

Moon Area School District Curriculum Map

Integrated Technology

Grade Level: 9-12

Content Area: Technology Education

Frequency: Semester Course

Big Ideas

1. Technology: A human adaptive
2. Technology as a System
3. Types of Technology Systems
4. Outputs, Feedback and Control
5. Problem solving
6. Measurement Tools
7. Machine safety
8. Problem solving and Design Process
9. Construction Structures
10. Using Technology to Transport

Essential Questions

11. How can students develop an understanding of the characteristics and scope of technology.
12. How can students develop an understanding of core concepts of technology.
13. What is the process that all companies use to develop a product or service?
14. Describe technology in terms of level of development, economic structure and types of products or service produced.
15. How can students differentiate between desired and undesired outputs of technological systems.
16. Discuss the relationship between outputs, feedback and control.
17. What types of measuring devices are used to measure for accuracy?
18. Why are certain measuring tools appropriate for certain task?
19. How does identifying safety equipment ensure safe work practice?
20. Discuss the steps of the problem solving system.
21. Explain and describe the steps involved in constructing a structure.
22. What is the purpose of transportation and its types?
23. Why is a working drawing so important for construction.

Primary Resource(s) & Technology:

Textbook Series, online software,
Microsoft Teams, Promethean Boards, Student Laptops/iPads

Pennsylvania and/or focus standards referenced at:

Big Ideas/ EQs	Focus Standard(s)	Assessed Competencies (Key content and skills)	Timeline
1,11,2 4,11, 12,13, 14	Eligible Content:	<ul style="list-style-type: none"> • Types of Technology • Evolving Technology • System Components • Systems model 	August - September
5,2,6, 11,13 16		<ul style="list-style-type: none"> • Problem solving (tower activity) • Measuring 	September
6 ,7,17 18,19		<ul style="list-style-type: none"> • Measuring • Machine safety 	September
4,5,6,7 8,9,15, 16,17, 18,19		<ul style="list-style-type: none"> • Construction (desk Design) • Machine safety • Problem solving • Measurements 	October - November
4,5,6,7 8,9,10, 13,14, 15,16, 17,18, 19,21, 22		<ul style="list-style-type: none"> • Transportation (mouse trap & CO2 car) • Machine Safety • Problem solving • Measurement • Technical Drawing 	December - January