

## SIGNATURE EXPERIENCES

UH is a leading research university offering many opportunities for lab and field experience on campus and in the greater Houston area, including:

- Energy Corridor
- Texas Medical Center
- NASA Johnson Space Center
- UH Coastal Center

But we don't stop there. The world is the classroom for many NSM students.



The experience of being an NSM student is one of diversity, intellectual excellence, and research opportunity. Our students build and send payloads into space, study under professors who are actively making scientific discoveries, and participate in research themselves. As the fourth-largest city in the country, Houston is a great place from which to launch a STEM career.

Geology students participate in the UH Yellowstone Bighorn Research Association field camp near Red Lodge, Montana. While surrounded by the breathtaking views of southern Montana, students spend over a month gaining real-world experience and learning how geological problems are defined and addressed in the field.



Opportunities also exist for research abroad. For example, NSM students conduct valuable STEM fieldwork in the birthplace of evolution — the Galápagos Islands off the coast of Ecuador. Most students earn their scuba certification in order to work on underwater projects involving sea lions, sea urchins, turtles, and various species of fish. Add in a homestay with a local Ecuadoran family, and students return with a new cultural perspective.

## STUDENT TESTIMONIALS



*"I love being a part of NSM because of the people I've been able to connect with. You're surrounded by tomorrow's healthcare providers, scientists, researchers — people that will advance science and innovate technology."*

**Paula Igwe, Biology, B.S.**

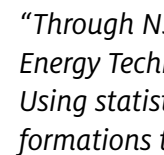
*"I've had so many doors opened for me that I did not know existed prior to my time at UH. My coursework in geospatial analysis and field methods prepared me for an internship in Fairbanks, Alaska, modeling river flooding."*

**True Furrh, Environmental Sciences, B.S.**



*"NSM has shaped me into an adult who knows her values, knows how to fight for what she believes in, and knows that she has found a forever home at UH. The moment I stepped foot on this campus, I did not feel like a number or lost in the sea of incoming freshmen. I knew I was wanted, and I knew I could make an impact here."*

**Daniela Orozco, Biology, B.S.**



*"Through NSM, I earned a fellowship with the Department of Energy's National Energy Technology Laboratory focused on carbon capture and sequestration. Using statistical methods, my job was to analyze characteristics of the rocks and formations to determine which are naturally better at preventing carbon dioxide from escaping, and therefore, made for better seals. This fellowship was my first opportunity to apply my mathematical training to a real-world problem."*

**Michelle Tran, Mathematics, B.S.**



*"NSM has shaped the person I am today. I really found my passion in data analytics and machine learning through the Computer Science program, and I found great friends and colleagues that gave me the skills to thrive in the workforce."*

**Ketan Sinha, Computer Science, B.S.**



[www.uh.edu/nsm](http://www.uh.edu/nsm)

[uhnsms@uh.edu](mailto:uhnsms@uh.edu)



## UNDERGRADUATE PROGRAMS



# NATURAL SCIENCES & MATHEMATICS



# CHOOSE YOUR PATH

NSM DEPARTMENTS, DEGREES, & CAREERS

The College of Natural Sciences and Mathematics is a dynamic community of students, educators, and researchers working together to drive bold discoveries. As a Tier One Research institution celebrating diversity, we are committed to student success, the pursuit of knowledge through fundamental and applied research, and continued engagement in community and professional service.

## BIOLOGY & BIOCHEMISTRY

From molecular to cellular, organisms to ecosystems, courses and research opportunities address basic and applied aspects of biochemical and biological sciences.

- Biology (B.A., B.S.)
- Mathematical Biology (B.S.)
- Biochemical & Biophysical Sciences (B.A., B.S.)



### CAREERS

- Medicine/Health Care
- Ecology/Conservation
- Biotech/Life Science Research
- Bio/Biochemical Modeling

## CHEMISTRY

Study the composition, structure, properties, and reactions of matter, with a focus on manipulation of matter at atomic and molecular levels.

- Chemistry (B.A., B.S.)



### CAREERS

- Health Care
- Research
- Consulting/Quality Control
- Technical Writing/Editing

## COMPUTER SCIENCE

Impacts every sector of the economy, including aerospace, banking, energy, and health care, in addition to the core software and hardware industries.

- Computer Science (B.S.)



### CAREERS

- Software Engineer
- Applications Architect
- Security Analyst
- Data Scientist

## EARTH & ATMOSPHERIC SCIENCES

Degree plans and careers advance the understanding of the earth, oceans, atmosphere, and solar system.

- Geology (B.S.)
- Geophysics (B.S.)
- Earth Science (B.A.)
- Environmental Sciences (B.S.)



### CAREERS

- Geologist
- Geophysicist
- Environmental Scientist
- Atmospheric Scientist

## MATHEMATICS

The language of the universe and an engine of the sciences, mathematics provides key tools for countless applications, such as economics, engineering, and medicine.

- Mathematics (B.A., B.S.)
- Mathematical Biology (B.S.)



### CAREERS

- Financial/Data Analyst
- Research Scientist/Biotech
- Mathematician/Cryptographer
- Teacher

## PHYSICS

Discover and study the fundamental laws of nature around us, in us, and in the universe beyond us. Learn experimental, analytical, and numerical skills to solve problems.

- Physics (B.A., B.S.)



### CAREERS

- Scientific Researcher
- Data Analyst/Modeler
- Government Policymaker
- Physician/Lawyer

# THE ROAD TO NSM

A USEFUL TIMELINE FOR PREPARING FOR COLLEGE

## START HERE

Junior Year of High School

### What Do You Want To Do With Your Life?

Start With Math

Identify your passion. What are you endlessly curious about? Are you a STEM person? Unsure? Use Math as your diagnostic. Our majors require Calculus in the first year.

### Start Getting Ready

Recommended High School Courses

1. Precalculus is required for admission.
2. Take Calculus your senior year if you can.
3. Take Chemistry more than once! AP Chemistry in high school may improve your success in college-level science courses.
4. Going for Computer Science? Can you take a coding class?
5. Take Math courses through your senior year! If you don't use it, you'll lose it!

#### PRO TIP

NSM has higher admissions requirements than UH. You will be prompted for first, second, and third choice majors. Be strategic. It is possible to be denied your choice of major if you don't meet the requirements.

### Does UH Feel Like Home?

Come See Us

There's only one way to know! Request to meet with us at NSMyear1@cougarnet.uh.edu. We love talking about our majors, labs, research, and genetically modified fruit flies.

#### PRO TIP

Choose a university based on fit, not for a specific program. Most students change their major at least once, so don't base your decision on one thing alone. College is what you make of it.

### Take The Test Seriously

Class Rank Isn't Enough

High school class rank compares you to your peers, but SAT/ACT scores compare you nationally. We use both when considering you for scholarships and admission to your major.

### Send Transcripts and Scores

Be Smart About Your Credits

AP/IB/Dual Credit courses are great preparation for college. Make sure UH receives your scores and any relevant transcripts. Then, let us advise you on how to best use your credits.

### Apply Early! Money Matters!

Scholarships & Financial Aid

Apply to UH by November 1, and you're in the best position to get scholarship money. NSM has its own scholarship deadline in February as well!

#### PRO TIP

Completing the FAFSA (and/or TAFSA, if applicable) is fundamental. This will determine if you qualify for any federal aid. The UH FAFSA code is 003652.

### Register for Orientation!

Take The Math Placement Exam

Ready to commit to UH? Choose your Orientation date! Also, be prepared to take a Math Placement Exam; it is the gateway to many of your first-year courses. Remember that NSM majors require completion of Calculus in the first year.

### Future Coog?

Are You Admitted? And To What?

You can be admitted to UH but perhaps not your first choice major.

- Admitted to NSM: Welcome aboard!
- Denied NSM: You have options.

It's time to make your college decision! Confirm your major, check your budget, and register for Orientation!

#### PRO TIP

You can start in "Exploratory Studies" and apply to change your major after at least one semester of coursework at UH. This is a much better option than starting in a different major that you have no intention of completing.

## WELCOME

See You at Orientation!