UH STEM Pathways Project

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Director of STEM Education
University of Hawai’i System

UH STEM Pathways Project

University of Hawai‘i
Strategic Directions, 2015-2021
http://www.hawaii.edu/strategicdirections/

• Hawai‘i Graduation Initiative
• Hawai‘i Innovation Initiative
• 21st Century Facilities
• High Performance Mission-Driven System
UH STEM Pathways Project
Hawai‘i Graduation Initiative

GOAL: Increase the educational capital of the state by increasing the participation and completion of students, particularly Native Hawaiians, low-income students and those from underserved regions and population sand preparing them for success in the workforce and their communities.

HGI Action Strategy 1: Strengthen the pipeline from K-12 to the university to improve college readiness and increase college attendance.

TACTIC:
• Institutionalize early college and “bridge” programs
**UH STEM Pathways Project**

**HGI Action Strategy 2:** Implement structural improvements that promote persistence to attain a degree and timely completion.

**TACTIC:**
- Establish pathways for all degree programs, including transfer pathways from the community colleges.

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**UH STEM Pathways Project**

**HGI Action Strategy 3:** Anticipate and align curricula with community and workforce needs.

**TACTIC:**
- Develop new programs that are responsive to community needs, e.g., STEM, Information and Communication Technology (ICT), sustainability sciences and cybersecurity.
Objective of the ASNS

Prepare students to transfer to baccalaureate STEM programs with a recognized and supported pathway.

ASNS courses will fulfill STEM program requirements at 4-year institutions and provide an easier pathway into STEM.
**Proposed ASNS Concentrated Pathways**

- Biological Science
- Engineering
- ICT*
- Physical Science

*ICT – Information and Communications Technology (formally Data Science)

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### UHCC ASNS Concentration Course Requirements

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<th>Credits</th>
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ASNS Degree Enrollment Increase

Projected Growth

ASNS Graduates from UHCCs
ASNS Transfers to 4-Year Campuses 2008-2014

Includes both, graduates who transferred with and without ASNS degree from a UHCC

Mānoa | Hilo | West O'ahu
---|---|---
209 | 13 | 9

ASNS Transfers to UH Mānoa

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ASNS Engineering – Higher Ed

A.S. Degrees
A.A. Degrees
UHCC Gen Ed

HS Diploma

ASNS Check Sheet

WORKFORCE

GRADUATE SCHOOL

STEM MAJORS

Transfer Bridge

A.S. Degrees
A.A. Degrees

ASNS

Workforce

Transition Bridge

UHCC Gen Ed

Hawai‘i DOE STEM
To Consider…

- Data Science Information and Communications Technology
- Common UH STEM Pathway Courses: Calculus and Chemistry
- Critical Junctures: Transitions and Transfer
- Pathways for Completion