

## Goodheart-Willcox Publisher

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Goodheart-Willcox Publisher Correlation of *Engineering Fundamentals* ©2018 to South Carolina Department of Education

CTE / Science, Technology, Engineering and Mathematics Standards
Course: Industrial Technology Education – Exploratory I, II (6040, 6041)

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STANDARDS	CORRELATING PAGES	
UNIT A. THE NATURE OF TECHNOLOGY		
Develop an understanding of the characteristics and scope of technology.	4–7, 62–65	
2. Develop an understanding of the core concepts of technology.	4–5, 26, 44–45, 66–68, 91–92, 129, 201, 212–213, 240, 268, 360, 363, 367	
3. Develop an understanding of the relationships among technologies and the connections between technology and other fields of study.	6–7, 32, 85, 374	
UNIT B. TECHNOLOGY AND SOCIETY		
1. Develop an understanding of the cultural, social, economic, and political effects of technology.	28–32, 91–92, 367	
2. Develop an understanding of the effects of technology on the environment.	32–35, 91–92, 130, 198–201	
3. Develop an understanding of the role of society in the development and use of technology.	31–32, 130, 132	
4. Develop an understanding of the influence of technology on history.	16–19	
UNIT C. DESIGN		
Develop an understanding of the attributes of design.	42–54, 60–73, 78–93, 98–111, 116–134	
Develop an understanding of engineering design.	7–8, 48–50, 60–73, 78–93, 98–111, 116–134	
3. Develop an understanding of the role of troubleshooting, research and development, invention and innovation, and experimentation in problem solving.	26, 40–41, 43, 47, 69, 83–91	



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UNIT D. ABILITIES FOR A TECHNOLOGICAL WORLD		
1. Develop the abilities to apply the design process.	43–45, 48–50, 60–73, 78–93, 98–111, 116–134	
2. Develop the abilities to use and maintain technological products and systems.	120–125, 132–134, 205–206, 211, 214–215, 232–233, 244–245, 307	
3. Develop the abilities to assess the impact of products and systems.	35, 43–44, 83–88, 92, 126	
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2. Develop an understanding of and be able to select and use agricultural and related biotechnologies.	350, 354, 359–363, 383–384	
3. Develop an understanding of and be able to select and use energy and power technologies.	53, 140–142, 223, 303, 329–330	
4. Develop an understanding of and be able to select and use information and communication technologies.	253–269	
5. Develop an understanding of and be able to select and use transportation technologies.	274	
6. Develop an understanding of and be able to select and use manufacturing technologies.	188, 198–201, 205–206, 326	
7. Develop an understanding of and be able to select and use construction technologies.	277–281	