



SOEST
SCHOOL OF OCEAN AND EARTH
SCIENCE AND TECHNOLOGY

SOEST UNDERGRADUATE STUDENT HANDBOOK

www.soest.hawaii.edu/soestwp/education/undergraduate/

TABLE OF CONTENTS

03	<u>Welcome</u>
04	<u>SOEST Majors & Departments</u>
08	<u>Available Degree Plans</u>
10	<u>BAM (4+1) Pathways</u>
11	<u>Admissions</u>
15	<u>Registration</u>
17	<u>Academic Advising</u>
18	<u>Degree Requirements</u>
19	<u>Online & Campus Resources</u>

Note: All underlined content in this handbook
is hyperlinked for your convenience.

WELCOME TO THE SCHOOL OF OCEAN AND EARTH
SCIENCE AND TECHNOLOGY (SOEST)
AT THE UNIVERSITY OF HAWAI'I AT MĀNOA (UHM)!

LEARNING AT SOEST IS AS MUCH ABOUT
REAL-WORLD EXPERIENCE AS IT IS ABOUT
CLASSROOM AND LABORATORY WORK.

Our students learn, in the lab and the field, from the scientific pioneers responsible for our collective understanding of major world phenomena and global problems—preparing students to be tomorrow's leaders and change-makers. Our students graduate with in-demand technical and analytical skills and join a network of thousands around the world, all working to change the way we live on our planet. Our unique location allows students the opportunity to explore sciences right outside our door as well as within the rich, unique culture that is found here in Hawai'i.



Department of
Atmospheric Sciences

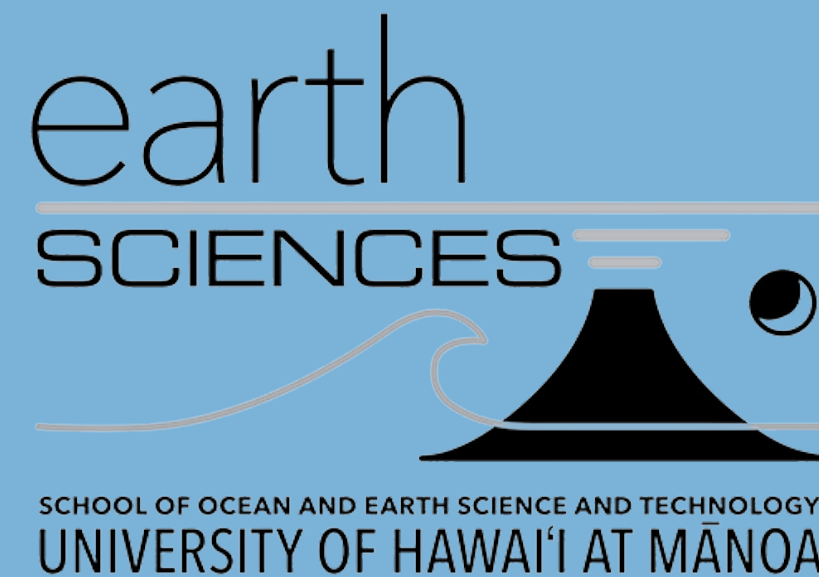
B.S. – Atmospheric Sciences



Department of
Earth Sciences

B.S. – Earth Sciences

B.A. – Environmental Earth Science



Department of
Oceanography

B.S. – Global Environmental Science



SOEST undergraduate
**DEPARTMENTS
& MAJORS**

Note: There are many undergraduate degree options/ tracks to choose from! Please see the [degree plan chart](#) for more information.



DEPARTMENT OF ATMOSPHERIC SCIENCES

www.soest.hawaii.edu/atmo/

Our unique position as a world-class university located in the middle of the Pacific Ocean has fueled our department's intent to focus on issues relating to the weather and climate of the tropical Pacific and Asian-Pacific regions.

DEPARTMENT OF EARTH SCIENCES

www.soest.hawaii.edu/earthsciences/

Our mission is to identify and solve fundamental and applied problems in the Geosciences and Environmental Sciences; to acquire new knowledge about Hawai'i, the Pacific Basin, and Earth; to serve society by teaching and training future geoscientists, teachers, and citizens; and to be a principal resource for objective Earth science expertise in Hawai'i.



DEPARTMENT OF OCEANOGRAPHY

www.soest.hawaii.edu/oceanography/

Our mission is to integrate undergraduate education with cutting-edge, oceanographic research, from local to global scales. Our island location and engaged community empowers us to address the natural processes and human activities that impact our coasts and watersheds, the food we eat, how we live and recreate along the coastline, as well as the climate and how it is changing. We do this by exploring topics that range from microbial communities to large-scale driving forces both on and in our ocean. Our educational programs inspire and nurture future oceanographers and environmental scientists.



DEGREE PLANS

All SOEST degree plans can be found on the [program sheet website](#) under: “School of Ocean and Earth Science and Technology.” Additional information about the degrees that SOEST offers can be found on the [SOEST admissions website](#).

School of Ocean and Earth Science and Technology

Atmospheric Sciences (BS)	Program Sheet	Plan Template
Environmental Earth Science (BA)	Program Sheet	Plan Template
Environmental Earth Science: Earth Science Education (BA)	Program Sheet	Plan Template
Earth Sciences: General (BS)	Program Sheet	Plan Template
Earth Sciences: Basic Sciences and Research (BS)	Program Sheet	Plan Template
Earth Sciences: Environmental and Hydrology (BS)	Program Sheet	Plan Template
Earth Sciences: Geophysics and Tectonics (BS)	Program Sheet	Plan Template
Earth Sciences: Planetary Science (BS)	Program Sheet	Plan Template
Earth Sciences: Volcano Science (BS)	Program Sheet	Plan Template
Global Environmental Science: Environmental Health Sciences (BS)	Program Sheet	Plan Template
Global Environmental Science: Environmental Planning (BS)	Program Sheet	Plan Template
Global Environmental Science: General Pathway (BS)	Program Sheet	Plan Template
Global Environmental Science: Sustainability Science (BS)	Program Sheet	Plan Template

DEGREE	ATMOSPHERIC SCIENCES <i>B.S.</i>	ENVIRONMENTAL EARTH SCIENCE <i>B.A.</i>	EARTH SCIENCES <i>B.S.</i>	GLOBAL ENVIRONMENTAL SCIENCE <i>B.S.</i>
WHAT IS IT?	<i>The study of phenomena in the Earth's atmosphere, including both weather and climate</i>	<i>The study of environmental Earth science and Earth's surface processes geared toward students who plan to enter the environmental and geotechnical fields</i>	<i>The study of the exterior and interior of the Earth and other planetary bodies, geared toward students interested in graduate studies or employment in the geosciences</i>	<i>The integrated study of environmental- and sustainability-related issues through Earth-system science with an oceanography foundation</i>
WHAT WILL I STUDY?	Fundamentals of mathematics, physics, and chemistry, leading to upper division atmospheric sciences topics such as tropical meteorology, aeronomy, applied dynamics, and climatology	Fundamentals of mathematics, physics, and chemistry, leading to a combination of upper division environmental geoscience topics such as hydrogeology, geospatial information systems, and environmental geochemistry	Fundamentals of mathematics, physics, and chemistry, leading up to upper division geoscience topics, such as mineralogy, Earth structure, geochemistry, geophysics, and field methods	Fundamentals of mathematics, physics, chemistry, and biology, leading to upper division environmental science topics, and a faculty-mentored, student-led thesis research project
WHAT ARE THE INTRO COURSES I WILL TAKE?	ATMO 101L, ATMO 200, scientific programming Calculus I, II III, & IV General Physics I & II + labs General Chemistry I & II + labs	ERTH 101+L, ERTH 200 Calculus I College Physics I & II + labs General Chemistry I & II + labs	ERTH 101+L, ERTH 200, scientific programming Calculus I & II General Physics I & II + labs General Chemistry I & II + labs	OCN 102, OCN 201+L, ATMO 200, ERTH 101+L, scientific programming Calculus I & II + 1 additional math General Physics I & II + labs General Chemistry I & II + labs Intro to Biology I & II + labs
POSSIBLE CAREER PATHS?	National Weather Service, Climate Scientist, Renewable Energy, Aviation, Data Scientist, Insurance, Agriculture and Forestry, Corporate Advisor	Field Technician, K-12 Educator, Park Ranger, Environmental Consultant, Hydrologist	Volcanologist, Coastal Geologist, Hydrologist, Planetary Scientist, Geochemist, Geophysicist	Oceanographer, Sustainability Science, Environmental Planning, Environmental Law, Environmental Health Scientist
DEPARTMENT WEBSITE	soest.hawaii.edu/atmo/	soest.hawaii.edu/earthsciences/	soest.hawaii.edu/earthsciences/	soest.hawaii.edu/oceanography/GES/

Please refer to the [UHM Catalog](#) and [Program Sheets](#) for specific course numbers & more information.

SOEST BAM Program DEPARTMENTS & MAJORS

Department of Atmospheric Sciences

B.S. + M.S. – Atmospheric Science

Department of Earth Sciences

B.A. – Environmental Earth Science + P.B.C.T.E. – Teacher Education

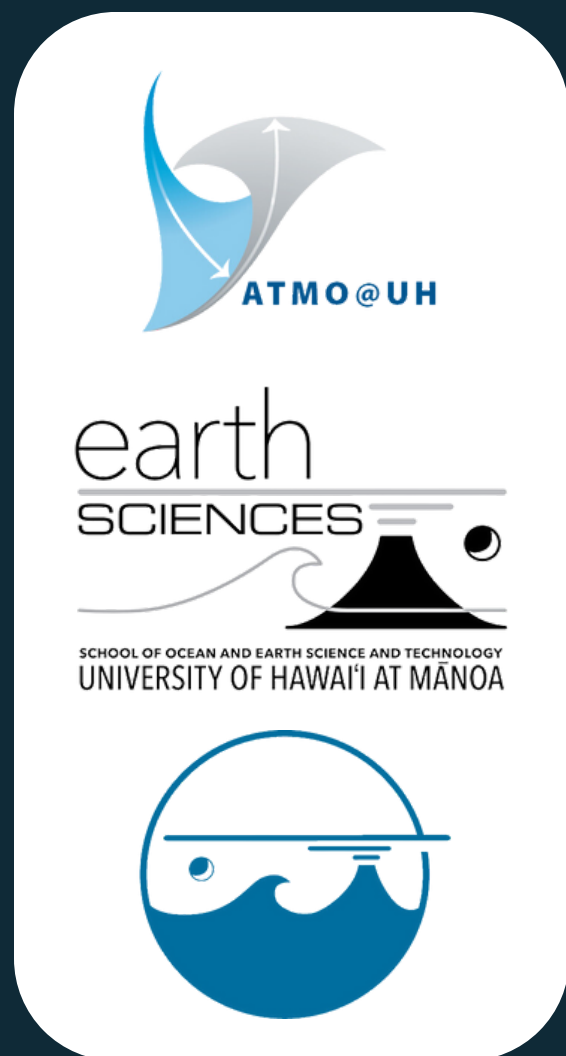
Department of Oceanography

B.S. – Global Environmental Science + M.P.H. – Public Health

B.S. – Global Environmental Science + M.S. Finance

B.S. – Global Environmental Science + M.U.R.P. – Urban & Regional Planning

B.S. – Global Environmental Science + P.B.C.T.E. – Teacher Education



ADMISSIONS

What we'll learn:

01

Applying to
a major in
SOEST

02

Rainbow
Warrior
Checklist

03

Degree plans

04

Placement
exams

05

How to
register for
courses

06

Navigating
STAR



APPLYING TO A MAJOR IN SOEST

New and transfer students can apply directly into SOEST at the University of Hawai'i at Mānoa by indicating a major within SOEST on their admissions application. Students wishing to transfer into SOEST from another major must have at least a 2.5 cumulative GPA and may also indicate a major in SOEST on the application to enter the School of Ocean and Earth Science and Technology. Transfer students can use the [transfer credit database](#) created by the UH admissions office to see which credits are eligible for transfer from their previous institution(s).

RAINBOW WARRIOR CHECKLIST

at a glance



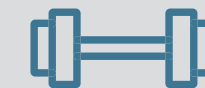
Submit intent to
enroll and tuition
deposit



Submit final
documents



Pay for tuition



Submit health
clearance



Get oriented
and stay
connected

manoa.hawaii.edu/admissions/accepted/

PLACEMENT EXAMS

For new and transfer students, placement exams should be taken before meeting with an advisor in order for the advisor to best guide a student through course planning.

Every SOEST degree requires chemistry and mathematics courses. Placement exams are required and are designed to place students into the appropriate level course that will give them the foundational knowledge needed to succeed. The placement exams should be completed before the start of the first semester if the student has not already taken college calculus and chemistry. More information about each placement exam can be found under the “New and Transfer Students” section on our SOEST SAS website.

MATH
PLACEMENT EXAM

CHEMISTRY
PLACEMENT EXAM

HOW TO REGISTER FOR CLASSES

Registration is done through STAR-GPS, an easy-to-navigate website that allows students to take control of their own academic pathways. STAR enables students to do the following:

- View which courses they need to complete in order to obtain their degree
- Search for classes at any University of Hawai'i campus
- Register for classes that count directly towards their degree/ program
- Maintain a visual calendar of the classes they are choosing and how they fit together
- Directly integrate their class schedules into Google Calendar
- Easily switch classes using the add/ drop function
- Access their own transcripts and related academic information



star.hawaii.edu/studentinterface/

NAVIGATING STAR

A UH Mānoa Innovation

Academic Essentials

Transcripts

What If Journey

GPS Registration

Scholarships

Displays, explains, and keeps track of all of the student's major and graduation requirements.

Shows students' unofficial transcripts. Students can order an official transcript from the Office of the Registrar.

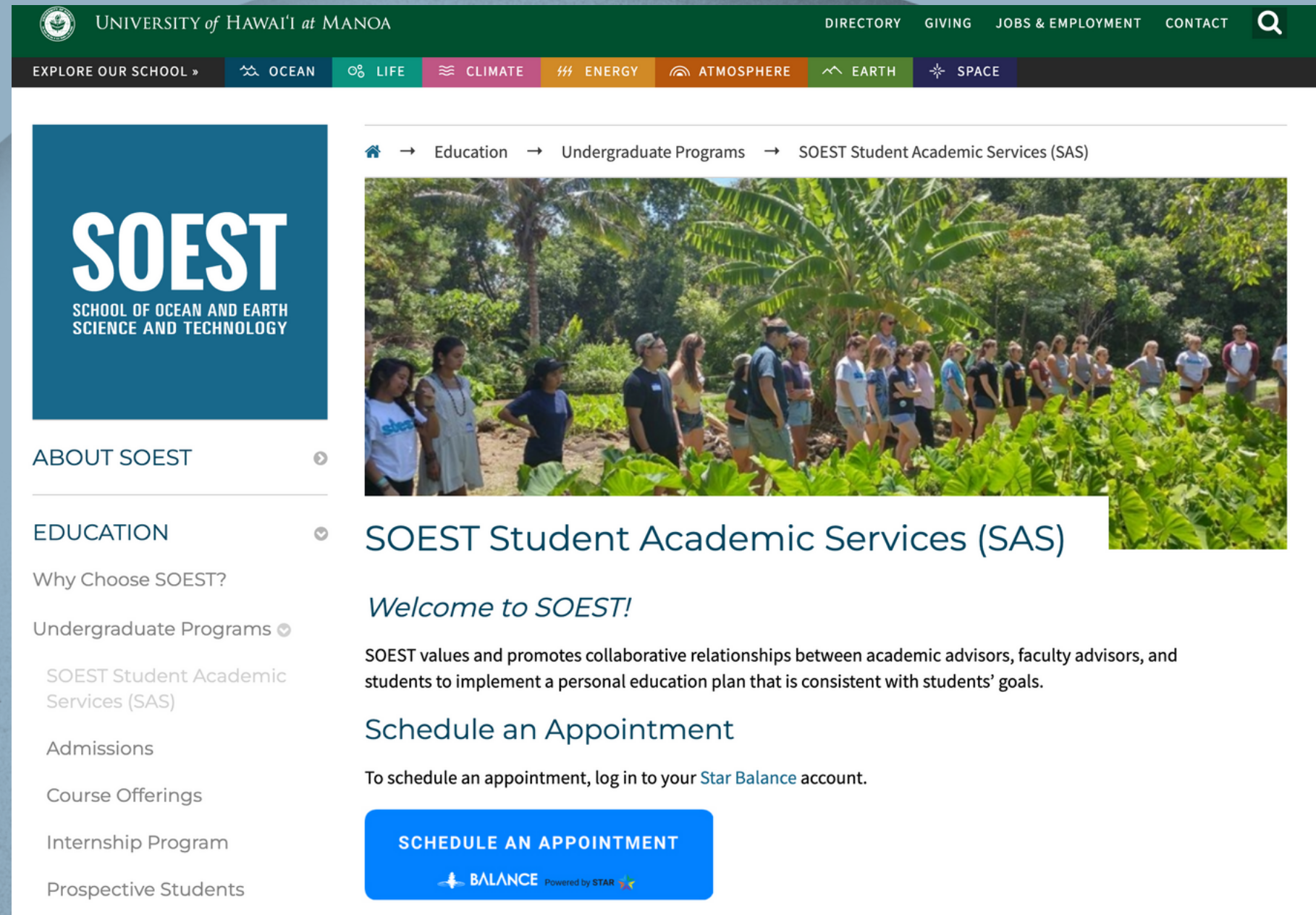
Helps students explore what it might look like if they changed majors. The Academic Essentials and GPS Registration tabs temporarily reflect the possibilities.

Outlines the student's academic plan. This is also where the student can register for courses.

Links to the STAR scholarships online application where students can apply for University of Hawai'i scholarships.

Note: For help with STAR-GPS, students can meet with an academic advisor or visit the [HELP website](#). Registration dates and times are published on the [Registration Timetable](#).

ACADEMIC ADVISING



The screenshot shows the University of Hawai'i at Manoa website. The top navigation bar includes links for DIRECTORY, GIVING, JOBS & EMPLOYMENT, and CONTACT. Below this is a secondary navigation bar with categories: OCEAN, LIFE, CLIMATE, ENERGY, ATMOSPHERE, EARTH, and SPACE. The main content area is titled 'SOEST Student Academic Services (SAS)' and features a large image of a group of students in a field. The left sidebar contains a menu with links: ABOUT SOEST, EDUCATION, Why Choose SOEST?, Undergraduate Programs, SOEST Student Academic Services (SAS), Admissions, Course Offerings, Internship Program, and Prospective Students. The main content area includes a 'Welcome to SOEST!' message, a description of SOEST's collaborative relationships, a 'Schedule an Appointment' section with a link to the Star Balance account, and a prominent blue button labeled 'SCHEDULE AN APPOINTMENT' with the Star Balance logo.

SOEST values and promotes cooperative relationships between academic advisors, faculty advisors, and students through the implementation of a collaborative personal education plan that is consistent with students' goals.

Students can schedule an appointment to speak with an advisor through our [SOEST Student Academic Services \(SAS\) website](#). Click the blue “Schedule an Appointment” button to log into STAR Balance using your UH username and password, or guest log-in.

www.soest.hawaii.edu/soestwp/education/undergraduate/advising/

DEGREE REQUIREMENTS

To obtain an undergraduate degree from SOEST, students must satisfy:

- (a) General Education Core requirements,
- (b) Focus requirements, and
- (c) requirements of the student's specific academic major.

Consulting an academic advisor can help a student select courses that might simultaneously satisfy more than one requirement.

Please note that Hawaiian Language/ Second Language courses are not required for any of the majors in SOEST, but may be required for many other majors outside of SOEST.



General Education Core Requirements

Foundation Requirements: Written Communication, Quantitative Reasoning, and Global & Multicultural Perspectives

Diversification Requirements: Arts, Humanities, & Literatures, and Social Sciences



Focus Graduation Requirements

Contemporary Ethical Issues, Oral Communication, Writing Intensive, and Hawaiian, Asian, & Pacific Issues

Learn more about General Education and Focus requirements on the [Undergraduate General Education Requirements website](#)



Academic Major Requirements

Introductory courses in Calculus, Physics, and Chemistry, and introductory and advanced courses related to the subject of the academic major. For example, Atmospheric Sciences requires a scientific programming course.



USEFUL WEBSITES

for Incoming &
Transfer Students

HELPFUL RESOURCES



MyUH



AP/ IB Credits



Laulima



Credit Transfer



Financial Aid



UHM Catalog



IDPs



Research
(UROP).



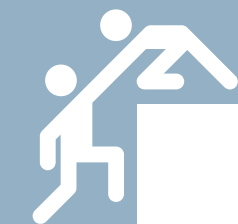
Tutoring



SOEST Club



Funding



Mentorship

SOEST RESOURCES

OTHER USEFUL RESOURCES



[Campus Center Information & ID Office](#)

[Student Housing Services](#)

[UH Mānoa Dining Services](#)

[UH Mānoa Bookstore](#)

[University Health Services](#)

Academic Support Services

- [Sinclair Library Student Success Center](#)
 - [UH Mānoa Learning Assistance Center](#)
 - [NatSci Learning Emporium](#)
 - [UH Mānoa Writing Center](#)
-

Student Support Services

- [TRIO Student Support Services](#)
 - [International Student Services](#)
 - [KŌKUA Office for Students with Disabilities](#)
 - [Counseling & Student Development Center](#)
-

*Learn more at: [SOEST SAS Student Resources](#) → *Helpful Resources at UH**

WE ARE HERE TO SUPPORT YOU!

Please contact SOEST Student Academic Services if you have any further questions or need additional assistance.



SOEST SAS



@soest_uh

Visit us on campus at HIG Room 131B

Email us at soestsas@hawaii.edu

Call us at (808) 956-8468