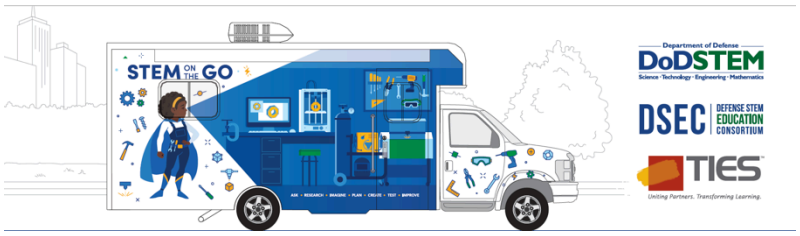
STEM-on-the-Go Project Options

Currently booking for 2025-2026 School Year



One Day Engagement

- The digital activities are short and quick such as making a keychain or bookmark. Students will learn about the fab lab equipment and see how the machines work. These activities are designed for 1 class at a time (20-30 students) in 40-50 minutes.
- Mini Digital Fabrication Projects are more in depth and can be completed by 1 class in 1-2 hours of work time.

	OPTION A	OPTION B	OPTION C
	Introductory Digital Fabrication Projects	**Mix of Introductory Digital Fabrication Projects/ Mini Digital Fabrication Projects**	**Mini Digital Fabrication Projects**
# of Introductory Digital Fabrication Projects	5 classes	2-3 classes	None
# of Mini Digital Fabrication Projects	none	1 class	2 classes
Approximate # of Students	125	75-100	50

One / Two Week Engagements

- Mini Digital Fabrication Projects are more in depth and can be completed by 1 class in 2 hours of work time.
- Extended Digital Fabrication projects are more open ended and allow students to iterate and engage with the content on a deeper level and are completed over the course of the week/two-week visit.

	OPTION D	OPTION E	OPTION F
	Mini Digital Fabrication Projects only	**Mix of Mini Digital Fabrication Projects / Extended Digital Fabrication Projects**	**Extended Digital Fabrication Projects Only**
# of Mini Digital Fabrication Projects	3 classes	2 classes	3 classes
# of Extended Digital Fabrication Projects	1 class	2 classes	3 classes
Approximate # of Students	300	200	150

Activity Options

Introductory Digital Fabrication Projects		
Keychain	Grades 2-12	Students will engage the laser engraver machine and create a custom keychain with their name on it
Bookmark	Grades 2-12	Students will use the laser engraver to design a custom bookmark with their name on it
Robot Keychain	Grades 4-12	Students will see how the laser engraver works and build a Robot keychain with small hand tools
Seasonal Sculptures	Grades K-3	Students will see how the laser works and decorate their own seasonal sculpture to take home (pumpkin, turkey, snowflake, heart, flower, etc)
Coasters	Grades 3-12	Students will use the laser engraver to design a custom drink coaster

Mini Digital Fabrication Projects		
Gliders	Grade 3-12	Students will use digital fabrication software to build a glider and then fabricate the glider using the laser cutter. The glider project was developed in connection with the North Carolina Grade 4 Social Studies Standards. (The Wright Brothers are listed as an example topic for Objective 4.H.1.1 in the Unpacking Documents for North Carolina K-12 Social Studies Standards.)
Mars Structures	Grades 3-12	Students will design and build a structure to protect an astronaut from a solar flare storm on Mars
Avatar	Grades 3-12	Students will complete a design activity and use design software to create their own personal avatar to be engraved onto a journal or magnet
Puzzle/Maps	Grades 3-12	Students will create their own puzzle, content can range from art to geography to more
Alebrijes	Grades 3-12	Students will learn about Alebrijes and design their own before using the laser to fabricate their pieces to create their own mythical creature
Totem Poles	Grades 3-12	Students will complete a design activity before designing their own totem with their spirit animal

Extended Digital Fabrication Projects		
Bird House	Grades 5-12	Students will design, fabricate and construct a birdhouse for a species native to their community
Class Medals	Grades 3-12	Students will determine their class values and create awards before designing and fabricating their own medals
Topographical Maps	Grades 6-12	Students will create a topographical map of a local mountain or lake
Mandala Lanterns	Grades 5-12	Students will create their own mandalas and use them to create a lantern
Tree Lanterns	Grades 3-12	Students will draw their own trees that will be used to create a lantern