

 <p>www.uvi.edu</p>	<p>SPECIALIZING IN FUTURES</p>  <p>HISTORICALLY AMERICAN. UNIQUELY CARIBBEAN. GLOBALLY INTERACTIVE.</p>
<p>Emerging Caribbean Scientists (ECS) Program College of Science and Mathematics Email: ecs@uvi.edu Website: http://ecs.uvi.edu</p>	

The Mathematics Behind the Science (MBS) Program

Six week, residential summer bridge program open to **high school seniors and current UVI freshmen** interested in:
Biology, Chemistry, Computer Science, Engineering, Marine Biology, Mathematics, or Physics

Priority Deadline: May 15th*

**Applications accepted on a continuous basis until all 20 slots are filled. Please inquire about space availability and additional funding options.*

WHAT is the *Mathematics Behind the Science* summer bridge program?

Mathematics Behind the Science (MBS) is a STEM (Science, Technology, Engineering, Mathematics) college preparation program that serves students who have completed grade 12 and will enter college (preferably UVI) as freshmen in the fall, or freshmen already attending UVI who have successfully completed MAT 024. It is intended to serve as a bridge between high school curriculum and expectations at a university.

The program is designed to provide an introduction to the demands of a college STEM curriculum through courses in mathematics, computer science, and scientific writing and a Success in STEM course that will provide information on navigating college life. The courses are designed to show students some of the ways that mathematics and computation are used in scientific contexts and to enhance the preparedness of college-bound students who are interested in pursuing STEM careers. The goal is to provide a foundation for success in STEM courses in the freshman year. Mathematics is required for majors in both Mathematics and Applied Mathematics (part of the Dual Degree Engineering Program) as well as Bachelor degrees in Biology, Marine Biology, Chemistry, Computer Science, and the Associate degree in Physics.

WHEN is the *Mathematics Behind the Science* summer bridge program? The program dates coincide with UVI's Summer Session II and typically begins the last week in June and lasts for 6 weeks.

WHO IS ELIGIBLE?

Students from St. Croix, St. Thomas, and St. John are highly encouraged to apply. The applicant must have:

- A genuine interest in pursuing a program of study in science, mathematics, engineering, technology, pre-medical or other health professional field;
- Acceptance into an accredited college or university **for students in grade 12** (*preference given to applicants enrolling at UVI*).

WHAT ARE THE COSTS? There is no cost to participants or their parents.

WHAT IS THE PURPOSE OF the *Mathematics Behind the Science* bridge program?

- To illuminate uses of mathematics and computation in the sciences and strengthen students' ability to use computation as a problem solving tool in future careers.
- To strengthen the mathematical proficiency of entering students, better preparing them for success in college level

mathematics courses.

- To facilitate the transition between high school performance and that expected at the university level.
- To establish a community of learners supporting student success throughout the undergraduate years as science STEM major.

WHAT ARE THE COMPONENTS?

1. A residential agreement where students are housed in the dormitories of UVI's St. Thomas campus and can dive into the full college life experience for six weeks.
2. A unique mathematics program exploring the mathematical concepts that underpin the fundamentals of calculus. Significant connections will be made to biology, chemistry, physics and the environment.
3. A course in computing that will focus on introductory computer science skills, with applications to the sciences in order to prepare students for a college STEM curriculum and today's environment where computation is used in Biology, Chemistry, Engineering, and other related STEM disciplines.
4. A Success in STEM course to give students information that will help them to transition to college life, including seminars related to use of library, information technology, student services, and scholarship programs to support student success at UVI.
5. A Scientific Reading and Writing course.
6. Career sessions, speaker series and field trips to demonstrate mathematical modeling in the Caribbean environment and expose students to scientific careers.

HOW TO APPLY?

For full consideration, students should submit all application materials by **May 15th**. Please apply early! Applications received after that date may be considered, based on space availability. Applications for admission can be obtained online at <http://ecs.uvi.edu> or by sending an email to ecs@uvi.edu.

GENERAL INFORMATION

The University of the Virgin Islands is a learner-centered institution dedicated to the success of its students and committed to enhancing the lives of the people of the U.S. Virgin Islands and the wider Caribbean through excellent teaching, innovative research, and responsive community service. It enrolls over 2,500 full-time and part-time students on the St. Thomas and St. Croix campuses.

The College of Science and Mathematics offers programs leading to bachelors degrees in biology, marine biology, chemistry, computer science, mathematics and applied mathematics. Associates degrees are offered in process technology, physics, and computer science. Masters degrees are offered in mathematics for secondary teaching, and in marine & environmental studies. Other programs that may be of interest to MBS participants are the Research Initiative for Scientific Enhancement (RISE) Program, Minority Access to Research Careers (MARC) program, Boston University Early Medical School Selection Program (EMSSP), the Dual Degree Engineering programs with Columbia University, University of Florida, and University of South Carolina, the Summer Science Research Institute (SSRI) and the Summer Undergraduate Research Experience (SURE).

ACKNOWLEDGEMENT

The *Mathematics Behind the Science* bridge program is managed by the **Emerging Caribbean Scientists (ECS) Program**. ECS provides UVI students with counseling, scholarships, research experiences, scientific seminars and graduate school preparation workshops. Funding for MBS is provided by the National Science Foundation (NSF), through HBCU-UP (Historically Black Colleges and Universities Undergraduate Programs), and by individual donors to the university.

For more information, visit <http://ecs.uvi.edu> or contact us by email at ecs@uvi.edu or call 340-693-1249.