

# Bachelor of Applied Science, Information Security and Assurance

The goal of academic advising is to further enhance the educational mission of the university, and create quality, accessible advising partnerships with all students in a positive environment that supports student success. This advising sheet is for tracking purposes toward degree completion and is subject to change. Students also may track their academic progress via STAR Degree Check through STAR GPS at <https://www.star.hawaii.edu/>. Academic Advising appointments may be scheduled by calling [808-689-2689](tel:808-689-2689) or toll-free from neighbor islands at [866-299-8656](tel:866-299-8656).

## Graduation Requirements (see the 2024-25 catalog for any additional graduation requirements):

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|--|---|--|
| <input type="checkbox"/> 45 Upper Division Credits Minimum | <input type="checkbox"/> 3 Upper Division Writing Intensive Courses | <input type="checkbox"/> 2.0 UHWO GPA          |
| <input type="checkbox"/> 120 Total Credits Minimum         | <input type="checkbox"/> Focus Requirements (OC, HAP, ETH)          | <input type="checkbox"/> 2.0 CONCENTRATION GPA |
| <input type="checkbox"/> 30 UHWO Credits                   |   |  |

\*Note: Some courses may be applied more than once to fulfill General Education, Core, or Concentration Requirements. Double counted courses do not reduce the number of credits required for the concentration. Students are still responsible for meeting the minimum number of credits in the concentration and the overall total credits for graduation

## General Education Requirements: 31 credits (\*25 credits see note above)

Credits	Course Alpha / Number / Title
3	Foundations Written Communications (FW) ENG 100 Composition I
0*	Foundations of Quantitative Reasoning (FQ) <b>MATH 115 Statistics</b>
6	Foundations Global and Multicultural Perspectives (FG): 6 credits from two <b>different</b> groups (A, B, C): *Group A: Primarily before 1500 CE (e.g., HIST 151 or ANTH 151) *Group B: Primarily after 1500 CE (e.g., HIST 152 or ANTH 152) *Group C: Pre-history to present
6	Diversification Arts, Humanities & Literature (DA, DH, DL): 6 credits from two different areas
0*	Diversification Social Sciences (DS): 6 credits from two different areas: <b>SSCI 301</b>
3	Diversification Social Sciences (DS): Different area from above.
3	Diversification Natural Sciences (DB, DP, DY): 3 credits from the biological sciences (DB):
3	3 credits from the physical sciences (DP):
1	1 credit of laboratory (DY):

## ISA Lower Division Concentration Requirements: 18 credits

Credits	Course Alpha / Number / Title
3	ICS 111 Introduction to Computer Science I
3	ICS 129 Introduction to Databases
3	ICS 184 Introduction to Networking
3	ICS 211 Introduction to Computer Science II
3	ICS 240 Operating Systems
3	ISA 275 Security Essentials

## ISA Lower Division Math Requirement: 11 credits

Credits	Course Alpha / Number / Title
3	MATH 115 Statistics (Will satisfy FQ General Ed Requirement)
4	MATH 241 Calculus I
4	MATH 242 Calculus II

## Applied Science Core Requirements: 15 credits

Credits	Course Alpha / Number / Title
3	ICS 101 Digital Tools for Info World
3	ENG 200 Composition II, ENG 209, ENG 210, ENG 215 (or equivalent)

Credits	Course Alpha / Number / Title
3	SSCI 210 Statistical Analysis I (Pre: Math 115 with a C- or higher)
3	SSCI 301 Methods & Techniques in Social Science Research ( <i>May also count as DS in General Education Above and ETH Focus if designated at time of completion</i> )
3	300-400 level course with an ETH designation (*may be combined with other requirements)

### ISA Upper Division Concentration Requirements: 18 credits

Credits	Course Alpha / Number / Title
3	ISA 320 Fundamentals of Secure Software Programming
3	ISA 330 Introduction to Proactive System Security
3	ISA 340 Introduction to Digital Forensics
3	ISA 400 Management of Information Security
3	ISA 450 Modern Cyber Conflicts
3	ITS 410 IT Project Management

### ISA Upper Division Electives: 18 credits

#### Complete 18 credits of 300 or higher-level ISA, CSNT, ITS, MATH, PUBA, or Business Area\* electives

\*Business Area is meant to reflect any course in core or concentration areas within the BA in Business Administration Programs including ACC, BUSA, ECON, FIN, FMGT, HOST, MGT, or MKT

\*ISA students may choose an optional CSNT focus area by completing five 300-level CSNT electives (15 credits) at Honolulu Community College as part of the National Center of Academic Excellence in Cyber Defense Education (CAE-CD) designation and partnership.

Credits	Course Alpha / Number / Title
3	<i>Recommended: ISA 360 Cyber Competitions (Fall)</i>
3	<i>Recommended: ISA 430 Cybersecurity of SCADA (Spring)</i>
3	<i>Recommended: ISA 480I Cyber Investigations (Spring)</i>
3	<i>Recommended: ISA 480R Cyber Detection and Response (Fall)</i>
3	<i>Recommended: BUSA 342 Practical Programming: Python</i>
3	<i>Recommended: BUSA 386 (WI) or BUSA 340 (WI)</i>

### Capstone Requirement: 3 (UD) credits

Credits	Course Alpha / Number / Title
3	WI APSC 486S Senior Project or WI APSC 490S Senior Practicum

### Elective Requirements: 12 credits

**\*Check with your College Success Advisor to confirm how many elective credits are needed.**

Credits	Course Alpha / Number / Title
3	<i>Possible Upper Division 300-400 level Elective</i>
3	<i>Recommended: additional MATH up to 15 credit hours (see below)</i>
3	
3	

#### Recommended Electives:

- MATH 103 College Algebra (or MATH 103 M/L) – this is a prerequisite to MATH 140X which is needed before MATH 241 Calculus I (if you do not place into Calculus I)
- MATH 140X Accelerated Precalculus - this is a prerequisite to MATH 241 Calculus I (if you do not place into Calculus I)

\*All ISA students are encouraged to complete 15 credit hours of mathematics that include math statistics (MATH 115) and both differential and integral calculus (MATH 241 and 242) in order to promote eligibility for specialized professional employment opportunities in cybersecurity and scientific career fields.

**NOTES:** The faculty contacts for this program are Dr. J. Burrell, Email: [jb743@hawaii.edu](mailto:jb743@hawaii.edu); Phone: (808) 689-2479, and Michael Miranda, Email: [mmirand1@hawaii.edu](mailto:mmirand1@hawaii.edu); Phone: (808) 689-2481.