



Gains in the Education of Mathematics and Science Program
GEMS is a science, technology, engineering, and mathematics (STEM) education program that engages school-age students in hands-on experiments and broadens their knowledge about STEM and STEM careers.

Student Participants

Who can apply?

Elementary, Junior High, or High School students who are current 4th-11th graders

Student Application Requirements:

1. An Online Application
2. One GEMS Student Essay Form, including grade-level appropriate essay responses
3. One completed GEMS Student Recommendation Form (examples of suitable recommenders include a teacher, school administrator, school counselor, career counselor, athletic coach, troop leader, professional mentor, etc.)

Program Dates/Times

Monday through Friday, 8:30 am to 3:30 pm

Session 1: June 21-25, 2021

Session 2: June 28-July 2, 2021

Session 3: July 12-16, 2021

Session 4: July 19-23, 2021



GEMS 2021 Modules

Simple Machines (4th-5th graders)

Exploration of basic engineering techniques to build, test, and evaluate simple machines

Forensics (6th-7th graders)

Investigation of problem solving, engineering, physics/force of motion, and forensics techniques

Robotics (8th-9th graders)

Building, coding, and programming robots to maneuver and conquer different tasks

Medical (10th-11th graders)

Investigation of the physiology of various human organ systems, and exploration of various healthcare professions

APPLICATION DEADLINE: March 14, 2021

WAITLIST DEADLINE: April 30, 2021

Application link and more information: <http://www.usaarl.army.mil/stem>

Questions? Contact the USAARL GEMS Coordinators via email
usarmy.rucker.medcom-usaarl.mbx.stem@mail.mil



GEMS 2021

Gains in the Education of Mathematics and Science Student Application Instructions

The USAARL GEMS Student application packet has three parts:

1. An Online application
2. One GEMS student Essay Form, including grade-level appropriate essay responses
3. One completed GEMS Student Recommendation Form
(examples of suitable recommenders include a teacher, school administrator, school counselor, career counselor, athletic coach, troop leader, professional mentor, etc.)

Part 1: Online Application

1. Access the online application at <https://cvent.me/mq1adX>
2. Complete the online application by selecting "Finish" on the "Application Summary".

Your application is almost complete. Please review your application below and if everything is correct, click "Finish".

Application Summary

Cancel

Finish

Part 2: GEMS Student Essay Form

1. Download the GEMS Student Essay Form from the application or from the USAARL website.
2. The applicant (i.e., not a parent) should complete the GEMS Student Essay Form.
3. Submit the GEMS Student Essay Form via email to usarmy.rucker.medcom-usaarl.mbx.stem@mail.mil.

Part 3: GEMS Student Recommendation Form

1. Download the GEMS Student Recommendation Form from the application or from the USAARL website.
2. Ask a recommender to complete the GEMS Student Recommendation Form.
3. The GEMS Student Recommendation Form should be submitted directly by the recommender via email to usarmy.rucker.medcom-usaarl.mbx.stem@mail.mil.

Application link and more information: <http://www.usaarl.army.mil/stem>

APPLICATION DEADLINE: 14 March 2021

WAITLIST DEADLINE: 30 April 2021



Questions?

usarmy.rucker.medcom-usaarl.mbx.stem@mail.mil



GEMS STUDENT ESSAY FORM

Submit by **March 14, 2021.**

Previous year forms will NOT be accepted

Applicant Information

Name:	
School:	Current Grade (2019-2020 school year): 3 rd 4 th 5 th 6 th 7 th 8 th 9 th 10 th
Email address:	Phone number:

***Note:** The GEMS Student Essay Form includes two questions to be answered by the applicant. The applicant's essay responses should be *complete sentences* and *grade-level appropriate*. The Student Essay Form is one part of the three-part GEMS application packet. Check <http://www.usaarl.army.mil/stem> for complete application information.

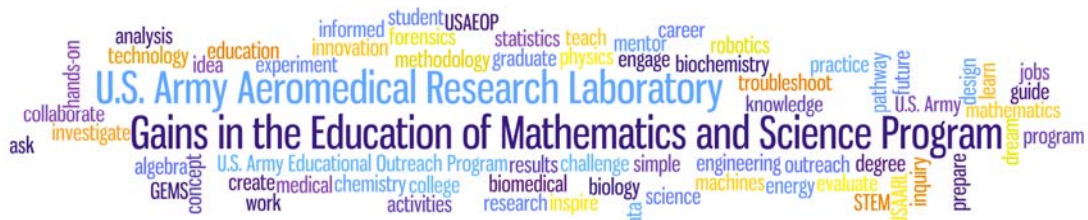
Question 1. GEMS is a program that teaches students about the subjects of **science, technology, engineering, and mathematics (STEM)** by doing experiments.

For 3rd-6th grade applicants: Pick 2 of these subjects. Explain 2 ways you use each subject and how each makes your daily life better.

For 7th-10th grade applicants: Explain the current and future impact that each of these subjects has on you.

E-mail to: usarmy.rucker.medcom-usaarl.mbx.stem@mail.mil

For office use only:



GEMS STUDENT RECOMMENDATION FORM

Submit by **March 14, 2021.**

Previous year forms will NOT be accepted

Applicant Information

Name:	
School:	Current grade: 3 rd 4 th 5 th 6 th 7 th 8 th 9 th 10 th
Email address:	Phone number:

***Note:** The GEMS Student Recommendation Form is one part of the three-part GEMS application packet. Check <http://www.usaarl.army.mil/stem> for complete application information.

The Gains in the Education of Mathematics and Science (GEMS) program is an extracurricular science, technology, engineering, and mathematics (STEM) outreach activity that engages students in hands-on, inquiry-based experiments and nurtures students' interest in STEM career fields. The program aims to reach students historically underserved and underrepresented in STEM.

Rate the applicant	Poor (99 th percentile)	Fair (75 th percentile)	Good (50 th percentile)	Excellent (25 th percentile)	Outstanding (5 th percentile)
Peer Interaction					
Integrity/Honesty					
Respectfulness					
Personal Initiative					
Interest in STEM					
Self-Motivation					
Emotional Maturity					
Cooperation					

Comments about the applicant and how he/she would benefit from participating in GEMS:

Recommender Information

Name:	Relationship to applicant:
Email address:	Phone number:
Signature:	Date:

E-mail to: usarmy.rucker.medcom-usaarl.mbx.stem@mail.mil

For office use only: