

SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS CLUSTER

LESSON 1

Lesson Plan Title: ABET U **Instructor:**

Suggested Total Time for Lesson (minutes): 45-90 minutes (1-2 days)

Content Focus - What Will Students Learn? (Content Skill Sets)

0972.ST.2461.1 Describe Major Engineering Fields

0972.ST.2461.2 Identify Functions an Engineer Performs

0972.ST.2461.3 Describe Education Required to be an Engineer

0972.ST.2461.5 Describe relationships between the engineer and other technical personnel

Materials and Resources- What do you need to assemble and prepare before the lesson?

Materials:

- Careers Engineering and Engineering ppt
- Recruitment Video(s)

Resources:

- ABET. (2022) ABET, Inc. Retrieved January 20, 2022, from https://www.abet.org/
- Science reference guides. Engineering Disciplines. Science Reference Guide, Library of Congress. (n.d.). Retrieved January 20, 2022, from https://www.loc.gov/rr/scitech/ SciRefGuides/eng-disciplines.html
- What do engineers do? (Michigan State University)
 URL: http://www.egr.msu.edu/future-engineer/what
- WVU Statler Majors and First Year. YouTube. (2020, April 2).
 Retrieved April 1, 2022, from https://youtu.be/MGSBdKLGVlw

Lesson Outline: What learning activities will your students do?

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Time	Sequence/Description of Learning Activity
10-15 minutes	Get Started/Explain: Teacher will present Careers in Engineering and Engineering Technology ppt
20-25 minutes	Discover/Engage/Practice: Students will identify and become familiar with what an engineer is and what engineers do Students will discover which Mountain State Colleges and Universities are ABET Accredited Institutions Students will engage in discussions about the major Engineering Disciplines
5-10 minutes	Check for Understanding/Summarize/Close: Students will discuss what they believe is the most important invention or innovation of the past 100 years detailing which engineering disciplines might have been involved in the creation of this item or system. (Optional) Students will prepare a 3-minute presentation for their invention/innovation to share with the class.

Modifications, Support, and Extensions (for those students with IEP)

Reflection- Did the students learn the content outlined in the lesson focus? Why or why not?