

# Standards Correlations

## Aerospace Technology II (8488)

Task	SOL Correlations	ITEEA National Standards
<b>Demonstrating Personal Qualities and Abilities</b>		
Demonstrate creativity and innovation.	English: 6.1, 6.3, 6.4, 6.6, 6.7, 6.9, 7.1, 7.3, 7.4, 7.6, 7.7, 7.9, 8.1, 8.3, 8.4, 8.6, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WG.4, WHI.1, WHII.1 Mathematics: 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.10, 6.11, 6.12, 7.2, 7.3, 7.8, 7.9, 8.2, 8.4, 8.6, 8.7, 8.11, 8.12, 8.17, 8.18, A.9, AFDA.3, AFDA.4, AFDA.5, AFDA.6, AFDA.7, AFDA.8, AII.9, COM.1, COM.3, COM.4, COM.5, COM.8, DM.7, DM.1*, DM.10, DM.2*, DM.3*, PS.3*, PS.4*, PS.7*, PS.9*, PS.10* Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PS.1	
Demonstrate critical thinking and problem solving.	English: 6.1, 6.3, 6.4, 6.5, 6.6, 6.7, 6.9, 7.1, 7.3, 7.4, 7.5, 7.6, 7.7, 7.9, 8.1, 8.3, 8.4, 8.5, 8.6, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.11, GOVT.1, USI.1, USII.1, VUS.1,	

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	WG.1, WG.4, WHI.1, WHII.1 Mathematics: 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.10, 6.11, 7.2, 7.3, 7.8, 7.12, 7.13, 8.2, 8.4, 8.8, 8.9, 8.10, 8.11, A.8, A.9, G.1, G.13, G.14, AFDA.3, AFDA.5, AFDA.8, AII.9, AII.10, AII.11, COM.1, COM.3, COM.4, COM.5, COM.8, DM.4, DM.7, DM.1*, DM.2*, DM.3*, DM.9*, PS.9*, PS.10* Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PS.1	
Demonstrate initiative and self-direction.	English: 6.1, 6.4, 6.6, 6.7, 6.9, 7.1, 7.4, 7.6, 7.7, 7.9, 8.1, 8.4, 8.6, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.11, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1	
Demonstrate integrity.	English: 6.1, 7.1, 8.1, 9.1, 9.5, 10.1, 10.5, 11.1, 11.5, 12.1, 12.5 History and Social Science: CE.1, CE.3, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1	
Demonstrate work ethic.	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Science: CH.1	
<b>Demonstrating Interpersonal Skills</b>		
Demonstrate conflict-resolution skills.	English: 6.1, 6.2, 6.4, 6.6, 6.7, 6.9, 7.1, 7.2, 7.4, 7.6, 7.7, 7.9, 8.1, 8.2, 8.4, 8.6, 8.7, 8.9,	

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	9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, VUS.1	
Demonstrate listening and speaking skills.	English: 6.1, 6.2, 6.4, 6.6, 7.1, 7.2, 7.4, 7.6, 8.1, 8.2, 8.4, 8.6, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1	
Demonstrate respect for diversity.	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.3, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, USII.9, VUS.1, VUS.13, WG.1, WHI.1, WHII.1	
Demonstrate customer service skills.	English: 6.1, 6.4, 6.7, 7.1, 7.4, 7.7, 8.1, 8.4, 8.7, 9.1, 9.5, 9.6, 10.1, 10.5, 10.6, 11.1, 11.5, 11.6, 12.1, 12.5, 12.6 History and Social Science: CE.1, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1	
Collaborate with team members	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.3, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1	
<b>Demonstrating Professional Competencies</b>		
Demonstrate big-picture thinking.	English: 6.1, 6.4, 7.1, 7.4, 8.1, 8.4, 9.1, 9.5, 10.1, 10.5, 11.1, 11.5, 12.1, 12.5 History and Social Science: CE.1, CE.4, CE.12, GOVT.1, GOVT.15, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1	
Demonstrate career- and life-management	English: 6.1, 6.7, 7.1, 7.7, 8.1, 8.7, 9.1, 9.6,	

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skills.	10.1, 10.6, 11.1, 11.6, 12.1, 12.6 History and Social Science: CE.1, CE.4, CE.12, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 8.4	
Demonstrate continuous learning and adaptability.	English: 6.1, 6.4, 6.7, 6.9, 7.1, 7.4, 7.7, 7.9, 8.1, 8.4, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.3, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Science: BIO.1, CH.1, LS.1, PH.1, PH.4, PS.1	
Manage time and resources.	English: 6.1, 6.2, 6.4, 6.7, 6.9, 7.1, 7.2, 7.4, 7.7, 7.9, 8.1, 8.2, 8.4, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.2, 11.5, 11.6, 11.8, 12.2, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.11, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 6.10, 6.11, 6.12, 7.2, 7.3, 7.8, 7.9, 7.10, 7.11, 7.12, 7.13, 8.4, 8.11, 8.12, 8.13, 8.14, 8.17, 8.18, A.4, A.5, A.8, A.9, AFDA.3, AFDA.4, AFDA.5, AFDA.6, AFDA.7, AFDA.8, COM.1, COM.3, COM.5, COM.8	
Demonstrate information-literacy skills.	English: 6.1, 6.2, 6.4, 6.6, 6.7, 6.9, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7, 7.9, 8.1, 8.2, 8.3, 8.4, 8.6, 8.7, 8.9, 9.2, 9.5, 9.6, 9.8, 10.2, 10.5, 10.6, 10.8, 11.2, 11.5, 11.6, 11.8, 12.2, 12.5, 12.6,	

Task	SOL Correlations	ITEEA National Standards
	12.8 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 6.10, 6.11, 7.8, 7.9, 8.11, 8.12, A.8, A.9, AFDA.3, AFDA.4, AFDA.6, AFDA.7, AFDA.8, DM.8, PS.1*, PS.2*, PS.3*, PS.4*, PS.7*, PS.8*, PS.9*, PS.10* Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PH.1, PS.1	
Demonstrate an understanding of information security.	English: 6.1, 6.2, 6.3, 6.4, 6.6, 6.7, 6.8, 6.9, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7, 7.8, 7.9, 8.1, 8.2, 8.3, 8.4, 8.6, 8.7, 8.8, 8.9, 9.1, 9.2, 9.5, 9.6, 9.8, 10.1, 10.2, 10.5, 10.6, 10.8, 11.1, 11.2, 11.5, 11.6, 11.8, 12.1, 12.2, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: COM.10	
Maintain working knowledge of current information-technology (IT) systems.	English: 6.1, 6.3, 6.4, 6.6, 6.9, 7.1, 7.3, 7.4, 7.6, 7.9, 8.1, 8.3, 8.4, 8.6, 8.9 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 7.8, COM.1, COM.2, COM.7, COM.9, COM.10, COM.11, COM.16, COM.18, PS.17 Science: BIO.1, CH.1, ES.1, PH.1	
Demonstrate proficiency with technologies, tools, and machines common to a	History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1,	

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specific occupation.	WG.1, WHI.1, WHII.1 Mathematics: 6.10, 6.11, 7.9, 8.4, A.7, A.8, A.9, AFDA.1, AFDA.3, AFDA.5, AII.4, AII.7, AII.9, COM.1, COM.7, COM.10, COM.11, COM.12, COM.16 Science: CH.1, ES.1, LS.1, PH.1, PS.1	
Apply mathematical skills to job-specific tasks.	English: 6.4, 6.6, 6.7, 7.4, 7.6, 7.7, 8.4, 8.6, 8.7, 9.5, 9.6, 10.5, 10.6, 11.5, 11.6, 12.5, 12.6 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 6.1, 6.2, 6.5, 6.6, 6.12, 6.13, 6.14, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.8, 7.9, 7.11, 7.12, 7.13, 8.4, 8.5, 8.6, 8.8, 8.9, 8.10, 8.11, 8.12, 8.13, 8.14, 8.15, 8.16, 8.17, 8.18, A.1, A.3, A.4, A.5, A.7, A.8, A.9, AFDA.1, AFDA.3, AFDA.5, AFDA.8, AII.3, AII.7, AII.9, AII.10, COM.1, COM.7 Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PH.1, PS.1	
Demonstrate professionalism.	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1	
Demonstrate reading and writing skills.	English: 6.1, 6.6, 6.7, 7.1, 7.6, 7.7, 8.1, 8.6, 8.7, 9.1, 9.5, 9.6, 9.7, 10.1, 10.5, 10.6, 10.7, 11.1, 11.5, 11.6, 11.7, 12.1, 12.5, 12.6, 12.7 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1	

<b>Task</b>	<b>SOL Correlations</b>	<b>ITEEA National Standards</b>
	Science: 6.1, PH.1, PS.1	
Demonstrate workplace safety.	English: 6.4, 7.4, 8.4, 9.5, 10.5, 11.5, 12.5 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Science: CH.1	
<b>Examining All Aspects of an Industry</b>		
Examine aspects of planning within an industry/organization.	History and Social Science: GOVT.16	
Examine aspects of management within an industry/organization.		
Examine aspects of financial responsibility within an industry/organization.		
Examine technical and production skills required of workers within an industry/organization.		
Examine principles of technology that underlie an industry/organization.		
Examine labor issues related to an industry/organization.	History and Social Science: GOVT.16	
Examine community issues related to an industry/organization.	History and Social Science: GOVT.16	
Examine health, safety, and environmental issues related to an industry/organization.	History and Social Science: GOVT.16	
<b>Addressing Elements of Student Life</b>		
Identify the purposes and goals of the student organization.		

<b>Task</b>	<b>SOL Correlations</b>	<b>ITEEA National Standards</b>
Explain the benefits and responsibilities of membership in the student organization as a student and in professional/civic organizations as an adult.		
Demonstrate leadership skills through participation in student organization activities, such as meetings, programs, and projects.		
Identify Internet safety issues and procedures for complying with acceptable use standards.		
<b>Exploring Work-Based Learning</b>		
Identify the types of work-based learning (WBL) opportunities.		
Reflect on lessons learned during the WBL experience.		
Explore career opportunities related to the WBL experience.		
Participate in a WBL experience, when appropriate.		
<b>Understanding Aircraft Operations</b>		
Identify the licenses required to become a pilot.	English 11.5, 12.5	18. Transportation Technologies
Complete a preflight checklist.	English 11.5, 12.5	18. Transportation Technologies
Simulate flight operations and maneuvers.		18. Transportation Technologies
Plan a flight.	English 11.1, 11.5, 12.1, 12.5	18. Transportation Technologies
Simulate the navigation of aircraft, using instrumentation.	History and Social Science VUS.14, WHII.14 Mathematics T.9, MA.7	18. Transportation Technologies

<b>Task</b>	<b>SOL Correlations</b>	<b>ITEEA National Standards</b>
<b>Designing Aircraft</b>		
Apply the design process to aircraft design.	English 11.3, 11.5, 12.3, 12.5	11. Apply the Design Process 18. Transportation Technologies
Construct an airfoil.		12. Use and Maintain Technological Products and Systems 13. Assess the Impact of Products and Systems 18. Transportation Technologies
Test an airfoil.	English 11.5, 11.6, 12.5, 12.6 Mathematics G.8, AII.3, AII.7, MA.7	12. Use and Maintain Technological Products and Systems 13. Assess the Impact of Products and Systems 18. Transportation Technologies
Analyze airfoil test results.	English: 11.5, 12.5 Mathematics: G.8, AII.3, AII.7, MA.7	13. Assess the Impact of Products and Systems 18. Transportation Technologies
Describe factors that affect aircraft design.	English: 11.5, 12.5	3. The Relationships Among Technologies and the Connections Between Technology and Other Fields 12. Use and Maintain Technological Products and Systems

<b>Task</b>	<b>SOL Correlations</b>	<b>ITEEA National Standards</b>
		18. Transportation Technologies
Construct an aircraft.	English: 11.5, 12.5	11. Apply the Design Process 12. Use and Maintain Technological Products and Systems 13. Assess the Impact of Products and Systems 18. Transportation Technologies
Identify emerging aircraft technologies.	English: 11.5, 12.5 History and Social Science: VUS.14, WHII.14	4. The Cultural, Social, Economic, and Political Effects of Technology 7. The Influence of Technology on History 18. Transportation Technologies
Explain the importance of following a periodic aircraft maintenance schedule.	English: 11.5, 11.6, 12.5, 12.6	18. Transportation Technologies
Identify aircraft maintenance and repair concerns.	English: 11.5, 12.5	13. Assess the Impact of Products and Systems 18. Transportation Technologies
Identify flight-line safety protocols when performing aircraft maintenance.	English: 11.5, 12.5	18. Transportation Technologies
Identify flight-line safety equipment.	English: 11.5, 12.5	18. Transportation Technologies
<b>Examining Aviation Flight Safety</b>		

<b>Task</b>	<b>SOL Correlations</b>	<b>ITEEA National Standards</b>
Identify flight crew safety protocols.	English: 11.5, 12.5	18. Transportation Technologies
Research an aviation accident.	English: 11.5, 11.8, 12.5, 12.8	3. The Relationships Among Technologies and the Connections Between Technology and Other Fields  18. Transportation Technologies
Identify flight safety equipment and safety protocols.	English: 11.5, 12.5	18. Transportation Technologies
Describe the air traffic control (ATC) system.	English: 11.5, 12.5  History and Social Science: VUS.14, WHII.14	18. Transportation Technologies
Describe the responsibilities of ATC.	English: 11.5, 12.5	18. Transportation Technologies
<b>Working with Model Rockets</b>		
Model an extraterrestrial surface exploration vehicle.	English: 11.5, 12.5	9. Engineering Design  10. The Role of Troubleshooting, Research and Development, Invention and Innovation, and Experimentation in Problem Solving  11. Apply the Design Process  12. Use and Maintain Technological Products and Systems  13. Assess the Impact of Products and Systems
Describe extra-orbital space exploration	English: 11.5, 12.5	7. The Influence of Technology on

<b>Task</b>	<b>SOL Correlations</b>	<b>ITEEA National Standards</b>
systems.	History and Social Science: VUS.14, WHII.14  Science: ES.3	History  18. Transportation Technologies
Design a device to solve a potential problem in space exploration.	English: 11.1, 12.1  History and Social Science: VUS.14, WHII.14	3. The Relationships Among Technologies and the Connections Between Technology and Other Fields  10. The Role of Troubleshooting, Research and Development, Invention and Innovation, and Experimentation in Problem Solving  18. Transportation Technologies
Research trends in the space industry.	English: 11.8, 12.8  History and Social Science: VUS.14, WHII.14  Science: ES.1	18. Transportation Technologies
Design a multistage rocket.	English: 11.1, 11.5, 12.1, 12.5  History and Social Science: VUS.14, WHII.14	9. Engineering Design  10. The Role of Troubleshooting, Research and Development, Invention and Innovation, and Experimentation in Problem Solving  11. Apply the Design Process  12. Use and Maintain Technological

Task	SOL Correlations	ITEEA National Standards
		Products and Systems  13. Assess the Impact of Products and Systems  18. Transportation Technologies
Construct a multistage rocket.	English: 11.5, 12.5	9. Engineering Design  10. The Role of Troubleshooting, Research and Development, Invention and Innovation, and Experimentation in Problem Solving  11. Apply the Design Process  12. Use and Maintain Technological Products and Systems  13. Assess the Impact of Products and Systems  18. Transportation Technologies
Operate a multistage rocket.	English: 11.5, 12.5  Mathematics: A.7, A.8, A.9, AFDA.1, AII.7, AII.9, PS.4*	3. The Relationships Among Technologies and the Connections Between Technology and Other Fields  18. Transportation Technologies
Discuss advanced space travel theories and concepts.	English: 11.1, 12.1	3. The Relationships Among Technologies and the Connections

<b>Task</b>	<b>SOL Correlations</b>	<b>ITEEA National Standards</b>
	History and Social Science: VUS.14, WHII.14	Between Technology and Other Fields
<b>Exploring sUAS Technology</b>		
Identify types of sUAS.	English: 11.5, 12.5	18. Transportation Technologies
Research the evolution of UAS.	English: 11.8, 12.8	3. The Relationships Among Technologies and the Connections Between Technology and Other Fields  18. Transportation Technologies
Analyze the commercial operations of sUAS.	English: 11.5, 12.5	4. The Cultural, Social, Economic, and Political Effects of Technology  6. The Role of Society in the Development and Use of Technology  7. The Influence of Technology on History  18. Transportation Technologies
Describe the recreational use of sUAS.	English: 11.5, 12.5	18. Transportation Technologies
Describe regulations and requirements for sUAS.	English: 11.5, 12.5  History and Social Science: VUS.14, WHII.14	4. The Cultural, Social, Economic, and Political Effects of Technology  18. Transportation Technologies
Complete a flight simulation.		18. Transportation Technologies
Plan a flight mission.	English: 11.1, 12.1	18. Transportation Technologies

<b>Task</b>	<b>SOL Correlations</b>	<b>ITEEA National Standards</b>
Construct a UAS.	English: 11.5, 12.5	9. Engineering Design  10. The Role of Troubleshooting, Research and Development, Invention and Innovation, and Experimentation in Problem Solving  11. Apply the Design Process  12. Use and Maintain Technological Products and Systems  13. Assess the Impact of Products and Systems  18. Transportation Technologies
Troubleshoot sUAS.		10. The Role of Troubleshooting, Research and Development, Invention and Innovation, and Experimentation in Problem Solving
Operate an sUAS.		18. Transportation Technologies
Research careers that use sUAS.	English: 11.8, 12.8	3. The Relationships Among Technologies and the Connections Between Technology and Other Fields  18. Transportation Technologies