

# e-Biome's SUMMER OF STEM 2022



"Exploring Deep Sea Engineering."

### Who are we?



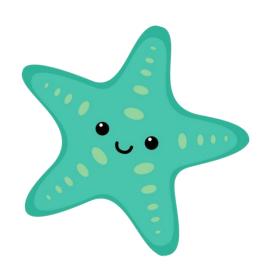


e-Biome is a Scientific Research and **Development Consultancy with a vested** in using Science, Technology, interest **Engineering and Mathematics (STEM) to drive** development in areas of Marine Biotechnological Research, Botanical studies, STEM **Education, Grants and Project** Management, Ecosystem Management and **Business Support Services.** 

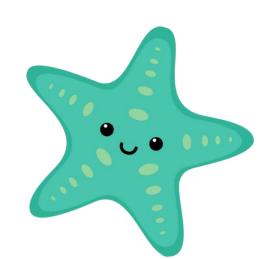
e-Biome provides scientific research and and employs discovering new leading product ideas in the cosmetics and nutraceutical fields using

# What is the Summer of STEM Virtual Camp

This is a **synergetic** and **gratifying** Virtual Camp under the theme "**Exploring**" Deep Sea Engineering". This virtual camp aims to enlighten students of the merits of deep sea engineering as well as the expensive, challenging, and risky nature of deep sea exploration. They will experience the peculiar experience of deep sea engineering, but also how various technologies can be employed to enhance the experience and aid in the discovery of treasures. Deep-sea animals, their adaptations, marine robotics, and ocean engineering will all be investigated in this camp that students will truly



# The Duration of the Camp





It will be held on August 8-26, 2022. The camp commences on Monday, August 8 and end on Friday, August 26, lasting a wonderful 3 weeks duration.

Live Sessions will be held each week from Monday to Thursday from 9 am to 1 pm (EST) via Zoom and students will complete exciting projects on Fridays via the Learning Management System (LMS), Google Classroom.

# Subjects and Topics Provided

- Marine Ecosystems
- Deep-Sea Biology
- Ocean's Physical, Chemical, and Biological Properties
- Marine Engineering

- Thermodynamics
- Ocean Energy Probability
- Hydrostatics and Stability
- Marine Hydrodynamics
- Stochastic Process & Statistics

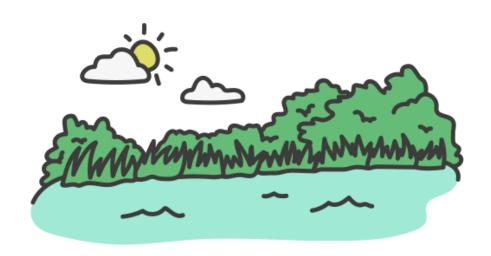
- Marine Robotics
- Coastal Engineering
- Design of Marine Vehicles
- Computer-Aided Marine Design and Production
- Design of Ocean Structures
- Advanced Marine Vehicles





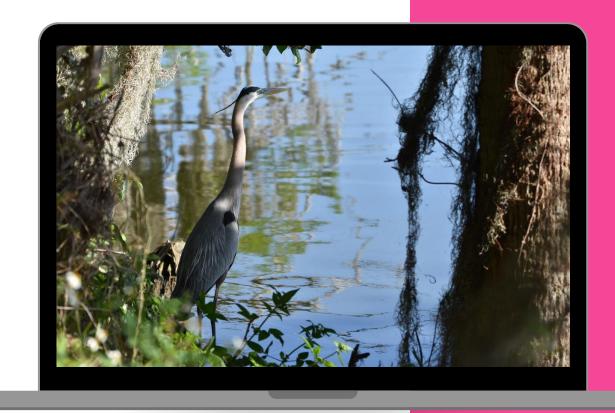






### Age 8-12: Wetlands

The camp is divided into two arms.



Arm one, entitled "Wetlands", caters to ages 8-12. The objective for Wetlands is to enable students to acquire crucial scientific and analytical competencies. The strategy used is designed to lay a solid STEM foundation by exposing students to the practical application of science. They will be given a conceptual introduction as well as hands-on activities, including Virtual Labs, that are meant to sharpen their problem-solving and critical thinking skills.





## Age 13-18: Tropical Forests



Arm two, entitled "Tropical Forests", caters to ages 13-18. The focus of Tropical Forests is to adequately prepare students for a demanding future in STEM by examining cutting-edge scientific concepts and combating environmental challenges. The management and application of scientific principles in the ecosystem will be introduced. Students will grasp and cherish the benefits and drawbacks of deep sea engineering. This is definitely a worthwhile experience.



# Why This Summer Camp?



#### Provides a diverse community of STEM enthusiasts

The primary goal of this camp is to create a diverse community of STEM enthusiasts who are committed to growing their ideas and developing strong communication skills. By developing presentation skills and preparing for interactions with successful marine engineers, entomologists, zoologists, medical doctors, and environmentalists, among others, each participant will achieve being verbally and nonverbally equipped.



#### **Develop Presentation and Communication Skills**

Students will learn how to create a PowerPoint Presentation and develop the skills needed to effectively deliver their presentation.





# Why This Summer Camp?



#### **STEM Career Exposure**

Students will be exposed to different careers in the field of STEM and get the opportunity to interact with local and international professionals.



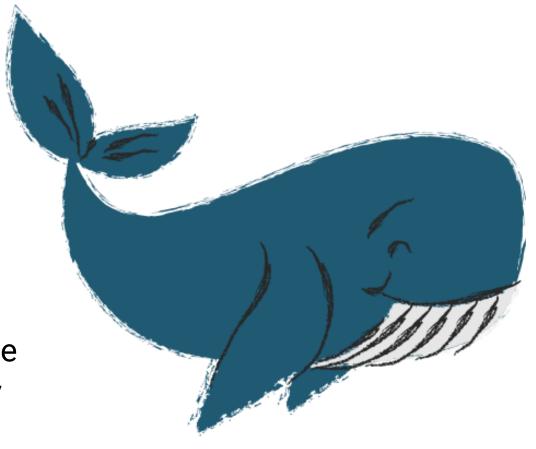
#### **Interactive Virtual Space**

The Zoom Classroom is fun and interactive. The use of polls, white boards and breakout rooms are effective learning tools utilized by e-Biome to engage and keep students edutained.



#### What happens if my child misses a session?

The recording of each session will be posted on the Google Classroom platform.



# Cost and Additional Information





The cost of Summer of STEM 2022 is \$55 USD/ \$8000 JMD. Payment may be made via PayPal, www.e-biome.com, Bank Transfer, or in-cash at the University of the West Indies, Mona.

Register your child for this exceptional experience. Make the right the decision and let us help you to help your child reach their maximum STEM potential. Scan the QR code to apply.

If you need to speak with an e-Biome representative, email us at ebiomeofficial@gmail.com or biolifeja@gmail.com. You may also call or WhatsApp us at +1-876-588-5892.