appreciate the importance of life-long learning	○	○	○	○

BS Electrical Engineering
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Apply knowledge of mathematics, science, and engineering	○	○	○	○
Design and conduct experiments	○	○	○	○
Analyze and interpret data	○	○	○	○
Design a computer system or component to meet desired needs	○	○	○	○
Implement computer programs and computational processes to meet desired needs	○	○	○	○
Function on multi-disciplinary teams	○	○	○	○
Identify, formulate, and solve engineering problems	○	○	○	○
Understand professional and ethical responsibility	○	○	○	○
Communicate effectively	○	○	○	○
Understand the impact of engineering solutions in a global and societal context	○	○	○	○
Engage in life-long learning	○	○	○	○
Understand contemporary issues in electrical engineering	○	○	○	○
Use techniques, skills, and modern engineering tools necessary for engineering practice	○	○	○	○
Demonstrate depth within specific sub-areas of electrical engineering such as control, communications, systems, circuit design, etc.	○	○	○	○

BS Electrical Engineering
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Apply knowledge of mathematics, science, and engineering	○	○	○	○
Design and conduct experiments	○	○	○	○
Analyze and interpret data	○	○	○	○
Design a computer system or component to meet desired needs	○	○	○	○
Implement computer programs and computational processes to meet desired needs	○	○	○	○
Function on multi-disciplinary teams	○	○	○	○
Identify, formulate, and solve engineering problems	○	○	○	○
Understand professional and ethical responsibility	○	○	○	○
Communicate effectively	○	○	○	○
Understand the impact of engineering solutions in a global and societal context	○	○	○	○
Engage in life-long learning	○	○	○	○
Understand contemporary issues in electrical engineering	○	○	○	○
Use techniques, skills, and modern engineering tools necessary for engineering practice	○	○	○	○
Demonstrate depth within specific sub-areas of electrical engineering such as control, communications, systems, circuit design, etc.	○	○	○	○

BS Global Security & Intelligence Studies
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Capability to write in the clear and precise formats required in the Intelligence and Security Communities, both public and private.	○	○	○	○
Ability to present oral briefings at a level comparable to those characteristic of the military, national security, intelligence, and corporate communities.	○	○	○	○
A strong capacity to think critically and imaginatively to interpret the implications of developments critical to the national and/or corporate security.	○	○	○	○
To work effectively in teams on breaking issues, simulations and war gaming, emergency planning and management, and aviation security management.	○	○	○	○
Demonstrate basic oral competence and reading comprehension in a foreign language	○	○	○	○
Capacity to perform criminal justice investigations and crime scene forensic examinations.	○	○	○	○
Demonstrate an understanding of the institutional and regulatory frameworks in the national security arenas, including aviation.	○	○	○	○
Demonstrate an overall knowledge of the Government of the United States, its Constitution and Laws.	○	○	○	○
Demonstrate an understanding of History, in its widest sense, as the foundational discipline for the study of international relations, U.S. Foreign Policy, and intelligence studies.	○	○	○	○

BS Global Security & Intelligence Studies
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Capability to write in the clear and precise formats required in the Intelligence and Security Communities, both public and private.	○	○	○	○
Ability to present oral briefings at a level comparable to those characteristic of the military, national security, intelligence, and corporate communities.	○	○	○	○
A strong capacity to think critically and imaginatively to interpret the implications of developments critical to the national and/or corporate security.	○	○	○	○
To work effectively in teams on breaking issues, simulations and war gaming, emergency planning and management, and aviation security management.	○	○	○	○
Demonstrate basic oral competence and reading comprehension in a foreign language	○	○	○	○
Capacity to perform criminal justice investigations and crime scene forensic examinations.	○	○	○	○
Demonstrate an understanding of the institutional and regulatory frameworks in the national security arenas, including aviation.	○	○	○	○
Demonstrate an overall knowledge of the Government of the United States, its Constitution and Laws.	○	○	○	○
Demonstrate an understanding of History, in its widest sense, as the foundational discipline for the study of international relations, U.S. Foreign Policy, and intelligence studies.	○	○	○	○

BS Interdisciplinary Studies
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Sufficient exposure to several areas of study, such as aeronautical science, business administration, and social sciences, to develop understanding of those disciplines beyond knowledge gleaned from General Education coursework	○	○	○	○
Understand the intersection of disciplinary knowledge and develop the ability to conduct research demonstrating interdisciplinary methodologies	○	○	○	○
Develop an understanding of the complex history and culture of one or more world regions	○	○	○	○
Develop vocabulary and writing skills pertinent to particular communication contexts	○	○	○	○
Appreciate the complexity and magnitude of human production in the arts, such as graphic art, architecture, and literature, and to author analytical interpretations of those works	○	○	○	○
Appreciate and understand human moral, religious, or philosophical thinking and belief systems	○	○	○	○
Garner skills and knowledge from a combination of minors that intersect with one another to form a coherent body of knowledge	○	○	○	○

BS Interdisciplinary Studies
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Sufficient exposure to several areas of study, such as aeronautical science, business administration, and social sciences, to develop understanding of those disciplines beyond knowledge gleaned from General Education coursework	○	○	○	○
Understand the intersection of disciplinary knowledge and develop the ability to conduct research demonstrating interdisciplinary methodologies	○	○	○	○
Develop an understanding of the complex history and culture of one or more world regions	○	○	○	○
Develop vocabulary and writing skills pertinent to particular communication contexts	○	○	○	○
Appreciate the complexity and magnitude of human production in the arts, such as graphic art, architecture, and literature, and to author analytical interpretations of those works	○	○	○	○
Appreciate and understand human moral, religious, or philosophical thinking and belief systems	○	○	○	○
Garner skills and knowledge from a combination of minors that intersect with one another to form a coherent body of knowledge	○	○	○	○

BS Mechanical Engineering
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Knowledge of mathematics and physical science	○	○	○	○
Knowledge of fundamental engineering sciences	○	○	○	○
Design and conduct experiments	○	○	○	○
Analyze and interpret experimental data	○	○	○	○
Knowledge of machine design fundamentals	○	○	○	○
Knowledge of fluid mechanics, thermodynamics and the design of energy conversion systems	○	○	○	○
Knowledge of robotic mechanisms, actuation and control	○	○	○	○
Knowledge of gas turbine engine systems	○	○	○	○
Knowledge of circuits, electronics and instrumentation	○	○	○	○
Identify, formulate and solve engineering problems	○	○	○	○
Use computer aided design and programming tools	○	○	○	○
Design a robotic or gas turbine system or component to meet desired needs	○	○	○	○
Understand the impact of engineering decisions on society and the environment	○	○	○	○
Understand professional and ethical responsibility	○	○	○	○
Recognize the need to continue professional development through one's career	○	○	○	○

BS Mechanical Engineering
Rate ERAU preparation

	Very High Preparation	*High Preparation*	*Moderate Preparation*	*Little Preparation*
Knowledge of mathematics and physical science	○	○	○	○
Knowledge of fundamental engineering sciences	○	○	○	○
Design and conduct experiments	○	○	○	○
Analyze and interpret experimental data	○	○	○	○
Knowledge of machine design fundamentals	○	○	○	○
Knowledge of fluid mechanics, thermodynamics and the design of energy conversion systems	○	○	○	○
Knowledge of robotic mechanisms, actuation and control	○	○	○	○
Knowledge of gas turbine engine systems	○	○	○	○
Knowledge of circuits, electronics and instrumentation	○	○	○	○
Identify, formulate and solve engineering problems	○	○	○	○
Use computer aided design and programming tools	○	○	○	○
Design a robotic or gas turbine system or component to meet desired needs	○	○	○	○
Understand the impact of engineering decisions on society and the environment	○	○	○	○
Understand professional and ethical responsibility	○	○	○	○
Recognize the need to continue professional development through one's career	○	○	○	○

BS Space Physics
Usefulness to current job

	Very Useful	*Useful*	*Not Very Useful*	*Not at all Useful*
Apply knowledge of mathematics and science	○	○	○	○
Design and conduct experiments	○	○	○	○
Analyze and interpret data	○	○	○	○
Identify, formulate, and solve scientific problems	○	○	○	○
Understand professional and ethical responsibility	○	○	○	○
Communicate effectively	○	○	○	○
Recognize and engage in life-long learning	○	○	○	○
Knowledge of contemporary issues	○	○	○	○
Knowledge of classical mechanics	○	○	○	○
Knowledge of electricity and magnetism	○	○	○	○
Knowledge of space physics	○	○	○	○
Knowledge of quantum mechanics	○	○	○	○
Knowledge of planetary science	○	○	○	○
Knowledge of astrophysics	○	○	○	○

BS Space Physics
Rate ERAU preparation

	Very High P repara tion	*Useful*	*High P repara tion*	*Moder ate Pr eparati on*	*Little Prepar ation*
Apply knowledge of mathematics and science	○	○	○	○	○
Design and conduct experiments	○	○	○	○	○
Analyze and interpret data	○	○	○	○	○
Identify, formulate, and solve scientific problems	○	○	○	○	○
Understand professional and ethical responsibility	○	○	○	○	○
Communicate effectively	○	○	○	○	○
Recognize and engage in life-long learning	○	○	○	○	○
Knowledge of contemporary issues	○	○	○	○	○
Knowledge of classical mechanics	○	○	○	○	○
Knowledge of electricity and magnetism	○	○	○	○	○
Knowledge of space physics	○	○	○	○	○
Knowledge of quantum mechanics	○	○	○	○	○
Knowledge of planetary science	○	○	○	○	○
Knowledge of astrophysics	○	○	○	○	○