

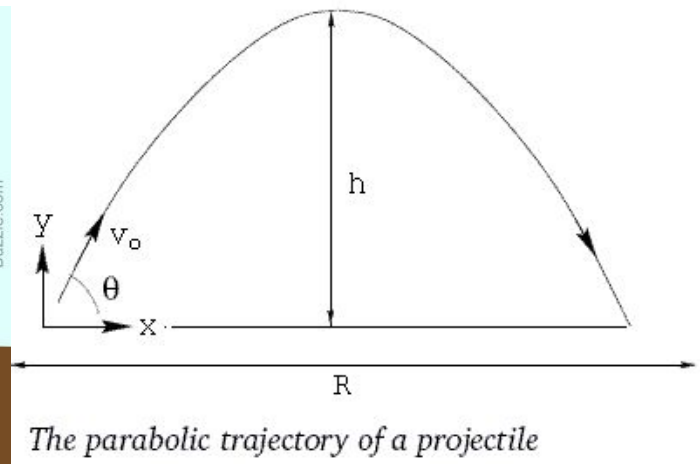
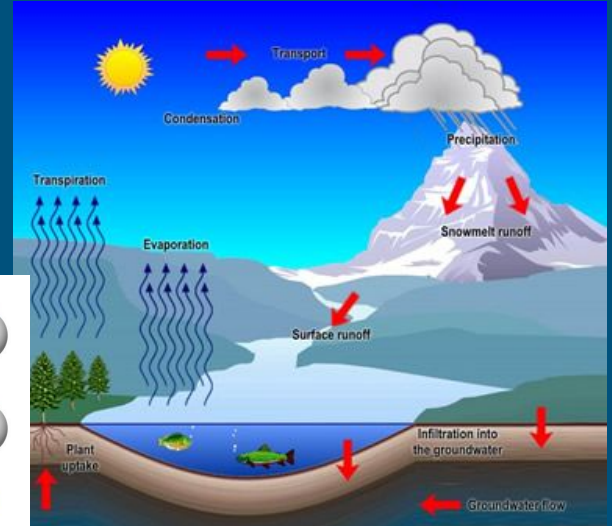
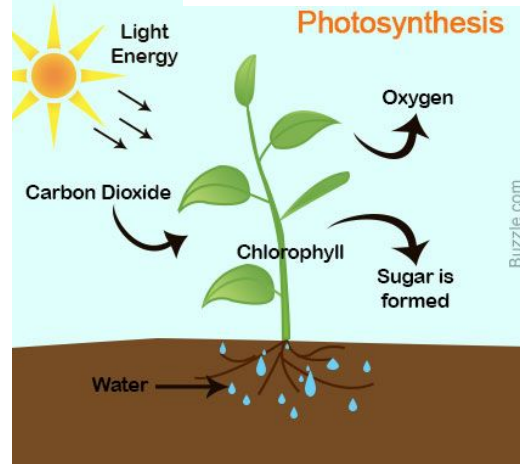
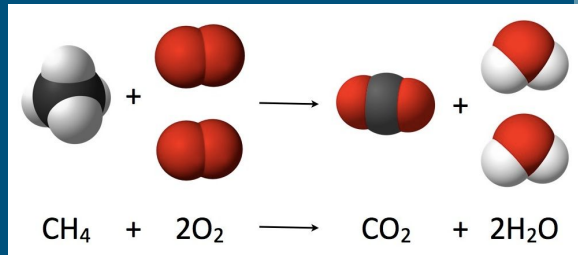
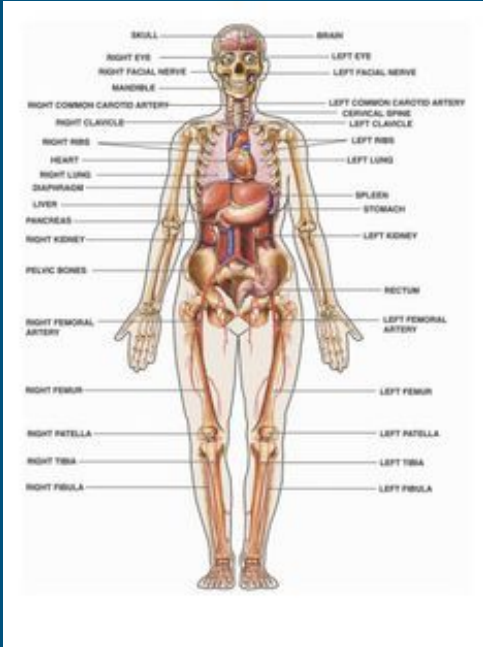
Branching out with STEM

Goodnight Scholars Program
NC State University



What are my options?

In high school you probably studied...



What are my options?

50 undergraduate major options!

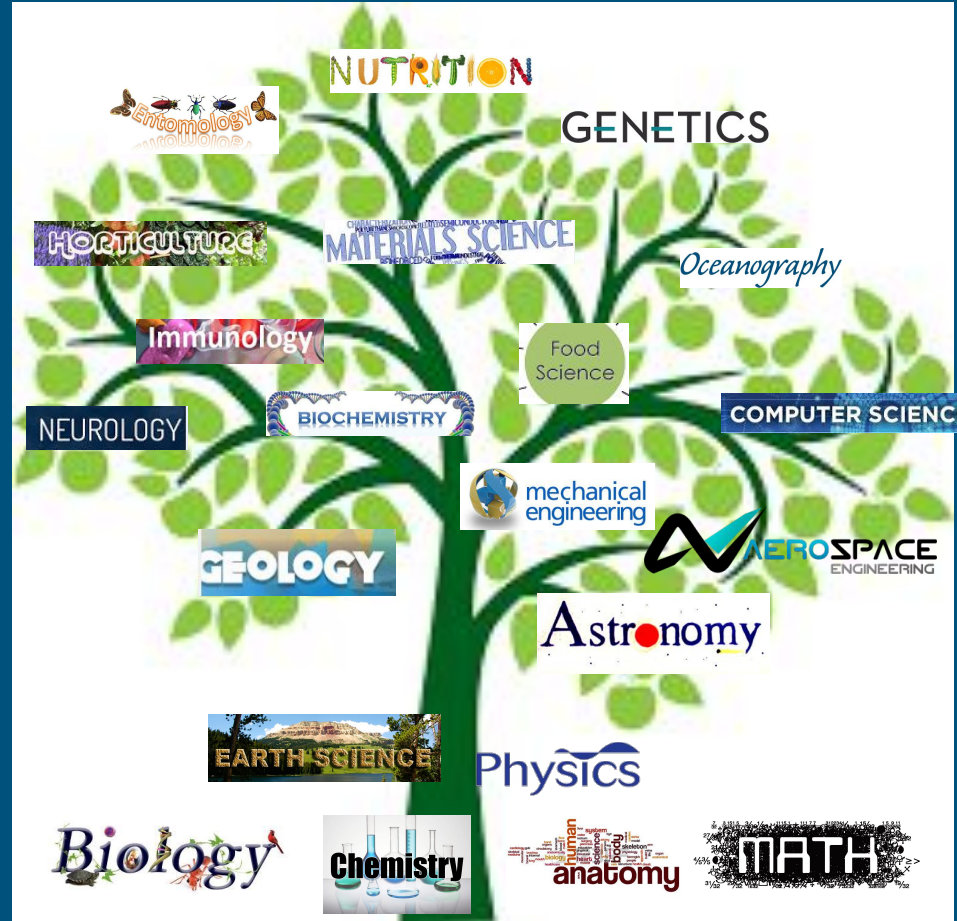
-and concentration options!

Degrees Offered

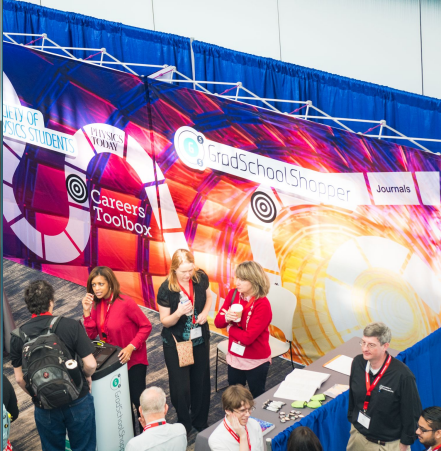
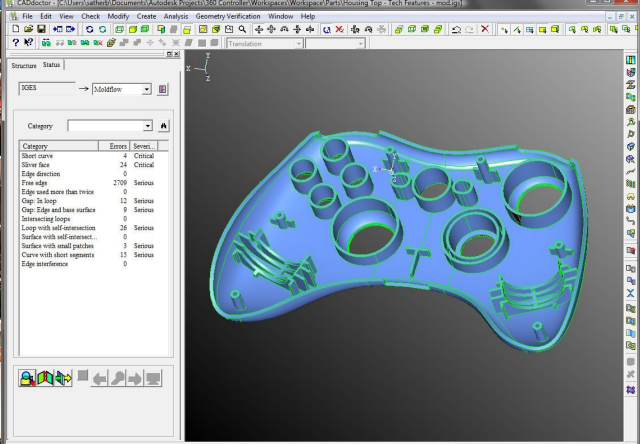
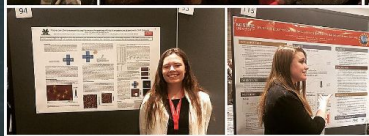
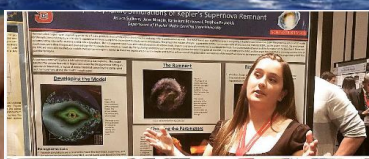
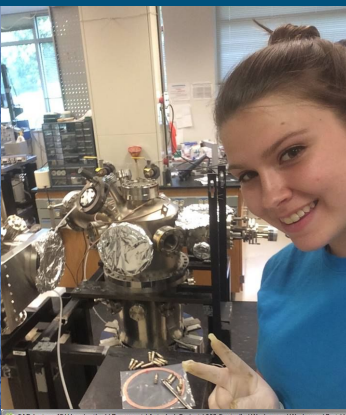
Bachelor of Science in Marine Sciences

- › Biological Oceanography concentration
- › Chemistry concentration
- › Geology concentration
- › Meteorology concentration
- › Physics concentration

See also: [Natural Resources — Marine and Coastal Resources \(NRC\)](#)



What can you do with STEM in college?



What can I do in high school to explore STEM?



Marine, Earth, and Atmospheric Sciences

[About](#)[Undergraduate](#)[Graduate](#)[Research](#)[People](#)[Events](#)

Undergraduate

Programs

[Marine Science](#)[Earth Science](#)[Atmospheric Science](#)[Transfer Students](#)[Life at MEAS](#)

Marine Science

Marine scientists explore all aspects of the seas, seeking to understand how the oceans, their biological communities, the solid earth and the atmosphere interact.



What Do Marine Scientists Do?

Chemical oceanographers study such things as how minerals on land weather into salts and enter the ocean, how chemicals in seawater interact and react, how organic material created by plants survives in the ocean and is buried in sediments deep below the sea surface (and thereby subtracts greenhouse gases from the atmosphere), and how major elements cycle through the ocean.

Geological oceanographers are concerned with plate tectonics and how new crust is formed below the ocean, with the formation and evolution of marine sediments and coastlines, and with reconstruction of ancient environments from fossils and minerals found in the seafloor.

Marine meteorologists work to better understand air-sea interactions such as the exchange of gases, nutrients, heat and water across the air-sea interface.

Physical oceanographers map bodies of water and model water motion to better our understanding of how the movement of seawater affects the transfer of heat, of inorganic and organic materials, and of plant cells and animal larvae from one part of the world to another.

Biological oceanographers explore the biological systems of the marine realm, seeking to establish the interconnections between organisms and their physical regime, nutrient flux, and geologic setting.

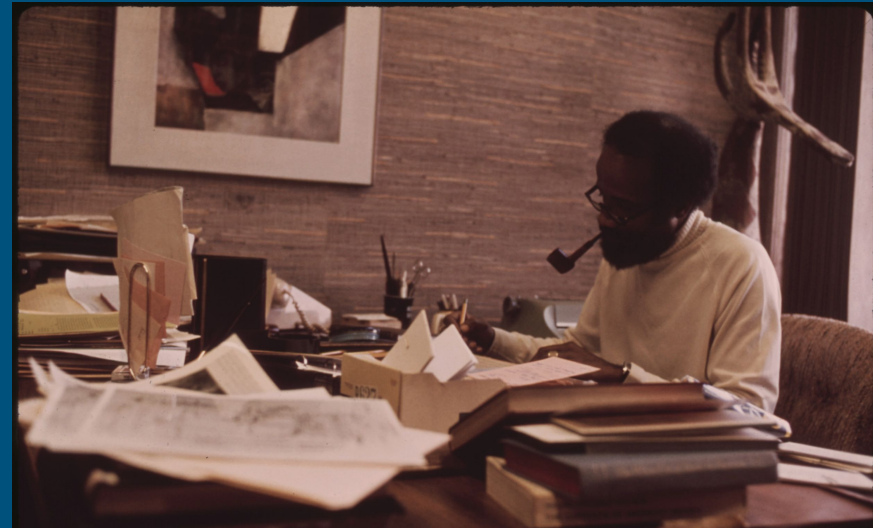
Versatility of STEM

How do you take STEM and apply it in the world?

Versatility of STEM



Versatility of STEM



Careers

Marine scientists are tasked with increasing the scientific knowledge base. As professionals with interdisciplinary training, they are needed to advise business, industry and governments on the potential impact of human activities and the wise use of marine resources.

Marine scientists work for consulting firms; regulatory agencies; the mass media; business and industry; federal, state and local governments; academic laboratories; research and education organizations; and nonprofit environmental watchdog groups.

Examples of career opportunities include modeling, predicting and publicizing weather; predicting and mitigating natural disasters; managing coastal zones that have dynamic geology; monitoring pollution, managing marine resources; and researching sustainable fisheries.



A little bit about us...

In conclusion...



Contact Us!

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