

AS-Natural Science: Information and Communication Technology

Description

The curriculum in this program will allow students to complete a two year degree while fulfilling the coursework for the first two years of study towards a baccalaureate degree in one of four STEM fields of study. Students will have the option of choosing from one of four concentrations - Biological Sciences, Engineering, Information and Communications Technology, and Physical Sciences.

Program Learning Outcomes

Upon completion of the certificate, students will be able to:

- Communicate STEM-field specific ideas and/or principles clearly, correctly, and effectively.
- Apply quantitative reasoning in solving mathematical, programming, biological, physical, or chemical problems, with a special emphasis on Hawaii, where appropriate.
- Analyze and apply STEM concepts and/or techniques to one of the four concentrations (i.e. Biological Sciences, Engineering, Information and Communication Technology, and Physical Sciences).

Contact Information

Program Coordinator: **I-Chia Shih**

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Program Counselor: **Heather Takamatsu**

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Notes

Appropriate course substitutions may be made with the prior written approval of **both** the appropriate Division Chair **and** Dean.

All credits count toward the degree must be earned from the courses numbered 100 and above.

Optional elective courses: Students may take up to four semesters of sequential Hawaiian or Second Language (HSL) courses.

Twelve, 12, credits of the requirements must be earned at Leeward CC.

Cumulative grade point average (GPA) of 2.0 or higher for all courses used to meet the degree requirement.

Program: [Natural Science](#)

Type: Associate in Science (AS)

General Education: Foundation Requirements

Item #	Title	Credits
	Written Communications (FW)	3

MATH 241	Calculus I	4
	Global Multicultural Perspectives (FG-6cr)	6
	Sub-Total Credits	13

General Education: Diversification Requirements

Item #	Title	Credits
	Diversification Social Sciences (DS-3cr)	3
	DA/DH/DL Requirement (ASNS-BS/ICT/PS-E2021)	3
	Diversification Physical Sciences (DP+DY-ASNS)	4
	Sub-Total Credits	10

Concentration Requirements: Information & Communication Technology

Item #	Title	Credits
CHEM 162	General Chemistry II	3
CHEM 162L	General Chemistry II Lab	1
	Diversification Biological (DB)	3
MATH 242	Calculus II	4
ICS 111	Introduction to Computer Science I	3
ICS 141	Discrete Mathematics for Computer Science I	3
ICS 211	Introduction to Computer Science II	3
ICS 212	Program Structure	3
ICS 241	Discrete Mathematics for Computer Science II	3
	Sub-Total Credits	26

Electives

Item #	Title	Credits
	ASNS-ICT Electives (E2021)	11
	Sub-Total Credits	11

Hawaiian Asian Pacific

Item #	Title	Credits
	Hawaiian, Asian, & Pacific Issues (HAP)	
	Total credits:	60