

Overview of Units by Grade Level

Grade 6

Introduction (safety, measurement)
Materials, Tools, and Machines
Engineering Design (Technical Drawing)
3D Modeling and Printing
Manufacturing Technology
Robotics and Coding
Engineering Design Process

Grade 7

Introduction (safety, measurement)
Materials, Tools, and Machines
Engineering Design and Universal Systems Model
3D Modeling and Printing
Transportation Technology

Grade 8

Introduction (safety)
Materials, Tools, and Machines
Engineering Design
Construction Technology
Communication Technology



The curriculum is grounded in the state Next Generation Science and Technology standards as well as the Standards for Technology Literacy. Projects are hands on and the students work in small groups. Each unit has a measure of direct instruction and collaborative learning as we explore the different areas of technology.

Technology Education at Memorial Middle School focuses on the engineering design process. Much of the content standards can be addressed through the process, allowing students to innovate and create solutions to specific engineering challenges. All grades cover the basics of shop safety, measurement, sketching, technical drawing, 3D Design, and the proper use of tools and materials, but each grade targets different areas of engineering technology.

Sixth grade focuses on proper use of, materials, tools, and manufacturing technology. Among the projects is a product development activity and the creation of a company to market their products.

Seventh grade focuses on transportation technologies and the engineering design process. As part of the transportation unit students design, build and test prototypes of magnetic levitation vehicles, crash test vehicles, and glider design.

In eighth grade the focus is on construction technologies and communication systems. Eighth grade students compete in a balsa wood bridge competition and learn important aspects of communication technology through building a functional AM radio.