**Notice of Meeting**

## UNIVERSITY OF HAWAIʻI
## BOARD OF REGENTS COMMITTEE ON ACADEMIC AND STUDENT AFFAIRS

Members:  Regents Tagorda (Chair), Acopan (Vice-Chair), Bal, Kudo, Nahale-a, Sullivan, and Westerman

**Date:**  Thursday, March 14, 2019

**Time:**  9:45 a.m.

**Place:**  University of Hawaiʻi at Mānoa
Information Technology Building
1st Floor Conference Room 105A/B
2520 Correa Road
Honolulu, Hawaiʻi 96822

## AGENDA

**I.  Call Meeting to Order**

**II.  Public Comment Period:**  All written testimony on agenda items received after posting of this agenda and up to 24 hours in advance of the meeting will be distributed to the board.  Late testimony on agenda items will be distributed to the board within 24 hours of receipt.  Written testimony may be submitted via US mail, email at bor@hawaii.edu, or facsimile at 956-5156.  Individuals submitting written testimony are not automatically signed up for oral testimony.  Registration for oral testimony on agenda items will be provided at the meeting location 15 minutes prior to the meeting and closed once the meeting begins.  Oral testimony is limited to three (3) minutes.  All written testimony submitted are public documents.  Therefore, any testimony that is submitted verbally or in writing, electronically or in person, for use in the public meeting process is public information and will be posted on the board's website.

**III.  Agenda Items**

A. University of Hawaiʻi Student Caucus Presentation

B. Options for Program Approvals and Delegations

C. Review and Recommend Board Approval to Change from Provisional to Established Status:  Associate of Science in Business, Kauaʻi Community College

D. Review and Recommend Board Approval to Change from Provisional to Established Status:  Associate of Science in Natural Science at the following campuses:

1. Hawaiʻi Community College

2. Honolulu Community College

3. Kauaʻi Community College

4. University of Hawaiʻi Maui College

5. Windward Community College

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E. Review and Recommend Board Approval for the Establishment of a Provisional Bachelor of Science in Construction Engineering, University of Hawai'i at Mānoa

F. Review and Recommend Board Approval for the Establishment of a Provisional Master of Asian International Affairs, University of Hawai'i Mānoa

G. Review and Recommend Board Approval for the Establishment of the Following Provisional Programs:

1. Master of Science in Information Systems, University of Hawai'i at Mānoa

2. Master of Science in Marketing Management, University of Hawai'i at Mānoa

3. Master of Science in Finance, University of Hawai'i at Mānoa

**IV. Adjournment**

University of Hawaiʻi
**Student Caucus**

# Fall 2019 Update

Caucus Chair & Presenter: Christielove Espinosa (UHWO)
Presenter: Kalani Simeona (UHM)
Presenter: Bernadette Rose Garrett (WCC)

# Who is Student Caucus?

We are the representative body of the students of the University of Hawaiʻi system chartered by the University of Hawaiʻi Board of Regents, representing approximately 51,000 undergraduate and graduate students across 10 campuses.  As caucus delegates, we advocate collectively for the interests of the students and serve as the liaison between our constituents system-wide and the UH Administration, State Legislature, Governor, and other offices.

# Who is Student Caucus?

- Of our 20 delegates from all 10 campuses:
  - 16 are full time students (80%)
  - 17 are Hawaiʻi state residents (85%)
  - 2 Graduate students (10%)
  - 4 Seniors (20%)
  - 10 Juniors (50%)
  - 3 Sophomores (15%)
  - 1 Freshman (5%)
  - 15 students have been in UHSC for 1+ year (75%)
  - 5 students have been in UHSC for 2+ years (25%)

# Who is Student Caucus?

- Outside of Student Caucus,
    - 8 of us are enrolled in 15+ credits (40%)
    - 16 students work at least part-time jobs (80%)
    - 13 students work jobs on campus (65%)
    - 16 of us are involved in other organizations on campus in addition to student government (80%)
    - 6 students have transferred within the UH system (30%)

# UHSC Objectives 2018-2019

**Issues:**

- Affordable textbooks
- Parking
- Bus pass fee
- Food insecurity
- Title IX

**Standing Committees:**

- Open Educational Resources
- Transportation
- Affordability
- Mental Health

# Standing Committee: OER

- **Chair:** Jannah Lyn Dela Cruz (UH Mānoa)
- Danny Arase (UH Hilo)
- Kevianna Adams (UH Hilo)
- Joanah Leano (Maui College)

# Standing Committee: OER Progress

- Connecting with OER committee representative from each campus
  - Most are the librarians
  - Building a rapport
  - Finding ways students can help to encourage and support OERS on their campus
- Student Involvement
  - Each campus encouraged to hold an event to inform and educate students on OERS
  - Surveys to see how much students would benefit from OERS
- Faculty Involvement
  - Survey to see why faculty do use OERS
  - Survey to see how many suggest alternative learning materials

# Standing Committee: Transportation

- **Chair:** Autumn-Raine Hesia (WCC)
- Russia Famorca (KCC)
- Dan Flores (GSO)

# Standing Committee: Transportation Progress

- Parking issues
  - Parking Fees increase
  - Carpooling
- Viable alternatives
  - Shuttles
  - Biki stations
- U-Pass
  - Surveying each O'ahu campus that currently does not have U-Pass
    - Leeward CC, Windward CC, Honolulu CC & UH West O'ahu

# Standing Committee: Affordability

- **Chair:** Hannah Liebreich (GSO)
- Bernadette Garret (WCC)
- Christielove Espinosa (UH West O'ahu)
- Stephanie Marr (HawCC)
- Napualani Olivia (HawCC)
- Kamāla Morales (Kaua'i CC)
- Marc Earley (LCC)

# Standing Committee: Affordability Issues

- Campus-wide Priorities
  - Student Emergency Funds
  - Food Pantries (open and supported)
- Survey
  - Each campus polled on either their existing food pantries or their potential need for one
- Emergency Funds initiated on certain campuses
  - Will be monitored on their performance and rules

# Standing Committee: Mental Health

- **Co-Chair:** Andrew Kalani Simeona (UH Mānoa)
- **Co-Chair:** Allyson Villanueva (KCC)
- Kate Baoit (Maui College)

# Standing Committee: Mental Health Issues

- Counselor to student ratio
  - Compared to peer and benchmark schools
- Need for additional mental health resources
  - Better facilities or location for Mental Health Services

# UHSC Highlights

- We had regular meetings and updates with Regent Higa
- We have the same advisor, Hae Okimoto
- We received legislative training from Stephanie Kim
- On February 8th, we lobbied at the state legislature

# UHSC & BOR

- We would like to keep an open communication with the BOR
- Our delegates feel that many of our questions seem to be answered broadly or left unanswered.
- Regular campus meetings
- Our expectations of the board

# Program Approvals and Delegations

Donald O. Straney

Vice President for Academic Planning and Policy

March 14, 2019

# Types of Program Proposals

- ## Resource intensive
  - o New appropriations of positions, operating funds and/or CIP funds required

- ## Reallocation of Existing Resources
  - o Reallocation, rebalancing or refocusing of instructional resources
  - o Facility improvements involve RIM
  - o Represents an adjustment to meet changing student, economic or disciplinary demand

- ## Modification of Existing Programs
  - o Changes in type of degree or emphasis of program
  - o Minimal curricular changes or resource needs

- ## Special Program Need
  - o Programs requiring rapid planning and implementation e.g., to meet workforce needs

# Actions

| Program Type | Provisional Approval | Established Approval |
|---|---|---|
| Resource Intensive | Board of Regents | Board of Regents |
| Reallocating Resources | Board of Regents | Delegate to President after comprehensive review |
| Modifying Existing Programs | Delegate to President | Delegate to President |
| Special  Program Need | Delegate to President | Board of Regents |

UNIVERSITY of HAWAI'I'

KAUA'I
COMMUNITY COLLEGE

UNIVERSITY OF HAWAII
BOARD OF REGENTS

Office of the Chancellor
DTS-19446

**MEMORANDUM**

March 5, 2019
'19 MAR -7 P4:39

RECEIVED

TO:        Lee Putnam
           Chair, Board of Regents

'19 MAR -7 P12:54

           Michelle Tagorda
           Chair, Committee on Academic and Student Affairs

UNIVERSITY OF HAWAII
PRESIDENT'S OFFICE

VIA:       David Lassner
           President

VIA:       Donald O. Straney
           Vice President for Academic Planning and Policy

VIA:       John Morton
           Vice President for Community Colleges

FROM:      Helen Cox
           Chancellor, Kaua'i Community College

SUBJECT:   REQUEST APPROVAL TO CHANGE FROM PROVISIONAL TO
           ESTABLISHED STATUS, ASSOCIATE IN SCIENCE IN BUSINESS

SPECIFIC ACTION REQUESTED:

It is requested that approval to change from provisional to established status for the
Associate in Science (AS) in Business be granted.

RECOMMENDED EFFECTIVE DATE:

Fall 2019

ADDITIONAL COST:

None

PURPOSE:

The Associate in Science (AS) Business Degree Program has just completed its fourth
year. During this time, the Program has grown from zero Majors to 42 and Native
Hawaiians make up 38% of the current Majors. Students earning Certificates of

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Achievement and the AS Degree are steadily increasing and the Program is transferring credentialed and non-credentialed students into 4-year University of Hawaii institutions. Demand for Business Majors is strong and in order to continue to meet employment needs, it is imperative that we move the AS Business Degree Program from Provisional to Established status.

BACKGROUND:

Board of Regents (BOR) Policy RP Section 5.201, III.B.2, states, "Each provisional program shall be reviewed at the end of its first full cycle. The request to the board for "established" program status shall be submitted in the academic year following the end of the program's first full cycle."

The Business (BUS) program at Kaua'i Community College (Kaua'i CC) is a 61-credit Associate in Science (AS). Program courses combine classroom and experiential learning, as well as cooperative off-site opportunities that are designed to meet the Program Student Learning Outcomes (PSLOs). Students completing the program will have acquired skills and knowledge to enter into the workforce, increase their knowledge to attain supervisory positions, and continue their formal education and attain higher-level degrees from 4-year institutions. The AS BUS program obtained provisional status approval from the BOR in spring 2014 and launched in fall 2014.

**Significance/Contribution of This Degree (Address the Need of the Program):**
The Kaua'i CC AS BUS program student population is diverse and mirrors the Institution's diversity in terms of gender, age, and ethnicity. The Program has traditional students seeking a 4-year degree as well as non-traditional students seeking short-term certificates for employment and promotion. Also, there are students who have a desire to create their own businesses and are taking an entrepreneurial pathway. Roughly 55% of the students are part-time and working while attending classes. These students often have family and work responsibilities that require programs designed to accommodate their needs. The AS BUS provides students with both face-to-face and online course offerings, along with a high level of support that enables student progress. The high level of program satisfaction is due in part to a close collaborative partnership between the BUS program and community employers. In the last three years, the number of Business majors has increased from five in AY 2014-15 to 42 in AY 2017-18. This exceeds the initial projection of 30 majors enrolled by year three. For the current AY 2018-19, there are 42 declared Business majors. Native Hawaiian student enrollment increased from 0 in AY 2014-15, when the program was first offered to 18 in AY 2016-17. Native Hawaiian students made up 45% of the total Business majors in AY 2016-17. In the current AY 2018-19, there are 15 Native Hawaiian Business majors. The AS BUS program is effective. Annual course completion rates average 81% and persistence rates have increased in each of the first three AYs. Due to the strong economy and low

unemployment rates on Kauaʻi, persistence rates have declined. The first two AS in Business degrees were awarded in AY 2015-16. This represented a 40% completion rate based on the five declared majors in AY 2014-15. In AY 2017-18, 12 unduplicated certificates or degrees were awarded, which is 48% of the declared majors in AY 2015-16. Importantly, two of those students earning credentials from the program transferred to a 4-year University of Hawaiʻi campus, while one student transferred to a UH campus without credentials

**Demand Projections:**
Demand for the program is good as the state and county economies continue to grow. Additional data from the 2016 Hawaiʻi Labor Market Dynamics report completed by the Research and Statistics Office of the Department of Labor and Industrial Relations for the State of Hawaiʻi, supports the need for continuing the AS BUS at Kauaʻi CC. An employment poll from the AY 2016-17 program completers was taken in the fall of 2017 to determine how many were employed within their field. Of those who had earned a Certificate of Competence, Certificate of Achievement, and/or the AS Degree, 100% are employed in the profit and non-profit business sectors. These positions included both line and supervisory positions in hospitality, health, government, and retail, while one student will be taking over a family nursery and landscaping business.

**Accreditation Impact (if any):**
None

**Examples (2-3) of Similar Models from Peer Institutions:**
AS and Associates in Applied Science (AAS) degrees are being awarded by many online providers including Argosy University and Kaplan University.

**Similar programs at other UH campuses:**
UH Maui College currently offers an AAS in Business Careers. Leeward CC offers an AS in Management and Kapiʻolani CC offers an AS in Marketing. The AS BUS enables Kauaʻi CC to respond to student needs and meet a critical workforce demand on Kauaʻi. The BUS program also provides students with an opportunity to matriculate into the UH 4-year programs to earn a higher degree.

**Statement from Campus Administration of New Program's Strategic Value Within the UH System and Campus Mission, and the Integrated Academic and Facilities Plan:**
Under the campus mission and the UH System Integrated Academic and Facilities Plan, the UH Community Colleges are identified as playing a major role in providing for workforce needs across the state. This AS in Business program meets the workforce needs on Kauaʻi that cannot be easily met otherwise.

**Cost and Resource Allocation/Reallocation Implications:**
There are no additional costs associated with moving the AS in Business from provisional to established status. If enrollment numbers increase, it may be cost effective to add an additional FTE, as opposed to funding lecturers at credit levels that incur benefits and current faculty instructional overloads.

ACTION RECOMMENDED:

It is recommended that the BOR approve the change from provisional to established status, Associate in Science in Business.

Attachment(s):

1. UH Kauaʻi CC Provisional Program proposal for Established Degree Status Associate in Science in Business Degree

c: Executive Administrator and Secretary of the Board Oishi

UNIVERSITY *of* HAWAI'I

COMMUNITY COLLEGE

**UNIVERSITY** *of* **HAWAI'I**

**Kaua'i Community College**

**Provisional Program Proposal**

**for Established Degree Status**

**Associate in Science (AS) in Business Degree**

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## I. Self-Study Purpose

### Purpose of the Report
This report is being submitted to request that the Associate in Science (AS) in Business degree at Kaua'i Community College (KauCC) be moved from Provisional Status to Established Status for the 2019-2020 Academic Year.

Based on the information and data provided throughout the report, one will be able to identify the value that the AS in Business degree brings to the students, business sector, and broader community.

The report will address five areas:
1. Organization of the program to meet its outcomes,
2. Program resource allocation,
3. Program efficiency,
4. Evidence of student learning and student and program success, and
5. Assessment of the appropriateness of program outcomes to college and university functions.

The majority of the data presented throughout this report comes from the Annual Reviews of Program Data (APRD) for the Academic Years 2014-2017. Additional data comes from KauCC's Office of Institutional Research and Analysis.

## II. Business Program Overview

### Overview of the AS in Business Program
In the 2014-2015 Academic Year (AY), the AS in Business degree was launched with the following vision and mission:

### Vision
The AS in Business Degree Program seeks to cultivate and develop future industry professionals through a comprehensive curriculum that prepares them to enter into both the local and global marketplaces

### Mission
The mission of the Business Degree Program at Kaua'i Community College is to provide learners with the knowledge and skills they need to successfully obtain employment in the business sector or pursue further educational opportunities by creating a challenging and inspiring environment that incorporates experiential learning throughout the curriculum.

The Business Degree Program mission statement aligns with the institution's mission by providing learners with a firm foundation from which they can launch their personal career paths and attain the level of success that they desire.

*Objective*

The AS in Business degree will prepare students for entry-level positions in business, industry, and non-profit organizations. It is designed for students who seek to gain a solid foundation of the basic concepts and skills necessary to contribute and create solutions in today's business environment. Upon successful completion of this program, students will acquire the knowledge and skills that will allow them to apply management, marketing, and accounting concepts to improve operational performance in a business setting. This degree can help an individual jump-start his or her career in business or prepare them for transfer to a four-year institution.

The justification for developing and implementing the AS in Business was based on:
1. The need to fill jobs locally within the County of Kaua'i,
2. The growing impact of entrepreneurship education, and
3. The desire to create a pathway for students to articulate into a four-year Business Baccalaureate program

**Program Objectives:**

The Program objectives are to:
- Provide students with an integrated understanding of business and economic concepts and how these concepts relate to business and social systems.
- Instill recognition and practice of ethical responsibilities and accountability.
- Foster an understanding and practice of the management functions of planning, decision-making, and motivation.
- Increase the capacity to implement and adapt to change in the dynamic global market.
- Develop analytical thinking skills and inspire leadership growth.
- Cultivate the entrepreneurial spirit and provide a foundation for business development.
- Create a seamless pathway for attaining a baccalaureate degree through articulation.

**Program Structure:**

The Program is structured in such a way that Certificates ladder into the AS degree. Below is a table of the Certificate and Degree options offered within the Program:

| Name | Number of Credits | Semesters to Completion |
|------|------|------|
| Certificate of Competence in Retail Essentials | 15 | 1 |
| Certificate of Competence in Management Essentials | 21 | 2 |
| Certificate of Competence in Entrepreneurship | 18 | 2 |
| Certificate of Achievement in Management | 42 | 3 |
| Certificate of Achievement in Entrepreneurship | 42 | 3 |
| Associate in Science Degree in Business | 61 | 4 |

**(Please see Appendix A for the AY 14-15 to AY 17-18 Program Action Request)**

**Student Population:**

There are three distinct target markets for the Program:

1.    Traditional students matriculating from high school looking to complete their first two-years of a four-year degree program;
2.    Non-traditional students attending on a part-time basis in order to attain either a Certificate of Achievement or A.S. Degree; and
3.    Non-traditional, working professionals seeking to enhance technical skills in order to gain promotion or advancement.

The student population is diverse and mirrors the Institution's diversity in terms of gender, age, and ethnicity. The Program has traditional students seeking a four-year degree as well as non-traditional students seeking short-term certificates for employment and promotion. There are also students who with a desire to create their own businesses are taking an entrepreneurial pathway.

As the economy improves, we see part-time student enrollment increasing. In AY 17-18, roughly 55% of Business majors were part-time students. In order to accommodate their academic needs, the curriculum is designed to allow students to take either face-to-face or distance education courses. The curriculum has also been designed to have minimum prerequisites to allow for smoother entry at any point within the course sequencing.

## III.    Self-Study Content

### 1.    Program Organization

The Business Program Student Learning Outcomes (PSLOs) are stated below:

- Develop critical thinking and interpersonal skills applicable to real-world problems (PSLO 1)
- Utilize creativity and logical strategies and techniques to solve complex business issues (PSLO 2)
- Implement and apply current technical solutions to business activities, systems, and processes (PSLO 3)
- Apply foundational management principles to the functions of planning, organizing, coordinating, and decision making to business operations (PSLO 4)
- Demonstrate fundamental knowledge of business and technical skills to support lifelong professional development (PSLO 5)

**Advising**

Advising of students comes from two sources: The Business Education Division Counselor and Business Program faculty. Both parties work closely and communicate effectively to ensure that students are enrolled in the courses that they want and need to achieve their educational goals. Whenever questions or concerns

arise, both parties work towards alleviating the situation and providing solutions and options for students.

**Curriculum**

The Business core curriculum has been aligned to ensure that the PSLOs are met through its various courses. Below is a table that shows how each Business course aligns with the PSLOs:

| Course | Title | PSLO Link |
|---|---|---|
| ACC 201 | Introduction to Financial Accounting | 3 |
| ACC 202 | Introduction to Managerial Accounting | 3 |
| BUS 120 | Principles of Business | 1,5 |
| BUS 190 | Survey of International Business | 1,2,3,4,5 |
| BUS 293V | Cooperative Vocational Education | 1,2,3,4,5 |
| BLAW 200 | Business Law | 1,2,5 |
| ECON 130 | Principles of Microeconomics | 1,5 |
| ECON 131 | Principles of Macroeconomics | 1,5 |
| ENT 125 | Starting a Business | 1,2,3,4,5 |
| ENT 130 | Marketing for Small Business | 1,2,3,4,5 |
| ENT 150 | Basic Accounting and Finance for Small Business | 1,2,3,4,5 |
| MGT 120 | Principles of Management | 1,2,3,4,5 |
| MGT 122 | Human Relations for Business | 1,2,3,4,5 |
| MKT 120 | Principles of Marketing | 1,2,3,4 |
| MKT 130 | Principles of Retail | 1,2,3,4 |

The Program's core curriculum, that was originally submitted when seeking Provisional status, has remained, while courses that were no longer relevant as stand-alone courses were retired and new courses have been added. ECOM 100 and SMKT 150 have been retired, as there was redundancy and overlap with Course Student Learning Outcomes (CSLOs) from other Business courses. In order to prepare students to effectively engage in the global marketplace, BUS 190 – Survey of International Business was developed and added to the curriculum.

The curriculum is aligned with the other Business industry related programs within the UHCC system. In September of 2017, a University of Hawai'i System Course

Articulation Agreement was written. This agreement focuses on aligning Marketing, Management, and Entrepreneurship courses within the system and ensures that there are consistent course descriptions and Course Student Learning Outcomes (CSLOs).

The AS in Business Program has been accepted by University of Hawai'i -West O'ahu (UHWO) and a formal Articulation Agreement was executed in 2016. This agreement enables Kaua'i Community College Business Majors who attain their AS degree to complete their final two years at UHWO and earn a Bachelor's Degree.

The AS in Business is being offered at KauCC. UHCC – UH Maui College offers an AAS in Business Careers. While other campuses have AS Management or Marketing degrees, what is being offered at KauCC provides students with a broader platform within the business field, which allows them to continue their educational path in an area of specialization at a four-year institution.

Entrepreneurship has been a fabric of our community and is growing in popularity amongst our student base. The Program offers three entrepreneurship courses, which form the core of a Certificate of Competence, Certificate of Achievement, and the AS Degree.

As noted, the AS Degree is structured so that Program Certificates ladder into the Degree ensuring students are on a clear pathway to completion and not taking unnecessary, additional courses. The various options also allow students to attain credentials based upon their desired academic pathway. For those needing specific knowledge and skills, there are the Certificate programs and for those wishing to pursue higher degree attainment, there is the AS Degree.

**Business Program Advisory Board**
The Business Program has established its own Advisory Board in AY 14-15 to help guide and shape the Program's Certificates and Degree. Members of the Advisory Board represent the various chambers of commerce on island, private sector, economic development non-profit entities, and a seat for a member of the Business and Young Entrepreneurs student club.

The Advisory Board meets formally once a year to review the status of the Program and lend their expertise to improving all aspects of the Program. **(See Appendix B for a list of the Business Program Advisory Board.)**

2. **Program Resources**

Currently the Program has one (1.0) FTE and hires lecturers on an as-needed basis. Historically, the Program has hired lecturers to instruct between nine and 15 credits per semester. As mentioned earlier, the Program currently offers the BUS 120 course as part of the Early College program at Kapa'a High School one semester per academic year. With the increasing growth of the on-campus majors and the increased demand for additional courses and sections of Early College courses at

the high schools, there will be a need to increase the number of faculty. Analytic FTE Faculty for AY 16-17 was 3.0 and 2.0 for AY 17-18. For the past two AYs, full-time faculty have incurred Instructional Overloads. Below is a list of the current full-time faculty within the AS Business Degree Program:

| Faculty | Credentials |
|---|---|
| Dirk N. Soma<br><br>Instructor<br><br>Program Coordinator | BBA – Travel Industry Management<br><br>University of Hawai'i at Mānoa<br><br>MPS – Travel Industry Management<br><br>University of Hawai'i at Mānoa<br><br>Director and Immediate Past President – Kaua'i Native Hawaiian Chamber of Commerce<br><br>Kaua'i Island Representative – Native Hawaiian Education Council |

The 2017 Instructional APRD for Business identified an Analytic FTE Faculty of 2.6. If enrollment trends continue, more full-time faculty may be needed. A proposal will be submitted for additional FTE through the campus budget build process for the 18-19 AY.

**Budget**

As shown in the table below, the overall budget and the General Fund Budget Allocation has decreased from Fiscal Year (FY) 15 to FY 17. There are no Special Fund Budget Allocations for the Program. Tuition and Fees revenue will continue to increase as more students enroll in Business courses.

| BUDGET | FY 15 | FY 16 | FY 17 | FY 18 |
|---|---|---|---|---|
| General Funds | $160,337 | $140,421 | $123,523 | $140,692 |
| Tuition and Fees | N/A | N/A | $2,500 | $3,973 |
| Total Costs | $160,337 | $140,421 | $126,023 | $144,665 |

3.  **Program Efficiency**

Student semester hours (SSH) have significantly increased in both Program (from 0 to 213) and Non-Program majors (from 54 to 651) in Program classes as well as SSH in all Program classes (from 54 to 864), while the cost per SSH has decreased from $2,121 in AY 15-16 to $246 in AY 16-17.

| SSH | AY 14-15 | AY 15-16 | AY 16-17 | AY 17-18 |
|---|---|---|---|---|
| SSH Program Majors in Program Classes | 0 | 72 | 273 | 213 |
| SSH Non-Majors in Program Classes | 54 | 45 | 705 | 651 |
| SSH In All Program Classes | 54 | 117 | 978 | 864 |
| Cost per SSH | Not Reported | $2,121 | $246 | |

Average class size has grown in each of the last three AYs such that the Program has been operating currently with 13.0 students per class, which is 1.0 student above the recent 12:1 ratio reported in the College's most recent ACCJC accreditation self-study report. The class fill rate for AY 16-17 is 56.9%, up from 32.7% in AY 14-15. Though the fill-rate may seem concerning, it should be noted that the Program taught 25 courses in AY 16-17 as compared to five in AY 14-15.

| | AY 14-15 | AY 15-16 | AY 16-17 | AY 17-18 |
|---|---|---|---|---|
| Average Class Size | 4.5 | 9.8 | 13.0 | 14 |
| Fill Rate | 32.7% | 62.9% | 56.9% | 59.8% |
| Number of Classes Taught | 4 | 4 | 25 | 21 |

Fall 2017, an employment poll of the AY 16-17 Program completers was taken to determine how many were employed within their field. Of those who had earned a Certificate of Competence, Certificate of Achievement, and/or the A.S. Degree, 100% are employed in the profit and non-profit sectors of business. These positions included both line and supervisory positions in hospitality, health, government, and retail, while one student will be taking over a family nursery and landscaping business.

4.    **Evidence of Student Learning and Student and Program Success.**

In the last four years, the number of Business majors has increased from five in AY 14-15 to 42 in AY 2017-18. This exceeds the initial projection of 30 majors enrolled by year three. For AY 18-19, there are 42 declared Business majors of which 15 are Native Hawaiian.

Native Hawaiian Student enrollment has jumped from zero in AY 14-15, when the Program was first offered to 16 in AY 17-18. Native Hawaiian students made up 38% of the total Business majors in AY 17-18

| Number of Majors | AY 14-15 | AY 15-16 | AY 16-17 | AY 17-18 |
|---|---|---|---|---|
| Projected | 15 | 27 | 30 | - |
| Total | 5 | 25 | 40 | 42 |
| Native Hawaiian | 0 | 6 | 18 | 16 |

In addition to on-campus enrollment, the Business Program has offered its BUS 120 course to Kapaʻa High School as a part of the Early College program in the spring of 2017. The course was offered again in the spring 2018 semester. Beginning spring 2019, MGT 12 and ENT 125 are being offered for the first time.

**Time to Degree and Retention**

Below are data from the 2017 Instructional ARPD that relates to Program effectiveness:

| Indicator | AY 14-15 | AY 15-16 | AY 16-17 | AY 17-18 |
|---|---|---|---|---|
| Successful Completion (Equivalent of C or better) | 83% | 82% | 79% | 75% |
| Persistence Fall to Spring | 0% | 42.3% | 65.1% | 49% |
| Persistence Fall to Fall | 0% | 24% | 31.7% | 26% |
| Unduplicated Certificates/Degrees Awarded | 0 | 2 | 11 | 12 |
| Transfers with credential to UH 4-yr | 0 | 0 | 2 | 2 |
| Transfers without credential to UH 4-yr | 0 | 0 | 0 | 1 |
| Number of Distance Education Courses Taught | 0 | 0 | 6 | 5 |
| Enrollments in Distance Education Classes | N/A | N/A | 73 | 86 |
| Successful Completion (Equivalent of C or Higher) | N/A | N/A | 70% | 80% |

The table above shows that students are completing Business courses at a rate of 75% for AY17-18. In comparison, the Applied Business and Information Technologies Program at UH Maui College, the Management Program at Leeward Community College, and the Marketing Program at Kapiʻolani Community College has Successful Completion rates of 76%, 79% and 71% respectively.

In order to meet the needs of students who work and /or have families, the Program offered five distance learning courses in AY 17-18. Successful completion was 80%, which is comparable to UHMC (67%), LCC (77%) and KapCC (69%).

Persistence rates from fall to spring and fall to fall were trending higher in each of the first three AYs. In AY 17-18, persistence rates declined due to the extremely low unemployment rates on Kauaʻi. Efforts are being made to work with Counselors to improve academic advising to encourage retention.

The first two AS in Business degrees were awarded in AY 15-16. This represented a 40% completion rate based on five declared majors in AY 14-15. In AY 17-18, 12 unduplicated certificates or degrees were awarded, which is 48% of the declared majors in AY 15-16. Importantly, two of those students earning credentials from

the Program transferred to a 4-year University of Hawai'i campus and one transferred to a UH 4-year campus without credentials.

Because the rate of unemployment on Kaua'i is 2.7% and because roughly 55% of Business majors are part-time, it will be a challenge to increase the completion rates. However, through increasing faculty engagement with students, comprehensive student support services, and guided counseling, the Program will be able to maintain positive time to degree rates.

**Student Performance**
All five of the Business Program Student Learning Outcomes (PSLOs) were assessed over the past academic year through various course assignments and from industry review.

| COURSE | TITLE | PSLO ALIGNMENT |
|---|---|---|
| BUS 120 | Principles of Business | 1,3,5 |
| BUS 190 | Survey of International Business | 1,2,3,4,5 |
| ENT 125 | Starting a Business | 1,2,3,4,5 |
| ENT 130 | Marketing for Small Business | 1,2,3,4,5 |
| ENT 150 | Basic Accounting and Finance for Entrepreneurs | 1,3,4,5 |
| MGT 120 | Principles of Management | 1,4,5 |
| MGT 122 | Interpersonal Relations in Business | 1,2,5 |
| MGT 124 | Human Resource Management | 1,4,5 |
| MKT 120 | Principles of Marketing | 1,2,3,4,5 |
| MKT 130 | Principles of Retailing | 1,2,3,4,5 |
| BLAW 200 | Business Law | 1,2,5 |
| BUS 293V | Business Co-op | 1,2,3,4,5 |

Each spring semester, the Business Program Advisory Board (BPAB) reviews the PSLOs and makes recommendations to ensure that they align with industry needs. At the May 4, 2017, BPAB meeting, no additions, deletions, or edits were made to the existing PSLOs.

The expected levels of achievement for PSLOs is 70 percent. Annually, the Program conducts a five-year course review to ensure that business Course Student Learning Outcomes (CSLOs) are aligned with PSLOs as well as the Institutional Learning Outcomes (ISLOs). Since the Program's inception, all courses that have come up in the five-year course review cycle have met the PSLOs. The assessment measures used include both formative and summative assessment methodologies that help gauge student performance quantitatively and qualitatively.

Students performed satisfactorily for each PSLO. As stated earlier in the report, the benchmark for each PSLO within the Business Program is 70%. For the AY 2015-16, 73% of students either met or exceeded this benchmark. In AY 2016-17, 84% of students either met or exceeded this benchmark.

The College has recently decided to make a shift from direct CSLO assessment to PSLO assessment. A draft assessment plan has been being developed this spring for implementation AY 2018. **(Please see Draft Program Assessment Plan Appendix C.)**

The BUS 293V course serves as the capstone course for all Business majors. In this class, students are required to complete 225 hours of on-the-job experience, while integrating the knowledge and skills that they have acquired through their course work. Employers are given the opportunity to assess and evaluate the student's performance and provide comments and feedback through a Learning Objective Evaluation form **(Please see Learning Objective Form Appendix D.)**

Of the 11 students who have completed the BUS 293V, 100% have achieved Full Accomplishment or Above Average Accomplishment rating on their Job Oriented Learning Experience, with 93% earning a full Accomplishment rating. Moreover, 100% of the students have achieved an Excellent or Good rating for Overall Student Work Performance, with 96% earning an Excellent rating.

Below are some of the actual supervisor comments:

> *M is an energized go-getter. She is a great team member. She understands structure and organization. She looks for areas of our business where we can improve and ensures changes that she make(s) are made with everyone on the same page.*

> *J possesses a willingness to learn that is above par. He is confident in his abilities, which leads to quality performance. J is a well-balanced team player and is able to easily identify the needs of our internal and external customers.*

> *H is extremely dependable and loyal. Punctual and helpful to all co-workers. H will continually improve his skills as he studies and gains more life experiences. Any employer will be lucky to have H.*

In addition to the quantitative and qualitative data provided, below are two testimonials from students who will be graduating from the Business Program in AY 2017-18:

> *"The KCC business degree courses have taught me so much, not only about business but also about myself. I decided to attain my business degree because I wanted to be able to manage a company or own my own business sometime in the future. While going through the course I practiced what I was learning at my workplace, which got my bosses attention because I excelled in guest service, thanks to my customer service class, and I was able to think of ways to increase profits, from my accounting, marketing, and management classes. Through this program, I was able to mentor my managers at work and experience what it was like to be in charge of others and what it's like to run a company. Earning this degree shows me that I am*

*capable of achieving my goal of starting my own business and thanks to this entire program I now have to confidence to do so."* – **Melina O. C.A. in Management Candidate, Fall 2017 Graduate**

*"My experience with the program has been challenging but rewarding. I have gained a greater knowledge about the business field after being in the program. The projects were very challenging and a new experience for me. As a group we had to make business plans, market products to the class, run financial analyses on businesses, and much more. With each test passed and project successfully completed has built my confidence, abilities of being a manager, and finding a better job in the business field. Having teachers with great experience and knowledge in the field made learning very interesting and easy. All the business teachers do a great job at taking concepts we learned from the book and relating them to the real world, which made the material we learned that much more meaningful.*

*When I do attain my A.S. Business Degree it would mean being one step closer to obtaining a better job for myself. With this job I hope to better provide for my family instead of living from paycheck to paycheck. Also with the degree I can prove to myself that I can get a college education even though I dropped out of high school and got my G.E.D."* – **Hal M. – A.S. Business Degree Candidate, Spring 2018.**

**Awards to Faculty**
Instructor and Program Coordinator Dirk N. Soma was recognized by the Small Business Association in 2016 as the Small Business Advocate for Minorities for the County of Kaua'i for his ability to recruit Hawaiian students into the business pathway.

Mr. Soma has worked closely with the Wai'ale'ale Program to share information with Hawaiian students about the careers and opportunities in the business field and each year, invites 10 Wai'ale'ale students to attend the annual Kaua'i Native Hawaiian Chamber of Commerce general membership meeting for networking.

5. **Appropriateness of Program Outcomes to the Functions of the College and University**

The AS in Business Degree outcomes are appropriate functions of both the College and the University. The table below illustrates the alignment and describes actions and activities that have been completed over the past several years to ensure continuous support and alignment.

| Goal Alignment UH System Goals, Kaua'i Community College Goals, and Strategic Goals | Program Goals |
|---|---|
| **UHCC/KCC Initiative: Hawai'i Graduation Initiative** | |
| Strategic Goal 1: Increase the Number of Graduates | 1. Review and streamline course programming so that students can get the courses they need to graduate on time.<br>2. Completed articulation agreement with UHWO so that students can earn their 4-year degree more efficiently.<br>3. Offer high demand courses online and face-to-face.<br>4. Provide academic advising and support to students to keep them on track. |
| Strategic Goal 2: Increase the Number of Native Hawaiian Graduates | 1. Actively engage students within Project Wai'ale'ale and serve as host during their orientations and campus events. By developing relationships with NH students, the Program can attract them.<br>2. Informally, survey students in Business courses to identify NH students and be able to monitor their progress each semester. |
| Strategic Goal 3: Increase the Number of Low Income Student Graduates | 1. Work with on-campus programs that look to recruit and retain this student demographic. |
| Strategic Goal 4: Increase the Number of Students Who Transfer | 1. Inform students of articulation agreement with UHWO and benefits of their distance education offerings. |
| Strategic Goal 5: Eliminate Access and Success Gaps | 1. Actively engage students in all of the Business courses, not just declared majors to attend classes and provide extra support where needed. |
| Strategic Goal 6: Reduce the Time to Degree: Accelerate College Readiness | 1. Streamline, align, and schedule courses effectively to increase degree attainment. |

| Goal Alignment UH System Goals, Kaua'i Community College Goals, and Strategic Goals | Program Goals |
|---|---|
| Strategic Goal 7: Reduce the Time to Degree: Increase Student Retention and Credit Accumulation | 1. Streamline, align, and schedule courses effectively to increase degree attainment. |
| **UHCC/KCC Initiative: Hawai'i Innovation Initiative** | |
| Strategic Goal 8: Increase Job Placement for Kaua'i CC Students | 1. Work through Program Advisory Board and other community Professional networks to establish employment pipelines.<br>2. Communicate with on-campus career development and placement center to disseminate employment information to students. |
| Strategic Goal 9: Increase the STEM Workforce | N/A |
| Strategic Goal 10: Increase Lifelong Learning and Professional Development Opportunities for community members | 1. Work with OCET department to develop and provide courses and workshops to meet industry and professional development needs for the community. |
| | |
| **UHCC/KCC Initiative: Modern Teaching and Learning Environment** | |
| Strategic Goal 11: Increase Campus and Community Sustainability | 1. Incorporate discussions that focus on the three-and four-win business models into respective business courses and create activities around the theme of sustainability. |
| Strategic Goal 12: Strengthen Distance Education Offerings | 1. Increase DE learning opportunities for students.<br>2. Engage business faculty with professional development around enhancing DE. |

| Goal Alignment UH System Goals, Kaua'i Community College Goals, and Strategic Goals | Program Goals |
|---|---|
| Strategic Goal 13: Enhance Facilities with Appropriate Technology and Ensure Facilities Support 21st Century Learning and Teaching Environments | 1. Work with peers within BED to ensure that students are provided with up-to-date technology to succeed in the business environment of today.<br>2. See Part IV for Program goal for AY 2017-2018. |
| UHCC/KCC Initiative: High Performance Mission-Driven System | |
| Strategic Goal 14: Reduce the Cost of Education for Students | 1. Utilize soft-cover, on-line, and open source texts to reduce costs for students.<br>2. Utilize single text for all three Entrepreneurship courses being offered. |
| Strategic Goal 15: Implement Hawai'i Papa O Ke Ao | 1. Incorporate Hawaiian Cultural Values into Entrepreneurship and Business classes. |
| Strategic Goal 16: Increase Opportunities for and Participation in Professional Development | 1. Allocate portions of Program budget for PD activities and encourage lecturers to participate in PD opportunities on campus |
| UHCC/KCC Initiative: Enrollment | |
| Strategic Goal 17: Increase Recent High School Graduates Enrollment | 1. Offer BUS 120 as part of Early College Program at Kapa'a High School.<br>2. Attend College and Career Day events at various campuses.<br>3. Make presentations to educational groups such as Keiki to Career to promote the Business Program. |
| Strategic Goal 18: Increase Pacific Islander Enrollment | 1. Actively work with Kaua'i Native Hawaiian Chamber of Commerce to recruit NH students. |

| Goal Alignment UH System Goals, Kaua'i Community College Goals, and Strategic Goals | Program Goals |
|---|---|
| Strategic Goal 19: Increase High School Non-Completers and GED Recipient Enrollment | 1. Develop communications channels with DOE adult schools and other organizations supporting GED programs. |
| Strategic Goal 20: Increase Enrollment of Working Adults | 1. Develop PLA program within Business.<br>2. Actively promote the existing Program to the various business and professional associations on Kaua'i. |
| Strategic Goal 21: Increase Enrollment of International Students | 1. With the introduction of the BUS 190 course, Survey of International Business, provide a platform to dialogue with international institutions that the campus and the UH system have relationships with.<br>2. Actively seek out future opportunities to recruit international students from Pacific Island nations.<br>3. In 2018, establish an MOU with Otago Polytechnic in Dunedin, NZ for faculty and student exchange.<br>4. In 2018, establish an Articulation Agreement with Otago Polytechnic in Dunedin, NZ for AS Business Degree students to earn BA in Applied Management. |

The evidence for continuing the AS in Business Degree Program at Kaua'i Community College is clear:
- The Business Career and Technical Education Pathway at our D.O.E. high schools continue to grow. Students exiting this pathway will be seeking a viable option to continue their education.
- Enrollment in the Business Program at the College has increased over the past three AYs and continues to grow.
- As the College has identified Business as part of its Guided Pathways, students who decide on this path will be able to continue towards their degree in the discipline.

- Native Hawaiian students are entering into the Business Program and we will be able to keep their path to graduation open and encourage more to pursue studies in the field.
- Those earning an AS Business Degree are matriculating into UHWO to continue their education.
- According to the 2016 Hawai'i Labor Market Dynamics report completed by the Research and Statistics Office of the Department of Labor and Industrial Relations for the State of Hawai'i, the mean hourly wage for Management in the State of Hawai'i was the highest for all of the Major Occupational Groups at $44.81. Business and Financial Operations ranked sixth at a mean of $30.78. Overall monthly earnings for Management of Companies and Enterprises increased by 23.4% from 2005 to 2015. Students with their degrees will be able to compete for these jobs.
- A very high percentage of those who earn either a Certificate of Achievement or an AS Degree are employed within their field of study on Kaua'i.
- Members of Kaua'i's business community have expressed support for the continuation of the AS Degree Business Program and changing its designation from Provisional to Permanent. **(Please see Appendix E for Industry letters of support.).**

Below is a table illustrating the key APRD Demand Indicators for potential employment opportunities for graduates:

| Demand Indicator | AY 2014 | AY 2015 | AY 2016 | AY 2017 |
|---|---|---|---|---|
| New & Replacement Positions (State) | 780 | 3333 | 3210 | 3134 |
| New & Replacement Positions (County Prorated) | 34 | 199 | 198 | 190 |

Additional data from the 2016 Hawai'i Labor Market Dynamics report completed by the Research and Statistics Office of the Department of Labor and Industrial Relations for the State of Hawai'i, supports the need for continuing the AS Degree Program in Business at Kaua'i Community College:
- Kaua'i's unemployment rate of 4.1% is lower than the United States' rate of 5.3%.
- The Professional and Business Services industry sector posted faster than average job gains from 2010 to 2015 at 16.5%.
- Kaua'i County civilian labor force growth rate increased by 10.5% from 2005-2015, second only to Maui County.
- Professional and Business Services are predicted to have an annual growth rate of 0.7% through 2024.
- Projected average annual total job openings for occupational groups in business will increase through 2024.
- General and Operations Managers, as an occupation show positive growth in job openings through 2024.

## IV. APPENDICES

## Kauaʻi Community College
## University of Hawaiʻi
## Program Action Request

1.  **Type of Program Action:**  ☒ Modification          ☐ Deletion

| PRESENT | Entrepreneurship CO | Management Essentials CO | Retail Essentials CO | Entrepreneurship CA | Management CA | Business AS | PROPOSED | Entrepreneurship CO | Management Essentials CO | Retail Essentials CO | Entrepreneurship CA | Management CA | Business AS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACC 201 | | | | | 3 | 3 | ACC 201 | | | | | 3 | 3 |
| ACC 202 | | | | | 3 | 3 | ACC 202 | | | | | 3 | 3 |
| BLAW 200 | | | | 3 | 3 | 3 | BLAW 200 | | | | 3 | 3 | 3 |
| BUS 120 OR MATH 115 OR BUSN189 | | 3 | | 3 | 3 | 3 | BUS 120 | | 3 | | 3 | 3 | 3 |
| | | | | | | | BUS 190 | | | | 3 | | 3 |
| BUS 293V | | | | 3 | 3 | 3 | BUS 293V | | | | 3 | 3 | 3 |
| BUSN 189 (Thinking / Reasoning Math) | | 3 | 3 | 3 | 3 | | BUSN 188 (Thinking / Reasoning Math) | | 3 | 3 | | 3 | |
| ECON 130 | | | | 3 | 3 | 3 | ECON 130 | | | | 3 | 3 | 3 |
| ECON 131 | | | | | | 3 | ECON 131 | | | | | | 3 |
| ENT 125 | 3 | | | 3 | | 3 | ENT 125 | 3 | | | 3 | | 3 |
| ENT 150 | 3 | | | 3 | | 3 | ENT 150 | 3 | | | 3 | | 3 |
| HOST 100 | 3 | | 3 | 3 | 3 | 3 | HOST 100 | 3 | | 3 | 3 | 3 | 3 |
| MGT 120 | | 3 | | | 3 | 3 | MGT 120 | | 3 | | | 3 | 3 |
| MGT 122 | | 3 | 3 | 3 | 3 | 3 | MGT 122 | | 3 | 3 | 3 | 3 | 3 |
| MKT 130 | | | 3 | | | | MKT 120 | | | 3 | | | |
| COMPUTER TECHNOLOGY: BUSN 121, BUSN 130, BUSN 150; ICS 101 | 3 | | | 3 | 3 | 3 | COMPUTER TECHNOLOGY: ICS 101 | 3 | | | 3 | 3 | 3 |

| PRESENT | Entrepreneurship CO | Management Essentials CO | Retail Essentials CO | Entrepreneurship CA | Management CA | Business AS | PROPOSED | Entrepreneurship CO | Management Essentials CO | Retail Essentials CO | Entrepreneurship CA | Management CA | Business AS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CULTURAL ENVIRONMENT: ANTH 200; HWST 107; PHIL 100; POLS 110; PSY 100; REL 150; SOC 100 |  |  |  |  |  | 3 | CULTURAL ENVIRONMENT: ANTH 200; HWST 107; PHIL 100; POLS 110; PSY 100; REL 150; SOC 100 |  |  |  |  |  | 3 |
| MARKETING OPTIONS: ENT 130; ECOM 100; MKT 130; SMKT 150 | 3 | 3 |  | 6 | 3 | 6 | MARKETING OPTIONS: ENT 130; MKT 120 | 3 | 3 |  | 3 | 3 | 3 |
| NATURAL ENVIRONMENT: Any 100-level or higher natural science course. DB 3 credits, DP 3 credits, and DY 1 credit |  |  |  |  |  | 4 | NATURAL ENVIRONMENT: Any 100-level or higher natural science course. DB 3 credits, DP 3 credits, and DY 1 credit |  |  |  |  |  | 4 |
| ORAL COMMUNICATION: BUS 130; SP 151, SP 251 | 3 | 3 | 3 | 3 | 3 | 3 | ORAL COMMUNICATION: BUS 130; SP 151, SP 251 | 3 | 3 | 3 | 3 | 3 | 3 |
| THINKING/REASONING MATH: MATH 100, MATH 103, MATH 135 or higher |  |  |  |  |  | 3 | THINKING/REASONING MATH: MATH 100, MATH 103, MATH 135 or higher |  |  |  |  | 3 | 3 |
| WRITTEN COMMUNICATION: BUS 175 (WI); ENG 100, ENG 209* |  | 3 |  | 3 | 3 | 3 | WRITTEN COMMUNICATION: ENG 100, ENG 209* |  | 3 |  | 3 | 3 | 3 |
| TOTAL CREDITS | 18 | 21 | 15 | 42 | 42 | 61 | Total Credits | 18 | 21 | 15 | 42 | 42 | 61 |

*Not currently offered at Kaua‘i CC but available at other UH campuses.

## 2. Program Type:

☐ Associate in Applied Science (AAS) (CA)

☑ Certificate of Achievement

☐ Associate in Arts (AA) (CO)

☑ Certificate of Competence

☐ Associate in Arts–Concentration Certificate (ASC)

☐ Academic Subject

☑ Associate in Science (AS)

☐ Associate in Science Natural Sciences–Concentration (ASNS)

## 3. Program Title: Business

4. **Program Description:**

The Associate in Science in Business degree will prepare students for entry-level positions in business, industry, and non-profit organizations. It is designed for students who seek to gain a solid foundation of the basic business concepts and skills necessary to contribute and create solutions in today's business environment. Upon successful completion of this program, students will acquire the knowledge and skills to apply management, marketing, and accounting concepts to improve operational performance in a business setting. This degree can help an individual jump-start a career in business or prepare them for transfer to a four-year institution.

**Program Admission Requirements:**

None.

**To meet graduation requirements, all programs require a cumulative GPA of 2.0 or higher for all courses applicable toward the certificate or degree. Include any additional graduation requirements:**

None.

5. **List Program Student Learning Outcomes** that were approved by the Assessment Committee on 9/10/13.

   1. Develop critical thinking and interpersonal skills applicable to real-world problems
   2. Utilize creativity and logical strategies and techniques to solve complex business issues
   3. Implement and apply current technical solutions to business activities, systems, and processes
   4. Apply foundational management principles to the functions of planning, organizing, coordinating, and decision making to business operations
   5. Demonstrate fundamental knowledge of business and technical skills to support lifelong professional development

6. **Proposed Date of First Offering:** Fall 2014

7. **Is this program offered at another UH campus?**  ☐ Yes   ☒ No

   If **Yes,** specify campus. If **No,** why is this program offered at KCC:

8. **Reason for this Program Action:**

This Program Action Request reflects the process of the approved Authorization to Plan the Associate in Science in Business degree. The Business program is designed to be an articulated degree, which will enable students to transfer to a baccalaureate program. Additionally, certificate tracks will enable students to pursue concentrations in Entrepreneurship, Management, or Retail. Articulation discussions are in place to support student transferability to four-year campuses. Currently, discussions have are in progress with UH West Oʻahu, UH Hilo, and UH Mānoa.

9. **Board of Regents Approval Needed:** ☒ Yes    ☐ No

10. Indicate the number of semesters required to complete each certificate and degree.

| Certificate/Degree | Number of Semesters |
|---|---|
| CO Entrepreneurship | 2 |
| CO Management Essentials | 2 |
| CO Retail Essentials | 1 |
| CA Entrepreneurship | 3 |
| CA Management | 3 |
| AS Business | 4 |

11. **Program Course Sequencing:** Complete one for each certificate/degree if sequencing is not provided with question #1.

| Certificate/Degree Title: Certificate of Competence in Retail Essentials | |
|---|---|
| Fall Semester 1 | |
| Course Alpha/No. | Credits |
| Thinking and Reasoning | 3 |
| HOST 100 | 3 |
| MGT 122 | 3 |
| MKT 130 | 3 |
| ORAL COMM | 3 |
| Total Credits | 15 |

| Certificate/Degree Title: Certificate of Competence in Management Essentials | |
|---|---|
| Fall Semester 1 | |
| Course Alpha/No. | Credits |
| Thinking and Reasoning | 3 |
| MGT 120 | 3 |
| MGT 122 | 3 |
| MKT 120 | 3 |
| Spring Semester 2 | |
| Course Alpha/No. | Credits |
| BUS 120 | 3 |
| ORAL COMM | 3 |
| WRITTEN COMM | 3 |
| Total Credits | 21 |

| Certificate/Degree Title: Certificate of Competence in Entrepreneurship | |
|---|---|
| Fall Semester 1 | |
| Course Alpha/No. | Credits |
| ENT 125 | 3 |
| HOST 100 | 3 |

| COMPUTER TECHNOLOGY | 3 |
| --- | --- |
| **Spring Semester 2** | |
| Course Alpha/No. | Credits |
| ENT 150 | 3 |
| ENT 130 | 3 |
| ORAL COMM | 3 |
| Total Credits | 18 |

| Certificate/Degree Title: Certificate of Achievement in Management | |
| --- | --- |
| **Fall Semester 1** | |
| Course Alpha/No. | Credits |
| ACC 201 | 3 |
| HOST 100 | 3 |
| BUS 120 | 3 |
| MGT 120 | 3 |
| COMPUTER TECHNOLOGY | 3 |
| **Spring Semester 2** | |
| Course Alpha/No. | Credits |
| ACC 202 | 3 |
| ECON 130 | 3 |
| Marketing (MKT 120 or ENT 130) | 3 |
| ORAL COMM | 3 |
| WRITTEN COMM | 3 |
| **Summer Session** | |
| Course Alpha/No. | Credits |
| | |
| | |
| **Fall Semester 3** | |
| Course Alpha/No. | Credits |
| BLAW 200 | 3 |
| BUS 293V | 3 |
| Thinking and Reasoning | 3 |
| MGT 122 | 3 |
| Total Credits | 42 |

| Certificate/Degree Title: Certificate of Achievement in Entrepreneurship | |
|---|---|
| **Fall Semester 1** | |
| Course Alpha/No. | Credits |
| ENT 125 | 3 |
| HOST 100 | 3 |
| BUS 120 | 3 |
| WRITTEN COMM | 3 |
| COMPUTER TECHNOLOGY | 3 |
| **Spring Semester 2** | |
| Course Alpha/No. | Credits |
| Thinking and Reasoning | 3 |
| ECON 130 | 3 |
| ENT 130 | 3 |
| ENT 150 | 3 |
| BUS 190 | 3 |
| **Summer Session** | |
| Course Alpha/No. | Credits |
| | |
| | |
| **Fall Semester 3** | |
| Course Alpha/No. | Credits |
| BLAW 200 | 3 |
| BUS 293V | 3 |
| ORAL COMM | 3 |
| MGT 122 | 3 |
| Total Credits | 42 |

| Certificate/Degree Title: Associate in Science Degree in Business | |
|---|---|
| **Fall Semester 1** | |
| Course Alpha/No. | Credits |
| ENT 125 | 3 |
| MGT 120 | 3 |
| BUS 120 | 3 |
| WRITTEN COMM | 3 |
| COMPUTER TECHNOLOGY | 3 |
| **Spring Semester 2** | |
| Course Alpha/No. | Credits |
| HOST 100 | 3 |
| ECON 130 | 3 |
| MARKETING (ENT 130 or MKT 120) | 3 |
| ENT 150 | 3 |
| ORAL COMM | 3 |

| Summer Session | |
|---|---|
| Course Alpha/No. | Credits |
| | |
| | |
| **Fall Semester 3** | |
| Course Alpha/No. | Credits |
| ACC 201 | 3 |
| BLAW 200 | 3 |
| ECON 131 | 3 |
| MGT 122 | 3 |
| Cultural | 3 |
| **Spring Semester 4** | |
| Course Alpha/No. | Credits |
| ACC 202 | 3 |
| BUS 293V | 3 |
| BUS 190 | 3 |
| Thinking and Reasoning | 3 |
| Natural Environment | 4 |
| Total Credits | 61 |

## APPENDIX B - BUSINESS PROGRAM ADVISORY BOARD

| TITLE | LAST | FIRST | POSITION | COMPANY |
|-------|------|-------|----------|---------|
| Mr. | Greene | Tyler | Partner | Coco Palms Hui |
| Mr. | Wiederoder | Peter | Site Leader | Dow Agriscience |
| Mr. | Kreisman | Charles "Chip" | Director | Morale, Welfare, and Recreation |
| Ms. | Tai Kaneko | Susan | President & CEO | Kaua`i Economic Development Board |
| Ms. | Ingersoll | Jennifer | Executive Administrator | Kauai Native Hawaiian Chamber of Commerce |
| Mr. | Costa | George | Director | Office of economic Development, County of Kauai |
| Mr. | Ayadong | Bobby | President | Kauai Filipino Chamber of Commerce |
| Mr. | Nishek | Cody | President | Business and Young Entrepreneurs Club |
| Mr. | Perriello | Mark | President | Kauai Chamber of Commerce |

# APPENDIX C - DRAFT PROGRAM ASSESSMENT PLAN

## Business Program 5-YearAssessment Plan

**Summary:**

The purpose of this plan is to ensure that the Business Program at Kauaʻi Community College is structured in a way to meet the relevant needs of all of its stakeholder groups. By developing, implementing, and assessing both internal and external assessment methodologies, the Business Program will be able to continuously improve it products and processes and provide added-value to its internal and external customers

**BUS Program Learning Outcomes:**

1. Develop critical thinking and interpersonal skills applicable to real-world problems
2. Utilize creativity and logical strategies and techniques to solve complex business issues
3. Implement and apply current technical solutions to business activities, systems, and processes
4. Apply foundational management principles to the functions of planning, organizing, coordinating, and decision making to business operations
5. Demonstrate fundamental knowledge of business and technical skills to support lifelong professional development

**Business Course Alignment with PSLOs:**

| COURSE | TITLE | PSLO ALIGNMENT |
|--------|-------|----------------|
| BUS 120 | Principles of Business | 1,3,5 |
| BUS 190 | Survey of International Business | 1,2,3,4,5 |
| ENT 125 | Starting a Business | 1,2,3,4,5 |
| ENT 130 | Marketing for Small Business | 1,2,3,4,5 |
| ENT 150 | Basic Accounting and Finance for Entrepreneurs | 1,3,4,5 |
| MGT 120 | Principles of Management | 1,4,5 |
| MGT 122 | Interpersonal Relations in Business | 1,2,5 |
| MGT 124 | Human Resource Management | 1,4,5 |
| MKT 120 | Principles of Marketing | 1,2,3,4,5 |
| MKT 130 | Principles of Retailing | 1,2,3,4,5 |
| BLAW 200 | Business Law | 1,2,5 |
| BUS 293V | Business Co-op | 1,2,3,4,5 |

**Strategies for Program Assessment:**

1. Student Surveys
   a. Course evaluation survey PSLO-linked questions
   b. Continuing student end-of-semester survey

     c. Graduating student exit survey
2. Industry Assessments
     a. BUS 293V Learning Objective Evaluation Forms
     b. Business Program student employer survey
     c. Business Advisory Board Bi-Annual PSLO Review
3. 5-Year Course Reviews
     a. Review CSLOs, CLSO-PSLO alignment, PSLO-ISLO alignment

**Yearly Timeline:**

| FALL | SPRING |
|------|--------|
| 1a | 1a |
| 1b | 1b |
| 1c | 1c |
| 2a | 2a |
| 3a | 2b |
|  | 2c (Years 1,3,& 5) |

## BUSINESS PROGRAM ASSESSMENT PLAN STRATEGY DESCRIPTIONS

### Strategy 1a – Student course evaluation survey PSLO-linked questions

These questions will be added to all Business courses as part of the end of semester student course evaluation survey: (All questions will use a Likert Rating 1 Completely Disagree-5 Totally Agree)

1. This course helped me develop critical thinking and interpersonal skills applicable to real-world problems.
2. This course enabled me to utilize creativity and logical strategies and techniques to solve complex business issues.
3. This course allowed me to implement and apply current technical solutions to business activities, systems, and processes.
4. In this course, I was able to apply foundational management principles to the functions of planning, organizing, coordinating, and decision making to business operations.
5. In this course, I was able to demonstrate fundamental knowledge of business and technical skills to support lifelong professional development.

### Strategy 1b – Continuing student end-of-semester survey

These questions will be send via email 1-week after finals to all Business majors: (All questions will use a Likert Rating 1 Completely Disagree-5 Totally Agree)

1. This semester, I was able to develop critical thinking and interpersonal skills applicable to real-world problems.
2. This semester enabled me to utilize creativity and logical strategies and techniques to solve complex business issues.

3. This semester allowed me to implement and apply current technical solutions to business activities, systems, and processes.
4. Over the course of the semester, I was able to apply foundational management principles to the functions of planning, organizing, coordinating, and decision making to business operations.
5. Over the course of this semester, I was able to demonstrate fundamental knowledge of business and technical skills to support lifelong professional development.

## Strategy 1c – Graduating student exit survey

In addition to receiving the end-of-semester survey, students completing any Certificate or Degree will receive the following open-ended questions:

1. What are the strengths of the Business Program?
2. In what areas could the Business Program improve in preparing you for your next career move?

## Strategy 2a - BUS 293V Learning Objective Evaluation Forms

Each semester, students completing the BUS 293V course must submit this form from their supervisor. Data will be tracked as a way of monitoring student performance in the work environment.

## Strategy 2b - Business Program student employer survey

At the end of the Spring semester, a short survey will be sent to known employers of Business majors. (All questions will use a Likert Rating 1 Completely Disagree-5 Totally Agree)

1. This student possesses critical thinking and interpersonal skills.
2. This student utilizes creativity and logical strategies and techniques to solve complex business issues.
3. This student is able to implement and apply current technical solutions to business activities, systems, and processes.
4. This student can apply foundational management principles to the functions of planning, organizing, coordinating, and decision making to business operations.
5. This student is able to demonstrate fundamental knowledge of business and technical skills to support lifelong professional development.

In addition, the following open-ended question will be asked:

In which of the five areas that you rated the student did they show the most aptitude?

In which of the five areas that you rated the student, could they show more improvement?

## Strategy 2c - Business Advisory Board Bi-Annual PSLO Review

At the annual Business Advisory Board meeting in years 1, 3, and 5, members will review the Program Learning Outcomes and recommend additions, deletions, and edits. These changes will be implemented into the Business Program.

## Strategy 3a - Review CSLOs, CLSO-PSLO alignment, PSLO-ISLO alignment

The Business Program Coordinator, in collaboration with Business faculty, will continue to conduct course reviews based on the existing 5-year review schedule.

# APPENDIX D – BUS 293V LEARNING OBJECTIVE EVALUATION FORM

## COOPERATIVE WORK EXPERIENCE – LEARNING OBJECTIVE EVAL (end of semester)

Student name_____    Major_____

Supervisor_____    Worksite_____

COMMENTS

| | | | | | |
|---|---|---|---|---|---|
| ABILITY TO LEARN | ❑ Learns with Repetition | ❑ Average | ❑ Comprehends and follows through | ❑ Learns quickly, alert | |
| WORK HABITS | ❑ Follows some directions | ❑ Follows directions, satisfactorily | ❑ Steady Conscientious, worker | ❑ Accurate, resourceful, efficient | |
| SAFETY | ❑ Needs supervision & reminders | ❑ Generally meets safety standards | ❑ Meets safety standards | ❑ Conscientious and careful | |
| NEATNESS | ❑ Needs reminders | ❑ Adequate | ❑ Thorough | ❑ Organized and tidy | |
| ADAPTABILITY | ❑ Accepts changes with supervision | ❑ Adapts to changes | ❑ Adapts Well to changes | ❑ Flexible and efficient | |
| SELF-ESTEEM | ❑ Needs encouragement | ❑ Generally positive | ❑ Positive | ❑ Confident | |
| RESPONSIBILITY | ❑ Needs supervision and reminders | ❑ Generally reliable | ❑ Responsible | ❑ Very independent | |
| INITIATIVE | ❑ Needs occasional prodding | ❑ Does Assigned work | ❑ Occasionally seeks extra work | ❑ Good judgment and initiative | |
| MOTIVATION | ❑ Sometimes motivated | ❑ Generally motivated | ❑ High interest | ❑ Motivated and involved | |
| PEER RELATIONS | ❑ Occasionally has difficulty | ❑ Generally cooperative | ❑ Works well with others | ❑ Excellent interaction | |

| | | | | | |
|---|---|---|---|---|---|
| LEADERSHIP | ❑ Tends to follow | ❑ Can lead with encouragement | ❑ Shows Leadership skills | ❑ Effective leader, good judgment | |
| ACCEPTANCE OF SUPERVISION | ❑ Has some difficulty | ❑ Accepts Supervision | ❑ Cooperative | ❑ Very cooperative, good follow-through | |
| JUDGEMENT | ❑ Makes occasional errors | ❑ Usually makes good decisions | ❑ Makes good decisions | ❑ Competent in making decisions | |
| WORK AREA ATTENDANCE | ❑ Leaves without permission | ❑ Generally at work area | ❑ Dependable | ❑ Always where assigned | |
| WORK SKILLS | ❑ Below average | ❑ Generally meets standard | ❑ Meets standards | ❑ Consistently meets standards | |
| WORK QUALITY | ❑ Below average | ❑ Generally meets standards | ❑ Meets standards | ❑ Consistently meets standards | |

Student worker's outstanding strengths: _____

_____

_____

_____

_____

Student worker's areas to improve: _____

_____

_____

_____

**Supervisor Rating of Job Oriented Learning Objective/Project:**

❑ Full Accomplishment (A)

❑ Above Average Accomplishment (B)

❑ Average Accomplishment (C)

❑ Below Average Accomplishment (D)

❑ No Accomplishment (F)

**Overall Rating of Student's Work Performance**

❑ Excellent (A)

❑ Good (B)

❑ Average (C)

❑ Below Average (D)

❑ Unsatisfactory (F)

_____

Worksite Supervisor Signature                    Date

_____

Student's Signature                    Date

_____

COOP Instructor Signature                    Date

**APPENDIX E – INDUSTRY LETTERS OF SUPPORT**

Randall Francisco
P.O. Box 55
Hanapepe, HI 96716


December 11, 2017


University of Hawai'i
Board of Regents
2444 Dole Street
Bachman Hall Room 209
Honolulu, HI 96822

Regent Jan Naeo Sullivan
Chair, U.H. Board of Regents
& Members of the Board
RE: Kauai Community College Business Program

Aloha!

My name is Randall Francisco and I am writing in support of the KCC Business Program becoming a permanent full-time program of the college.

During the decade plus years, since I returned to Kauai, I have learned first-hand of the tremendous value and importance that KCC is to this community, especially, our private sector. During the past recession, as the former President/CEO of the Kauai Chamber of Commerce, I often sought the input and leadership of the college in helping our Garden Island economy recovery during our nation's worst recession in modern history. Thanks to the vision of the college in insuring that its programs and, especially, the business programs were there to provide a very qualified workforce of graduates as well as its non-credit program, together we were able to gradually recover in a very steadfast and strategic manner. This program does indeed align with the college's Strategic Plan in providing a local workforce ready to meet the demands of our industry, especially, in our economic expansion and growing diversified economy of small businesses sensitive to our island and state host culture.

Mahalo Nui Loa for your favorable support.

Aloha,

Randall Francisco
Former President/CEO, Kauai Chamber of Commerce
and
County of Kauai Film Commissioner/Creative Industries & Small Business Coordinator

December 5, 2017

Aloha University Board of Regents,

On behalf the Kauai Office of the Hawaii Small Business Development Center, I wholeheartedly support making the Kauai Community College Business program a permanent program. Business skills are a valuable skill set for employers as well as a necessary skill set for those not pursuing a business degree per se. Ultimately, careers are best envisioned as a business. Especially in the age of reduced public sector jobs, business as a career opportunity is more important than ever. Also, more and more individuals are pursuing entrepreneurship as an opportunity. Business skills are essential for success as an entrepreneur.

The future belongs to those that are willing to put in the hard of work of preparing for a career. The Business program is a tremendous support system and a vital resource for individuals and the community.

If I can provide any additional information, please feel free to contact me.

John Latkiewicz, Ph.D.

*Kauai Center Director*

**KAUA'I CENTER**
2970 Kele Street, Suite 101 · Līhu'e, Hawai'i 96766
TEL: (808) 241-3148 · FAX: (808) 241-3229 · www.hisbdc.org
*An Equal Opportunity Employer*

November 28, 2017

Aloha Board of Regents,

I am submitting this letter in support of making the Associate of Science Business Degree a permanent program at Kaua`i community college.
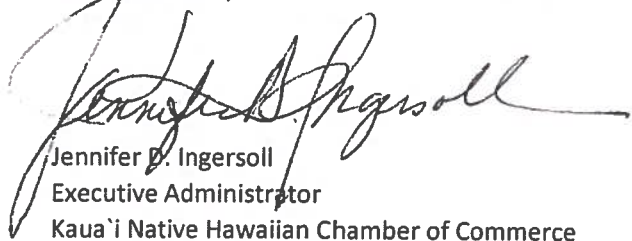
The Kaua`i Native Hawaiian Chamber of College (KNHCC) has had the opportunity to work intimately with the Business Program faculty and students for the past three years. Faculty have participated on our board and have attended and supported multiple events. Members have been invited to serve as guest speakers at classes to share our expertise. We have also worked with the Business and Young Entrepreneurs Club on developing our on-line membership directory.

The knowledge and skills that the students gain while progressing through the Program provides them with the foundation that they need to either continue on with their educational goals, or enter into our workforce as competent and confident contributors.

Native Hawaiian student enrollment has tripled since the A.S. Degree program has been introduced and having the two-year degree allows these students to better prepare themselves for their economic and social sustainability. The fact that the Program has an articulation with UHWO opens the doors for Kaua`i students to gain their Bachelors degree via distance education, which reduces barriers for them.

Again, KNHCC gives its full support to the A.S. Business degree program at Kaua`i Community College and we hope that you will agree to award the Program with Permanent status.


Me ka ha`aha`a,

Jennifer D. Ingersoll
Executive Administrator
Kaua`i Native Hawaiian Chamber of Commerce

**ROTARY** INTERNATIONAL

December 7, 2017

Mr. Dirk Soma, Business Program Coordinator
Kaua'i Community College
3-1901 Kaumualii Highway
Lihu'e, HI 96722

I am writing this letter in full support of making the Business Program at Kauai Community College a permanent program at KCC.

As a Past District Governor with Rotary International I have always valued the importance of partnering with local community groups, be they within the education system or the business community. The work of Rotary International in our local community is based on these strong partnerships as they allow all groups the ability to multiply our strengths and expertise for the benefit of those we serve.

As a member of the Rotary Club of Poipu Beach in Kauai, we have reached out to the community college to form partnerships that will allow our members to mentor local students and allow them the ability to enhance their skills and knowledge provided as part of their classroom work. One such partnership was in the Business Program and a marketing class taught by Dirk Soma. This was a true partnership in that members of our Rotary club met on a weekly basis with the students asking them to assist us in developing a strong marketing plan for a local fundraiser, Habitat for Humanity. This project was a partnership with the Habitat for Humanity/Kauai, the Rotary Club of Poipu Beach and KCC/marketing. The results were beyond our expectations in that the students were able to bring a perspective to the project that we did not have and the overall marketing product enhanced the fundraising effort. The experience the students received in participating in a real-world project allowed them to test their book knowledge and realize the realities of a local fundraising and marketing project.

Because of the positive results of this partnership, we plan to find additional projects that we can offer as a partnership with KCC business/marketing students. The experience for the students will be beneficial to their overall knowledge but the true winner is the community of Kauai.

Sincerely,

Ronald L. Mabry
District Governor 2013-2014
District 7570

Tel: 540.514.6176
Email: rlmabry@gmail.com

December 12, 2017

Dear University Board of Regents,

It is with great care and concern that I write to you to request that the Board consider making the Business Program at Kauai Community College a permanent program.

As a businessman both on the island of Oahu and Kaua'i, I have had the great opportunity to be exposed to the wonderful talent that has come out of the program. I have witnessed first-hand the excitement and enthusiasm these young adults have to get out in the workforce in hopes to create a sustainable and happy life for them, their families and communities.

I become very sad when I see local youth feeling they do not have sufficient opportunities in the areas in which they grew up. It is even more disheartening when business leaders and employers do not look first to hire local. Unfortunately, we are seeing more and more that many of our young talented kids are moving off to the Mainland to seek what they believe are better opportunities for education. As this happens employers then shift their attention and focus to "importing" employees.

It is my belief that with a permanent Business Program we will be able to significantly decrease the exodus of kids to the mainland and will be able to offer them exactly what they are looking for in the form of education and opportunity in their local community. Inversely, employers will gain confidence in the talent coming out of this program on a permanent basis and will concentrate on hiring locally.

It is my understanding that enrollment of declared majors has doubled each year since the Program's inception, that Native Hawaiian enrollment has tripled and that the graduates are either continuing on for their 4-year degree at UHWO or contributing to Kaua'I's workforce. With such strong and positive results for the program, I believe not only does the school benefit but the community intrinsically becomes a better place by being able to provide jobs for the bright students coming out of the Business Program.

Sincerely,

Managing Partner

**AINOFEA**
KAUAI

Ainofea Productions, LLC

Vance Pascua- CEO

PO Box 348,

Hanapepe, HI 96716

TO: University Board of Regents.

Aloha,

     My name is Vance Pascua – CEO of Ainofea Productions and Ainofea Active Apparel for the last 12 years on Kauai. I would like to express my gratitude for your KCC Business program here on the island.

Mr Soma has provided an opportunity for our students here at the college to not only have the building blocks to get started in Business but also invites Kauai Business people to his classes to give them first hand interaction with our local Business which is priceless information for the students when getting started.

    That kind of interaction along with what Mr Soma teaches our students is priceless for students wanting to become future Entrepreneurs.

    I hope you are able to continue to support this program at KCC, definitely something Kauai needs.

Respectfully,

Vance Pascua – CEO

Ainofea Productions, LLC

808-634-0404

KAUAI SOUL TRAVEL
Sightseeing Tours & Hiking Adventures

Coco Maria
454 Kamalu Rd.
Kapaa, HI 96746
Phone: 808.652.2247
coco@kauaisoultravel.com
www.kauaisoultravel.com

Dear UH Board of Regents,

I have been notified that next year on spring 2018 you will be voting on whether or not the Business Program at the Kauai Community College will be a Permanent Program.

I currently own and operate Kauai Soul Travel Sightseeing Tours & Hiking Adventures. 5 years ago I opened this company after completing my AAS at the Business Division at KCC. While attending college I had 2 jobs and I was raising my two young children. Upon graduation I got inspired to create my own company after years of financial struggles. It was scary but at KCC I got resources, peers, and mentors that gave me all the support and guidance to follow my dreams. Now I am an independent business owner, I am financially independent, and I love what I do for a living. I give thanks to the business division at KCC for that, as I don't think I would of done it without my education there.

Recently Dirk Soma invited me to be a guest speaker at his Entrepreneurship class. It was so rewarding not only sharing my story with the students but to hear how excited they were to find and create a business of their own. Kauai needs this program to stay permanently. My son who is 17 was hoping to attend this program next year, and he is not alone in this wish.

With all due respect, it shocks me that you are even considering doing such thing. To me there's not a drop of doubt that it would be a great mistake to take this opportunity away from so many young and old students to better themselves, and get ahead in life doing something they love for a living.

I hope that you guys can reconsider your plans and allow our community to have such valuable option as the Business Division.


Sincerely

Maria L. Camero Fraga

**Wiederoder, Peter (P)** 9:22 PM (10 hours ago)

to me

Dirk, Let me know if this works.  Thanks,  Peter.

University Board of Regents,

I am writing to support the Business Program at Kauai Community College.  We have had an intern from this program work at Dow AgroSciences in Kauai.  This was a very successful partnership that I would like to continue.  The quality of the education for these students is exceptional and the need for these skills are high.  The program is very open to input from industry and is meeting an industry need.  I highly support this program at KCC.

Regards,

Peter Wiederoder

Peter Wiederoder
Kauai Site Leader
Kauai Operations
Office: (808) 335-8302

Cell: (808) 652-9940

UNIVERSITY
of HAWAI'I·
SYSTEM

Office of the Vice President for Community Colleges
**Academic Affairs**

**19 MAR -8 A10:23**

RECEIVED

February 22, 2019

**MEMORANDUM**

'19 FEB 22 P4 :03

TO:  Lee Putnam
     Chair, Board of Regents

     Michelle Tagorda
     Chair, Committee on Academic and Student Affairs

UNIVERSITY OF HAWAII
PRESIDENT'S OFFICE

VIA:  David Lassner
      President

VIA:  Donald Straney
      Vice President for Academic Planning and Policy

VIA:  John Morton
      Vice President for Community Colleges

FROM:  Rachel Solemsaas, Chancellor, Hawai'i Community College

       Erika Lacro, Chancellor, Honolulu Community College

       Helen Cox, Chancellor, Kaua'i Community College

       Lui Hokoana, Chancellor, University of Hawai'i Maui College

       Ardis Eschenberg, Chancellor, Windward Community College

SUBJECT:  REQUEST TO CHANGE THE ASSOCIATE OF SCIENCE DEGREE IN
          NATURAL SCIENCE FROM PROVISIONAL TO ESTABLISHED
          STATUS AT FIVE COMMUNITY COLLEGES

SPECIFIC ACTION REQUESTED:

It is requested to change the Associate of Science degree in Natural Science (ASNS)
from provisional to established status at Hawai'i, Honolulu, Kaua'i and Windward
Community Colleges, as well as at University of Hawai'i Maui College.

RECOMMENDED EFFECTIVE DATE:

Upon Board of Regents approval

ADDITIONAL COST:

None

PURPOSE:

The purpose of the ASNS degree program is to address the critical need for professionals trained in STEM fields by providing a well-defined pathway for community college students to transfer into baccalaureate degree programs at University of Hawai'i four-year institutions.

BACKGROUND:

Board of Regents Policy, RP 5.201, III B.2 states:  Each provisional program shall be reviewed at the end of its first full cycle.  The request to the board for "established" program status shall be submitted in the academic year following the end of the program's first full cycle.

During Academic Year 2011, the Board of Regents (BOR) granted the University of Hawai'i Maui College provisional approval to begin offering the Associate in Science in Natural Science (ASNS) degree. Subsequently, in 2013, the BOR granted Hawai'i, Honolulu, Kaua'i and Windward Community Colleges provisional approval to begin offering the ASNS degree. These programs were patterned after ASNS degree programs at Kapi'olani and Leeward Community Colleges.

The ASNS is a 60-credit degree program that provides the first two years of a baccalaureate degree in the four discrete STEM areas of concentration:

- physical science,
- biological sciences,
- information and communications technology (ICS), and
- engineering.

Each of these concentrations combines a core of rigorous STEM education with a strong background in general education.

Moreover, the ASNS degree program has strong alignment with the following guiding principles of the UH Integrated Academic and Facilities plan (UHAFP). The UHAFP states that:

> *UH supports and rewards collaboration across all programs and activities. New silos are discouraged and current silos are eliminated or reduced. The university prioritizes and integrates systemwide articulation and transferability in all academic planning. (pp. 2)*

> Duplication of academic programs takes place only with intention and sound justification. All programs are planned in a fiscally sound and sustainable manner and placed in appropriate locations. Considerations include type of program and mission, regional and statewide demand and availability of physical space, facilities and land. (pp. 2)

In alignment with the UHAFP, extending the ASNS program at all seven community college campuses improves the university's ability to move students successfully into UH STEM baccalaureate degree programs. In Academic Year 2018, this new degree option accomplished its intended purpose at the five campuses by:

- 351 majors,
- 116 Native Hawaiian majors,
- 30 graduates from the program,
- 10 Native Hawaiian graduates,
- 37 students transferring into STEM programs at UH four-year campuses, and,
- 22 students transferring into STEM programs at UH four-year campuses prior to earning the degree (candidates for eventual ASNS reverse transfer degree completion).

Additionally, over the past three years the ASNS at the five campuses had seen:

- 77 graduates from the program,
- 25 Native Hawaiian graduates,
- 73 students transferring into STEM programs at UH four-year campuses, and,
- 52 students transferring into STEM programs at UH four-year campuses prior to earning the degree (candidates for eventual ASNS reverse transfer degree completion).

There are no additional costs or accreditation impacts associated with changing the ASNS degree from provisional to established status. The ASNS primarily represents a

redirection of existing resources previously dedicated to the one-size-fits-all Associate of Arts in Liberal Arts degree.

In closing, the ASNS degree efficiently integrates and articulates community college course offerings, thereby helping students transfer into UH baccalaureate degree programs in STEM fields. It is of strategic importance to the UHCCs, University, state, and region.

ACTION RECOMMENDED:

It is recommended to change the Associate of Science degree in Natural Science (ASNS) from provisional to established status at Hawai'i, Honolulu, Kaua'i and Windward Community Colleges, as well as at University of Hawai'i Maui College.

ATTACHMENT

1. Proposal to Request Established Status for the Provisional Associate in Science in Natural Science (ASNS) Degree, February 2019

c: Executive Administrator and Secretary, Board of Regents Oishi

# UNIVERSITY of HAWAI'I®
# COMMUNITY COLLEGES

Hawai'i Community College

Honolulu Community College

Kaua'i Community College

UH Maui College

Windward Community College

## Proposal to Request Established Status for the Provisional Associate in Science in Natural Science (ASNS) Degree

February 2019

# Table of Contents

# I. Program Overview: History and Objectives

**The Associate in Science in Natural Science (ASNS) aligns with the overall mission of the UH Community Colleges (UHCC).**
In an effort to accelerate the completion of a valuable Science, Technology, Engineering and Math (STEM) credential, the Associate in Science in Natural Sciences (ASNS) was created to accelerate transfer into STEM baccalaureate programs. UHCC campus curricular offerings were enhanced and all coursework for the first two years of study would be offered at the UHCCs and packaged neatly for transfer into a four-year UH campus. Thus, the ASNS is in direct alignment with the UHCC mission to enhance completion of valuable credentials and increase transfer to bachelor's degree programs.

The first ASNS was launched by Kapiʻolani Community College (Kapiʻolani CC) in 2010 and next expanded to Leeward Community College (Leeward CC) and UH Maui College. In 2013, the ASNS was approved for implementation at the remaining four UHCCs: Hawaiʻi Community College (Hawaiʻi CC), Honolulu Community College (Honolulu CC), Kauaʻi Community College (Kauaʻi CC), and Windward Community College (Windward CC).

Kapiʻolani CC and Leeward CC have both secured permanent status for their ASNS degrees. This consolidated proposal reports on the efforts of the final five campuses to have introduced the ASNS. These five institutions are composed of the three neighbor island institutions and two smaller Oʻahu CCs: Hawaiʻi CC, Honolulu CC, Kauaʻi CC, UH Maui College, and Windward CC.

ASNS programs seek to foster the following student learning outcomes:
- Analyze data,
- Communicate scientific ideas and principles,
- Analyze and apply fundamental mathematical, physical and chemical concepts, and
- Apply fundamental concepts and techniques in their chosen field of study and to problems and issues in daily life.

**Specialized ASNS "Concentrations" streamline pathways to four-year degrees.**
The original ASNS degree program was provisionally approved by the University of Hawaiʻi Board of Regents with two concentrations: *Biological Sciences* and *Physical Sciences* – now offered at all seven UHCCs. A third concentration, *Engineering* was followed by a fourth, *Information & Communication Technology*. These third and fourth concentrations are now available at several of the UHCCs.

- **Hawaiʻi CC** offers the ASNS with a concentration in Biological Sciences or Physical Sciences
- **Honolulu CC** and **Kauaʻi CC** offer the ASNS with a concentration in Biological Sciences, Physical Sciences, or Engineering
- **UH Maui College** and **Windward CC** (as well as Leeward CC and Kapiʻolani CC) offer all four ASNS concentrations: Biological Sciences, Physical Sciences, Engineering, as well as Information & Communication Technology

## II. Metrics of Success: STEM Enrollment

**The ASNS has encouraged cross-institutional collaborations and leveraging of system-level resources to support robust STEM curricular offerings across the UHCCs.** ASNS students enjoy a variety of specialized resources to enhance their academic experiences. Counselors help track student progress, provide outreach, and coordinate STEM-centric campus activities. On many campuses, ASNS students have access to trained tutors, Peer Mentors, or Supplemental Instruction to support rigorous STEM coursework. Undergraduate research opportunities have also been made available to students.

**The ASNS has also positioned the UHCCs to compete for and secure new grant funding amounting to over $30,000,000 in just the last two years.** Funds have been secured from NASA, the National Science Foundation including the Pre-Engineering Education Collaborative, Tribal Colleges and Universities Program, and Louis Stokes Alliances for Minority Participation Bridges to the Baccalaureate grants. Supplemental funding directly supports the development of curriculum and programs, allows for the hiring of teaching faculty and support staff, and has allowed for wrap-around services which have substantially increased STEM efficacy.

The ASNS represents one of the very best examples of the University working as a system. Among many other achievements, the ASNS has led to:
- increased capacity at the UHCCs to support and offer a comprehensive STEM curriculum by brokering resources across campuses,
- standardization of curriculum and course numbering across campuses,
- new, focused support services in academic support and counseling, and,
- shared online course offerings available to students at all UHCCs in specialized STEM curricular areas such as Calculus I-IV, Electrical Engineering, and Information and Computer Sciences – which offers nearly all required concentration courses online.

**The number of students enrolling into the ASNS exceeded targets at all five campuses.** The ASNS program has grown steadily on all UHCC campuses. The projected number of ASNS majors has exceeded intended targets at all five of these smaller UHCCs. Over the provisional period, all campuses have demonstrated significant progress towards the enrollment of students pursuing the ASNS degree

Declared ASNS Majors:

|  | 2014-15 | 2015-16 | 2016-17 | 2017-18* |
|---|---|---|---|---|
| **Hawai'i CC** |  |  |  |  |
| Projected | 15 | 20 | 30 | - |
| Actual | 20 | 44 | 58 | 60 |
| **Honolulu CC** |  |  |  |  |
| Projected | 52 | 54 | 55 | - |
| Actual | 21 | 43 | 62 | 84 |
| **Kaua'i CC** |  |  |  |  |
| Projected | 10 | 15 | 19 | - |
| Actual | 15 | 19 | 20 | 32 |

| UH Maui College | | | | |
|---|---|---|---|---|
| Projected | 30 | 40 | 50 | - |
| Actual | 51 | 53 | 52 | 50 |
| **Windward CC** | | | | |
| Projected | 16 | 24 | 32 | - |
| Actual | 118 | 143 | 157 | 165 |

*No enrollment goals were projected for 2017-18 and beyond

For comparison:

| | 2014-15 | 2015-16 | 2016-17 | 2017-18** |
|---|---|---|---|---|
| Kapiʻolani CC | | | | |
| Actual | 391 | 442 | 431 | - |
| Leeward CC | | | | |
| Actual | 365 | 398 | 392 | - |

**Data not available until May 2019

The ASNS program utilizes a variety of methods to recruit students interested in pursuing a career in the STEM professions. This includes visits to local high schools, presentations to the incoming freshman classes, and direct recruitment in core ASNS courses. Counselors are available to assist students with both personal and academic issues such as registration, course selection, and career guidance. Other campus highlights:

Hawaiʻi CC
Student enrollment in the ASNS program has been double the projected enrollment targets for the last three years. The program has developed partnerships with UH Hilo to offer courses that are still in development at Hawaiʻi CC. Efforts have also been made to align course numbering with other campuses in the UH System to provide a more seamless experience for students.

Honolulu CC
Our numbers of majors enrolled in the ASNS program have steadily increased each year. The math and science division is almost fully staffed at this time, and our campus is working on purposefully engaging with students to increase retention and persistence. As already indicated, the faculty will be conducting focus groups with students to understand their retention and success trends.

Kauaʻi CC
The demand for the ASNS program is healthy, enrollment targets were surpassed each year, and enrollment has continued to increase with 60% growth from the previous year (from 20 to 32 majors), and with additional marketing this trend is expected to continue.

UH Maui College
Over the past three years the number of majors in the program has remained steady at just over 50 majors. In order to increase the number of graduates, the program will need to improve the fall to fall persistence rates and increase the number of majors. This will position UH Maui College to increase the number of program graduates.

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Windward CC
Though among the smallest UHCCs, Windward CC's ASNS has drawn large numbers of students, exceeding enrollment targets by five times original projections. The program has been well-aligned with existing campus strengths in liberal arts and complements STEM-focused CTE offerings. Successful grant writing in support of STEM has generated millions of dollars of supplemental funding and has allowed Windward CC to expand its course offerings to include four semesters of Calculus as well as STEM and non-STEM tracks in Biology, Chemistry, ICS, Physics, and Engineering.

## III. Metrics of Success: STEM Graduates

### The number of ASNS degree completers continues to grow on all campuses.
While the five UHCCs are pleased by the general mobility of ASNS majors, we find that generous cross-campus admissions policies, dual enrollment programs, clearly articulated course offerings, and highly supportive counseling have actually contributed to somewhat lower than anticipated ASNS degree completion numbers.

These five smaller UHCCs have also worked intentionally to add curriculum such as Calculus I and II, Chemistry labs, and upper-level Physics. In some cases, the smaller campuses suffer from limited economies of scale but have worked to broker arrangements to allow their students to complete coursework such as Physics lectures and labs at other campuses in order to fulfill graduation requirements.

In alignment with ACCJC and WASC standards, the ASNS curriculum requires a minimum of 60 credits of 100- and 200-level courses as specified, and students must have secure a minimum 2.0 grade point average in courses required for the degree.

ASNS majors declare a Concentration, which aligns with the intended baccalaureate field of student. The ASNS degree also fulfills most UH Mānoa General Education Core Requirements.

ASNS Program Completers:

| | 2014-15 | 2015-16 | 2016-17 | 2017-18* |
|---|---|---|---|---|
| **Hawai'i CC** | | | | |
| Projected | New | 1 | 2 | 4 |
| Actual | - | 3 | 3 | 0 |
| **Honolulu CC** | | | | |
| Projected | New | 4 | 4 | 4 |
| Actual | - | 4 | 8 | 2 |
| **Kaua'i CC** | | | | |
| Projected | New | 4 | 6 | - |
| Actual | - | 2 | 2 | 2 |
| **UH Maui College** | | | | |
| Projected | 5 | 8 | 10 | 10 |
| Actual | 1 | 0 | 3 | 7 |

| Windward CC | | | | |
|---|---|---|---|---|
| Projected | 4 | 8 | 12 | - |
| Actual | 17 | 16 | 17 | 23 |

*No graduation goals were projected for 2017-18 and beyond

For comparison:

| | 2014-15 | 2015-16 | 2016-17 | 2017-18** |
|---|---|---|---|---|
| Kapi'olani CC | | | | |
| Actual | 58 | 91 | 66 | - |
| Leeward CC | | | | |
| Actual | 36 | 68 | 41 | - |

**Data available after May 2019

Hawai'i CC
As the ASNS program continues to gain traction, Hawai'i CC is working to establish the facilities and infrastructure needed to fully develop this program. Establishing lab space and securing instructors have been challenging. A partnership with UH Hilo has provided students access to ASNS program courses that are low-enrolled or not offered at Hawai'i CC.

Honolulu CC
The numbers of ASNS graduates at Honolulu CC have remained a challenge. The faculty are working on offering and sequencing math and science courses to ensure better options for students to take their required and elective courses. In Spring 2019, the campus opened a new STEM Center in a classroom so that students can access tutoring and makerspace opportunities. Faculty will also be conducting focus groups with students to understand their retention and success trends.

Kaua'i CC
The percentage of full-time students on the ASNS program for Kaua'i CC were 41% in fall 2017 and 44% in spring 2018 and have remained consistent for the previous three years. This is significantly higher than the overall college full-time enrollment. Since 2016, Kaua'i CC has seen an overall decrease in full-time students from 30% in fall 2016 to only 22% in fall 2018. This high percentage of part-time students means longer times to completion. To decrease time to completion on the ASNS, the college identified scheduling improvements in its accreditation self-study, and in fall 2018 has piloted a STEM cohort, consisting of two 8-week math courses, a semester long Chemistry course, and STEMinar course. Students were able to take college algebra and precalculus in their first semester and are able to take calculus 1 and 2 in an 8wk/8wk model.

UH Maui College
Until last year, UH Maui College only offered the Biological Sciences and Physical Sciences ASNS concentrations. By working with larger UHCCs and using distance learning solutions for classes that are not offered on Maui, UH Maui College was able to add the ICT and Engineering concentrations. Enrollments and graduation numbers should increase due to full staffing and more robust ASNS degree program offerings.

<u>Windward CC</u>
Windward CC has met its goals for program completers in all years. Despite these successes, they are a small campus with limited economies of scale. They have had to shift some course offerings to cycle in a logical but limited fashion. Small courses cannot be offered when enrollments are insufficient. Additionally, high utilization of the Ka'ie'ie dual admission program with UH Mānoa has increased student mobility, but somewhat to the detriment of ASNS completion.

## IV. Metrics of Success: STEM Transfers

**<u>Transfer and degree completion are fostered through STEM recruitment, focused student support services, and graduation counseling.</u>** In the original provisional program proposal, no specific target goals were established for transfers to 4-year institutions. Transfer continues to be a significant goal of the program and UHCCs have tracked students as they progress into a baccalaureate program of study.

As the ASNS was approved for most of these campuses during the 2014 academic year, no transfers were anticipated. However, a number of students enrolled in other programs of study changed majors to the ASNS and transferred to 4-year institutions earlier than anticipated. A high proportion of the students who declare the ASNS do not enter UHCCs college-ready in Math. This, coupled with a high proportion of part-time students, has slowed progress in transferring students to 4-year UH campuses. All campuses anticipate higher numbers of transfers in the years to come.

ASNS Transfers:

|  | 2014-15 | 2015-16 | 2016-17 | 2017-18 |
|---|---|---|---|---|
| **Hawai'i CC** | 1 | 4 | 8 | 7 |
| **Honolulu CC** | 0 | 2 | 8 | 8 |
| **Kaua'i CC** | 0 | 2 | 0 | 6 |
| **UH Maui C** | 3 | 3 | 5 | 10 |
| **Windward CC** | 2 | 19 | 16 | 17 |

For comparison:

|  | 2014-15 | 2015-16 | 2016-17 | 2017-18** |
|---|---|---|---|---|
| Kapi'olani CC | 58 | 78 | 106 | 95 |
| Leeward CC | 29 | 81 | 78 | 74 |

**Data available after May 2019

**<u>Further campus-level highlights about outbound ASNS student transfer:</u>**

<u>Hawai'i CC</u>
Students receive support from both their instructors and counselors to develop a long-term academic plan, which includes their plans to transfer. Hawai'i CC offers concentrations in Biological and Physical sciences. Students who are planning to pursue a major outside of these

areas will take as many courses as they can through Hawaiʻi CC, then transfer into their desired program of study. While this leaves Hawaiʻi CC completion numbers low, transfer numbers are increasing, reflecting the improved mobility of students moving from the Community Colleges to the four-year campuses. While numbers are small, the numbers of graduates from the program is increasing and we expect that trend to continue as the program ages. During 2016/17, eight Hawaiʻi CC ASNS majors, including three that completed the degree, transferred into University of Hawaiʻi baccalaureate degree programs.

<u>Honolulu CC</u>
Our numbers have increased or remained steady since the inception of the ASNS program in 2014 although not as rapidly as we would have hoped. Our science and math division has had faculty turnover in the past two years, but in Fall 2017 we hired an oceanography instructor and a biology instructor. In Fall 2018, we replaced an outgoing chemistry instructor with a new one. The faculty are also working on better sequencing and offering of science and math courses to ensure we are giving students good options for courses to advance in the ASNS degree and transfer opportunities.

<u>Kauaʻi CC</u>
The college has seen a positive increase from zero to six transfer students. With increasing enrollment, high course completion rates (80%), and fall to spring persistence ranging from 74%-66% over the last two years, wrap around services, grant funded initiatives, and scheduling for success, the number of transfers is expected to increase. Curricular changes better align the program with Bachelor of Science majors at UH Mānoa, offering maximum flexibility to accommodate the broad range of lower division course requirements. These changes facilitate ASNS degree completion and transfer rates.

<u>UH Maui College</u>
The main purpose of the ASNS degree program is to establish a clear pathway for students interested in pursuing a baccalaureate degrees in STEM. This may reduce the number of credits a student typically takes before transfer. Likewise, many students transfer before completing a degree program. These students are prime candidates for reverse transfer.

<u>Windward CC</u>
Transfer rates are proportionally consistent with more established ASNS programs on Oʻahu. Windward CC student transfers to UH 4-year campuses are impacted by a higher proportion of part-time students at Windward CC, lower numbers of ASNS course credits completed each semester, and lower levels of math and science readiness. A significant proportion of ASNS students also transfer to HPU, whose Hawaii Loa campus is located just a few miles from Windward CC.

# V. Program Resource Analysis

Resources to support the ASNS on the five smaller UHCCs are adequate. The ASNS is unique in that it was designed to develop a clearer academic pathway to a valuable STEM credential by offering a product which is differentiated by the pre-existing Associate in Arts (AA) degree. Indeed, the AA degree was not serving all students and was tracking STEM-intended majors into a program of study that was not well-aligned with STEM baccalaureate degrees.

**The ASNS has led to over $30,000,000 in grant funding.** Extramural grant projects at the UHCCs range in scope from capacity building (alliance building, infrastructure, academic program, and faculty development) to discipline and education research (inquiry, curriculum and pedagogy development) to participant support (scholarships, student research experiences, and studies or services for underrepresented populations such as Native Hawaiians, Pacific Islanders, women, first-generation students, veterans, and students with disabilities).

**Select current extramural projects supporting STEM and the ASNS include:**

| SOURCE | TITLE | CAMPUSES | AWARD | SUMMARY |
|---|---|---|---|---|
| **NSF** | *Development of a Data Analytics Education Pathway* | Honolulu | $221,951 | This project aims to create and implement a **Data Analytics career pathway** in partnership with UH Manoa phasing in a multi-entry, multi-exit career pathway in support of data analytics and information technology professionals in support in cyber defense, cyber operations, business, education, and industry. |
| **NSF** | *Bridge to the Baccalaureate: Strategic Transfer for Minority Participation (STAMP)* | Kapiʻolani (lead), Hawaiʻi, Honolulu, Kauaʻi, Leeward, Maui, Windward | $1,480,200 | Implements best practice strategies to increase enrollment, transfer, and degree completion of underrepresented STEM students at all UHCC campuses with particular focus on 1) math acceleration, 2) peer mentoring, and 3) undergraduate research experiences. |
| **NSF** | *Pre-Engineering Education Collaborative: PEEC II* | Kapiʻolani (lead), Honolulu, Leeward, Mānoa, Maui, Windward | $2,924,037 | Hawaii PEEC II builds capacity at six NH-serving institutions to prepare students for STEM degree completion, seamless transfer, and entry into the workforce in **engineering** and related fields. Project will also implement, investigate, and evaluate the effect of discipline-specific undergraduate research on student success. |

| | | | | |
|---|---|---|---|---|
| **NSF** | *NSF ADVANCE: Building Relationships to Increase Diversity and Gender Equity (BRIDGE) in Hawaii's Two-Year System* | Leeward (lead), UH Hilo, Hawai'i, Honolulu, Kapi'olani, Kaua'i, Maui, Windward | $1,099,959 | Conduct institutional assessments and implement best practices to improve the recruitment, retention, **promotion and success of women faculty and environment in STEM fields at UH.** |
| **ED** | *Ho'omānalowai: STEM Student and Teacher Preparation Program* | Mānoa (lead), Honolulu | $1,823,426 | This project provides **support for pre-service STEM teachers and STEM majors** to complete undergraduate degrees and enter the workforce. Includes K-12 outreach component and partnership with Malama Honua Public Charter School to raise awareness of STEM pathways. |
| **NSF** | *Akeakamai/Kahikini o ka La: NSF ATST Mitigation Plan* | Maui | $16,000,000 | This program wil employ **STEM educational strategies informed by traditional Native Hawaiian approaches** to learning to create a pipeline of NH STEM students; develop STEM curricula; STEM faculty development at secondary and postsecondary levels and seeks to engage employers, community members, and NH student networks |
| **NSF** | *CSP4Hawaii: Deployment of Computer Science Principles within Secondary Schools in Hawaii* | Maui | $999,239 | The University of Hawaii, in collaboration with HIDOE conducts a 3 year study "Computer Science Principles for All in Hawaii" aimed at improving state-level initiatives to address diversity in **computer science education.** |
| **NSF** | *CyberSecure: Extended Cybersecurity Education, Curriculum, and* | Maui | $299,404 | The project will build on the work of NSF Advanced Technological Education grantees to develop a comprehensive, industry- |

| | | | | driven program for **cybersecurity education and workforce development**. |
|---|---|---|---|---|
| **NSF** | *2018 Tribal Colleges and Universities Program Leaders Forum* | Hawaiʻi, Honolulu, Kauaʻi, Kapiʻolani, Leeward, Maui, Windward, Hilo, Mānoa, West Oʻahu | $89,026 | Biennial gathering of PIs, Project Directors, and **Native Hawaiian-serving, Alaskan Native-serving and tribal college institutions** to discuss STEM research and education capacities |
| **State** | *UH OHA Higher Education STEM Scholarship* | Hawaiʻi, Honolulu, Kauaʻi, Kapiʻolani, Leeward, Maui, Windward, Hilo, Mānoa, West Oʻahu | $1,825,000 | Partnership with the Office of Hawaiian Affairs to administer **scholarship and student support** for a minimum of 200 Native Hawaiian STEM undergraduate and graduate students at the 10 UH campuses |
| **NSF** | *Partnerships for Advancing Geoscience Education: PAGE* | Windward (lead), Honolulu, Kauaʻi, Mānoa | $3,281,147 | Halau Ola Honua builds capacity at four NH-serving institutions to prepare students for STEM degree completion, seamless transfer, and entry into the workforce in **geoscience and related environmental and physical science fields** |

At the UHCCs, courses which serve ASNS students may also be completed by AA pursuers and others. The ASNS has drawn upon pre-existing resources committed to the AA degree by reassigning faculty, program operating, and facilities resources from programs like the AA to the ASNS program of study. The figures below are, therefore, not necessarily discrete from other academic operating costs but are offered to provide a rough estimation of the costs associated with the offering of the ASNS degree:

| | 2014-15 | 2015-16 | 2016-17 | 2017-18 |
|---|---|---|---|---|
| **Hawaiʻi CC** | | | | |
| *Faculty Count* | 6.5 | 6.5 | 8.5 | 8.5 |
| *TFSF allocation* | 163,328 | 151,067 | 192,103 | 210,492 |
| *G-fund allocation* | 614,264 | 666,708 | 749,483 | 807,384 |

| Honolulu CC | | | | |
|---|---|---|---|---|
| Faculty Count | 10 | 10 | 10 | 10 |
| TFSF allocation | 149,221 | 115,269 | 114,399 | 113,900 |
| G-fund allocation | 1,333,803 | 1,295,713 | 1,208,110 | 878,913 |
| Grants allocation | 145,450 | 50,412 | 27,282 | 131,792 |
| Kaua'i CC | | | | |
| Faculty Count | 17 | 16 | 16 | 18 |
| TFSF allocation | 17,091 | 30,756 | 29,866 | 23,000 |
| G-fund allocation | 1,030,144 | 973,084 | 1,024,696 | 1,100,000 |
| UH Maui College | | | | |
| Faculty Count | 21 | 21 | 20 | 21 |
| TFSF allocation | 34,379 | 41,479 | 22,979 | 22,979 |
| G-fund allocation | 1,801,379 | 2,074,695 | 2,043,048 | 2,091,048 |
| Summer session allocation | 62,537 | 64,090 | 49,345 | 65,000 |
| Windward CC | | | | |
| Faculty Count | 5 | 5 | 5 | 6.5 |
| TFSF allocation | 17,805 | 17,805 | 19,586 | 19,586 |
| G-fund allocation | 561,452 | 577,072 | 593,284 | 679,006 |
| Grants allocation | 0 | 0 | 0 | 85,722 |

**ASNS Faculty**

The ASNS has not generally necessitated the addition of full-time faculty at any of the five smaller UHCCs. Faculty resources are generally sufficient at each of the five UHCCs addressed in this proposal with full-time faculty residing in position lines which were reassigned from other programs internally, such as Liberal Arts. At each institution, these full-time faculty members are complemented by part-time Lecturers who are together able to offer a complete program of study to ASNS students.

Hawai'i CC
The ASNS degree program is part of the Math and Natural Sciences Department. The Department has 11 full-time faculty members as of Fall 2018, 8.5 are assigned to the ASNS.

Honolulu CC
The ASNS degree program is part of the Natural Science and Math division As of Fall 2018, the division consists of 7 full-time Natural Science Faculty and 10 full-time Math faculty. Of these faculty, 10 FTE faculty teach the core and elective ASNS courses.

Kaua'i CC
The ASNS degree program is part of the Science and Math (SAM) Division. The Division has 18 full-time faculty members as of Fall 2017. Just three regular full-time faculty members and one grant-funded teaching position in the SAM Division teach science courses on the ASNS program. The required math courses are taught by math faculty assigned on a rotating basis.

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The table above includes all faculties who have taught courses contributing to the ASNS degree.  The program technically only has three FTE BOR appointed faculty, who would remain in place as part of SAM and in support of other campus programs and general education requirements. In other words, if the ASNS degree is not approved as an *established* program, the cost for faculties remains unchanged, and students are merely left obtaining an AA degree or transferring without a degree, which holds less employment and transfer value for STEM fields.

<u>UH Maui College</u>
The ASNS degree program is part of the Science, Technology, Engineering and Math Departments. The Department has 21 full-time faculty members as of Fall 2018. The majority of the faculty members in the STEM Department teach classes in the ASNS program.

<u>Windward CC</u>
Windward CC's ASNS is offered as a joint effort of two academic departments which report to the same Academic Dean.  Five full-time science faculty principally contribute to the ASNS.  3 contributing faculty from Math and 2 from ICS are assigned to other academic programs/units (Liberal Arts, for instance) and have salary costs accounted for elsewhere and are thus not included in the chart above.  With grant funds, an additional 1.5 FTE faculty were added to the department in fall 2018 to expand curriculum in Oceanography, Physics, Civil and Electrical Engineering.


**Highlights about ASNS-related Facilities**

<u>Hawaii CC</u>
Hawaii CC expects to see a higher number of transfers than graduates until we have the facilities to offer all lab courses that are required.   There are adequate facilities for chemistry at both Pālamanui and Manono campuses.  The Pālamanui biology facility and biology lab are sufficient to meet minimum needs, however, the addition of a prep room near the lab space would allow us to be more efficient in our offerings.  Neither the Pālamanui nor Manono campuses has a physics lab.  A new physics lab for Pālamanui has been funded (estimated completion in 2021) and funding is still not secured for a physics lab at the Manono campus.
<u>Honolulu CC</u>
Science instructional facilities are adequate to support the ASNS.

<u>Kauaʻi CC</u>
Science instructional facilities are adequate to support the ASNS.

<u>UH Maui College</u>
Science instructional facilities are adequate to support the ASNS.

<u>Windward CC</u>
Federal funds have been secured to renovate a lecture classroom into an instructional laboratory which better supports expanded instruction in Biology and Environmental Science. Other instructional facilities are adequate to support the ASNS.

## VI. Alignment

The ASNS program is consistent with the goals and objectives set forth in the 2015-2021 UHCC Strategic Directions, which are reflected in the University of Hawaii Community Colleges Strategic Plan. The ASNS further aligns with the following initiatives of the UH system:

Hawai'i Graduation Initiative (HGI)
The primary purpose of the ASNS degree program is to establish a clear pathway for students interested pursuing baccalaureate degrees in STEM. Specifically, the ASNS supports HGI by:
- Serving populations in geographic regions with large Native Hawaiian populations,
- Eliminating achievement gaps for target populations - Pell recipients, Pacific Islanders, Native Hawaiians, Filipino - in enrollment, graduation, STEM degrees and transfer,
- Increasing enrollment and completion rates while reducing time to completion, and,
- Establishing clear structured academic pathways.

Increase Enrollment of Target Populations
This goal seeks to increase enrollment and year-to-year retention of recent high school graduates, high school non-completers and GED recipients, Pacific Islanders, working adults, and international students by developing outreach programs. The ASNS program regularly develops and participates in community outreach endeavors to increase general knowledge about careers in STEM and how the ASNS degree can serve students toward that goal.

Hawaii Innovation Initiative
The ASNS helps build a qualified workforce in existing and emerging careers to the benefit of the state and the individual. This includes intentional efforts to increase access to STEM programs and the creation of specific pathways into baccalaureate programs in biotechnology, engineering, physical sciences, and other demand fields.

Modern Teaching and Learning Environments
ASNS students and faculty work in learning and teaching environments appropriate for the 21st century.

A High Performing System of Higher Education
ASNS programs have been implemented in partnership with the Hawaii DOE and with four-year institutions. Best practices have been integrated throughout the ASNS to ensure timely and effective transition of students from high school to community college and on to baccalaureate institutions.

The results of the ASNS program supporting system priorities and being coordinated as a system benefits students and supports UH's STEM objectives. The number of STEM graduates, including ASNS degree completers, have grown across all UHCC campuses.

Number of STEM graduates, 2009-2018
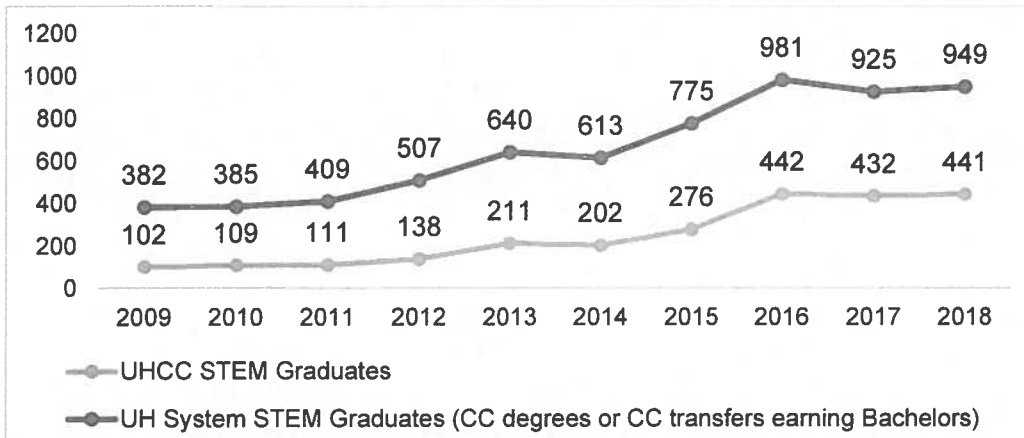


Between 2013 and 2018, the proportion of ASNS degrees awarded among all UH STEM degrees has increased from 25% to 39%. Moreover, UHCC ASNS graduates have also increased STEM enrollment ad graduation from UH baccalaureate campuses. In 2018, more than 500 former UHCC students earned baccalaureate STEM degrees; 98 of those graduates had previously earned a UHCC ASNS, primarily from the larger and more established ASNS campuses.

**The ASNS serves underrepresented students at UHCC quite well. Pell grant recipients with "exceptional financial need" earn UHCC STEM degrees and certificates at a rate which _exceeds_ parity. Pell ASNS graduates are, thus, statistically _overrepresented_ in comparison to their enrollment as a whole. In direct philosophical alignment with the overall access and equity mission of the UHCCs, economically disadvantaged students are meeting and exceeding their more financially advantaged peers in earning STEM credentials, creating greater opportunities for economic mobility, and increasing equity.**

Pell-Eligible Students' Share UHCC Enrollment and STEM Degrees and Certificates Awarded
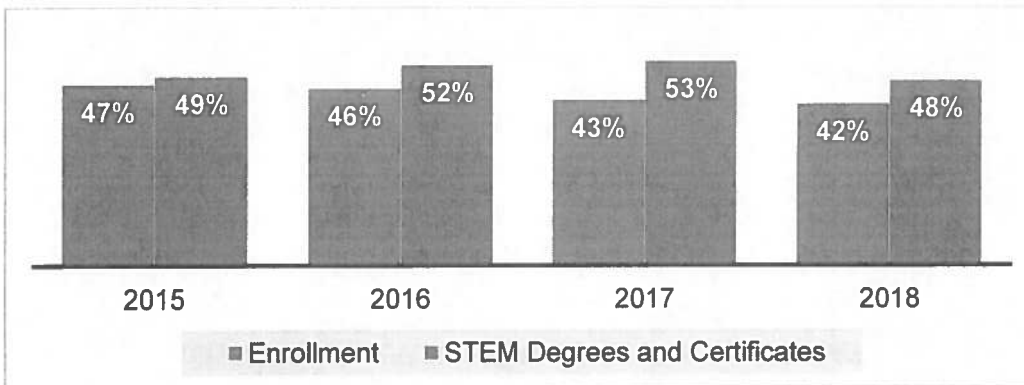
# VII. Conclusion

<u>Future Goals</u>
The following goals have been identified to be implemented across the five smaller UHCCs:

1. Increase the fall to fall persistence rate to 70 percent by 2022,
2. Increase the number of program graduates to a minimum of 20 per campus per year by 2022,
3. Enhance partnerships in Early College high school programs to allow high school students to complete ASNS coursework,
4. Expand the offerings of courses to include more distance education offerings,
5. Incorporate more undergraduate research experiences into the curriculum,
6. Administer surveys of ASNS graduates who have transferred to four-year UH institutions, and,
7. Increase the number of ASNS degrees (graduates) by 3% each year.

<u>Conclusion</u>
Approval of the Associate in Science in Natural Science degree program with established status at Hawaii CC, Honolulu CC, Kauai CC, UH Maui College, and Windward CC will ensure that all seven University of Hawai'i Community Colleges remain a positive force in providing a pathway for Hawai'i students to obtain skills and knowledge for the future and to prepare these students to participate fully in our state's emerging STEM economy.

UNIVERSITY
of HAWAI'I®
MĀNOA

March 4, 2019

**MEMORANDUM**

TO:     Lee Putnam, Chair
        Board of Regents

VIA:    David Lassner
        President

VIA:    Donald Straney
        Vice President for Academic Policy and Planning

VIA:    David Lassner
        Interim Chancellor

FROM:   Michael Bruno
        Interim Vice Chancellor for Academic Affairs
        and Vice Chancellor for Research

SUBJECT: APPROVAL OF NEW BACHELOR OF SCIENCE IN CONSTRUCTION
         ENGINEERING BY THE DEPARTMENT OF CIVIL AND
         ENVIRONMENTAL ENGINEERING AT UH-MĀNOA

SPECIFIC ACTION REQUESTED:
It is respectfully requested that the Board of Regents approve as provisional the
Bachelor of Science in Construction Engineering to be offered by the Department of
Civil and Environmental Engineering in addition to their long standing Bachelor of
Science in Civil Engineering.

RECOMMENDED EFFECTIVE DATE:
Effective Fall 2019

ADDITIONAL COST:
The proposed program will require additional nominal resources (lecturers) necessitated
by the addition of two new courses per year. The addition of one faculty member to
accommodate the expected increase in majors is proposed for year 2021 through
retirements or reallocations.

PURPOSE:
The Bachelor of Science in Construction Engineering will allow students to follow a
more specialized degree than the current civil engineering degree. Due to accreditation
requirements, the civil engineering degree requires coverage of at least four technical
areas, currently among construction, environmental, geotechnical, hydrology and
hydraulics, structures, and traffic and transportation. However, about one half of our

graduates are engaged in construction related engineering activities, but they are not well-prepared through the existing civil engineering degree, which is more design-oriented. Specifically, with the civil engineering bachelor's degree, our graduates take nine (9) credits in construction courses, but with the construction engineering bachelor's degree, the students will be able to take up to 24 credits in construction courses, making them much better prepared to work in construction engineering tasks and projects. ABET accreditation for the new degree will be sought during the next general accreditation review in 2021.

BACKGROUND:
Pursuant to Board of Regents Policy 5.201: Instructional Programs, "The Board shall approve the establishment of all new instructional programs granting academic credit leading to a degree or credential, upon recommendation by the President."

The UHM College of Engineering offers ABET-accredited undergraduate degrees in Computer Engineering, Civil Engineering, Electrical Engineering, and Mechanical Engineering. The College is also offering a new undergraduate degree in Engineering Science, which will seek accreditation in 2021. The College also offers the MS and PhD in Civil Engineering, Electrical Engineering, and Mechanical Engineering.

The proposed program is consistent with the Integrated Academic and Facilities Plan for the University of Hawai'i System, approved by the Board of Regents on April 20, 2017. This program will help UH attract more high school students locally and nationally. The local and national need for this degree is strong and Construction Engineering will allow students to study more in this popular area of interest, and let them graduate from an ABET-accredited program. As an additional opportunity for students to pursue an engineering degree, this program will also help retention and persistence of enrolled students. Engineering has already established pathways with the UH community colleges for transferring students. This new program will help strengthen the pathways and create more opportunities for students from UH community colleges.

A Construction Engineering program will prepare students for engineering and management positions in the construction industry by providing them with the educational tools they need. The curriculum will provide a solid foundation on which graduates will build their careers in the construction industry. Using the latest technology, students learn how the industry operates, what is expected of them as construction engineers and managers, and how to complete projects safely, on-time, and within budget. Hands-on project experiences coupled with theory-based instruction prepares students to become well-rounded professionals.

The demand for a program specifically designed for Construction Engineering is high given that many graduates of UHM's CEE program take positions in construction companies. We anticipate that after the program is established there will be approximately 50 graduates per year.

The University of Hawaiʻi at Mānoa is the only campus in Hawaiʻi that confers degrees in accredited engineering programs. Engineering is critical to the continued development of Hawaiʻi's economy. In addition, for several decades the Department of Civil and Environmental Engineering has had close ties with the construction industry and the General Contractors Association of Hawaiʻi. For example, Mr. William (Bill) Wilson, past President of Hawaiian Dredging and Construction, is a past member of the CEE Industry Advisory Committee and current member on the Dean's Council, College of Engineering. Mr. Russell Young, President, Albert C. Kobayashi, Contractors is currently a member of the Industry Advisory Committee of the Civil Engineering Department.

There is no additional admission policy to the Construction Engineering program other than that of admission or transfer to the College of Engineering and the University of Hawaiʻi at Mānoa. It is envisioned that students who will enroll in the program will include existing engineering students and new students. With the proposed degree program in place, we will be able to attract the students who would otherwise go to the mainland to obtain a Construction Engineering degree.

The Department has been offering a suite of six (6) Construction Engineering courses for over 30 years, but because of other requirements civil engineering degree students can take only a maximum of three of them. Two more courses, one in construction law and another in construction safety are planned to be added to be fully compliant with accreditation requirements. We are collaborating with the School of Law to offer the former, and with professionals with many years of construction experience to offer the latter course. In addition, we have partnered with the Shidler College of Business for the students to take one of their accounting courses.

The UH-Mānoa campus is constantly undergoing construction projects (addition, repair, renovation, etc.) and will provide convenient opportunities for hands-on experience and case study analysis in addition to internships offered to our students by the local construction industry.

Both the curriculum and accreditation process are similar to the existing degree in civil engineering, with students in both majors taking a majority of the same courses. Therefore, there is no difficulty in launching the new Bachelor program immediately upon BOR approval.

The CEE Department already has an Industry Advisory Committee which is made up of 16 representatives from industry including the construction industry.  The IAC meets with the department twice annually and reviews the program including laboratory tours, and meetings with students and faculty members; the same IAC will have oversight for the Construction Engineering program.

ACTION RECOMMENDED:
It is recommended that the Board of Regents approve as provisional the Bachelor of Science in Construction Engineering in the Department of Civil Engineering at UH-Mānoa.

Attachment: Proposal for BS in Construction Engineering

cc:    Executive Administrator and Secretary of the Board Kendra Oishi
       Interim Dean H. Ronald Riggs

# Bachelor of Science in Construction Engineering

## 1. Program Purpose and Outcomes

### A. Purpose

The BS in Construction Engineering will allow students to follow a more specialized degree than the current civil engineering degree in the College of Engineering (CoE). Due to accreditation requirements, the civil engineering degree requires we prepare graduates in four technical areas appropriate to civil engineering, which include construction, environmental, geotechnical, hydrology and hydraulics, structures, and traffic and transportation. Construction engineering is less focused on mathematical solutions and design of projects; it is more focused on the processes of material and supply flows, scheduling, crew management, site compliance and safety, etc. ABET, the engineering accreditation organization, recognizes 28 different programs (including Construction Engineering); the College currently has only 4. This approach will allow us to expand our offerings by one degree that is in high demand in Hawaii and the nation as both go through a necessary infrastructure rehabilitation, renewal and expansion.

Major new construction projects on Oahu include new terminals at the airport, secondary sewage treatment plants both at Sand Island and Honouliuli, hundreds of water and sewer line replacements, thousands of lane miles of road repairs, the new Atlantis hotel in Ko'Olina, and a large number of new buildings and large building renovations, both private and public. Most old bridges and dams are at risk and functionally obsolete on the neighboring islands, requiring substantial construction work to bring them to current standards. The April 2018 storms on Kauai are likely to generate about $200 million worth of construction and the threat of storm damage and recovery through re-construction is ever present in Hawaii. This makes Civil Engineering and Construction Engineering two of the most necessary types of expertise for the State.

### B. Identify the program outcomes, what the student will know and be able to do at the completion of the program

Engineering accreditation by ABET requires all programs to have the following student outcomes and to assess rigorously the achievement of the following outcomes centered on graduates having the ability to:

1. Identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. Communicate effectively with a range of audiences.
4. Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic,

environmental, and societal contexts.

5. Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives

6. Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.

7. Acquire and apply new knowledge as needed, using appropriate learning strategies.

The above outcomes establish what the student will know and be able to do at the completion of the program.

C. **Describe the fit of the proposed program with system/campus mission and state need. Describe how the program addresses the following:**

1) **Aligns with the UH System mission and academic master plan and the campus mission and academic plan**

   The proposed program is consistent with the Integrated Academic and Facilities Plan for the University of Hawaii' System, approved by the Board of Regents on April 20, 2017. This program will help UH attract more high school students locally and nationally. The local and national need for this degree is strong and Construction Engineering will allow students to study more in this popular area of interest, and let them graduate from an ABET-accredited program. As an additional opportunity for students to pursue an engineering degree, this program will also help retention and persistence of enrolled students. Engineering has already established pathways with UH community colleges for transferring students. This new program will help strengthen the pathways and create more opportunities for students from UH community colleges.

2) **Provides evidence of continuing need for the program, projections of the number of graduates, of career and graduate education opportunities for those completing the proposed program, etc.**

   Society is becoming ever more technological, and the need for engineers is increasing. The need increases as the baby-boom generation retires. Construction Engineering is a well-defined engineering specialty.

   Approximately 40%[1] of Civil Engineering graduates have found employment with local and mainland contractors. Also, in a 2015 internal poll of 54 CEE junior and senior students, 37% (20 out of 54) students showed an interest in specializing in Construction; and out of the 13 undecided students, 5 or 38% favored Construction Engineering.

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[1] Based on information from "May 2016 State Occupational Employment and Wage Estimates Hawaii" of the US Bureau of Labor Statistics, https://www.bls.gov/OES/current/oes_hi.htm#17-0000.

**Area of Interest of Fall 2015 CEE 355 Students**
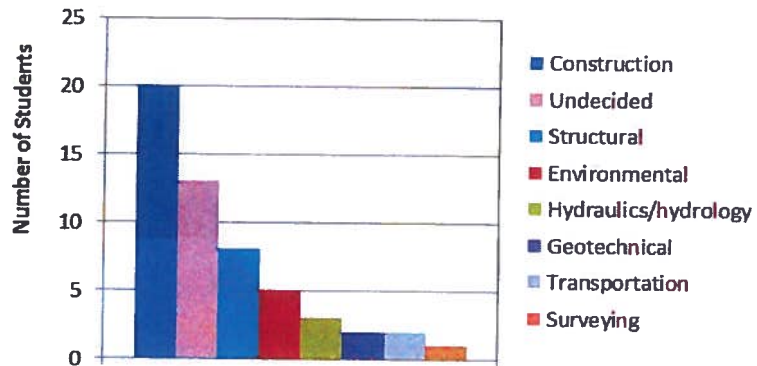


**Area Undecided Students are Leaning Towards**
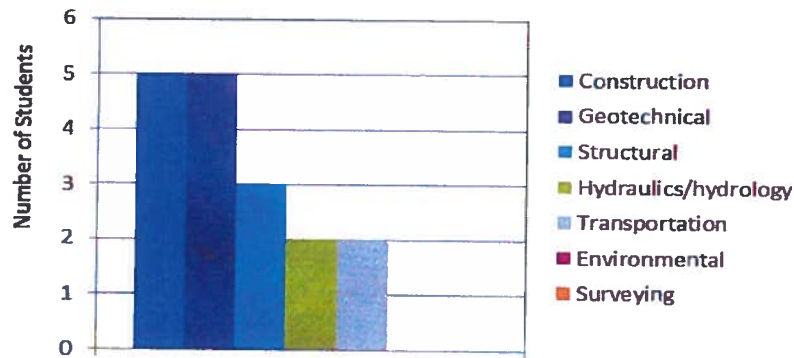


A similar survey conducted in 2008 among 116 CEE students showed 46% (53 out of 116) expressed an interest in pursuing Construction Engineering if the program is offered.

A Construction Engineering program will prepare students for engineering and management positions in the construction industry by providing them with the educational tools they need. The curriculum will provide a solid foundation on which graduates will build their careers in the construction industry. Using the latest technology, students learn how the industry operates, what is expected of them as construction engineers and managers, and how to complete projects safely, on-time, and within budget. Hands-on project experiences coupled with theory-based instruction prepares students to become well-rounded professionals.

The demand for a program specifically designed for Construction Engineering is high given that many graduates of UHM's CEE program take positions in construction companies. We anticipate that once the program is established there will be approximately 50 graduates per year.

3) **Includes a market analysis of the need of the program by addressing the professional, economic, social and workforce needs of the State of Hawai'i**

Construction Engineering is a well-established discipline of the American Society of Civil Engineers (ASCE). A small sample is indicated by a section of the monthly email of popular

technical papers in the area of Construction Engineering, shown below.

**ASCE** PUBLICATIONS

## Top Downloaded Articles in Construction Engineering

**Mechanical Properties of Alkali-Activated Concrete Subjected to Impact Load**
*Journal of Materials in Civil Engineering*

**Structural Risk Allocation in U.S. Public-Private Partnership Highway Project Contracts**
*Journal of Construction Engineering and Management*

**Behavior of GFRP-RC Slab–Column Edge Connections with High-Strength Concrete and Shear Reinforcement**
*Journal of Composites for Construction*

**Financial-Based Incentive Plan to Reduce Construction Waste**
*Journal of Construction Engineering and Management*

**Comparison of an Emerging Seat of Arbitration and Leading Arbitration Seats and Recommendations for Reform**
*Journal of Legal Affairs and Dispute Resolution in Engineering and Construction*

UHERO's latest forecast for Hawaii addressed construction as follows:[2]

"The construction cycle peaked in mid 2016, but the volume of activity has remained nearly as strong since then. In addition to resort and retail oriented developments around the state, two large-scale residential projects in Central Oahu and several high-rises in urban Honolulu will support construction activity at roughly its current level for the next several years."

In May 2015, the CEE Chair sent a Survey Monkey poll to the 95 CEE graduates in fall 2014 and spring 2015; 41 of them responded to the questionnaire and 30 answered the question of the name and location of their employment, as shown in the table below (these are the direct responses of students and some contain spelling errors.) The poll did not explicitly ask whether their job was in construction engineering, but we have a clear idea of how much construction each of the stated companies and agencies conduct as part of their engineering work. The data suggest that 54% of the Civil Engineering graduates work as Construction Engineers. Thirty respondents also revealed their starting salary which came to an average offer of $58,000.

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[2] UHERO, Annual Hawaii Forecast with Asia-Pacific Outlook, December 15, 2017.

| | Employer and Location | Construction |
|---|---|---|
| 1 | Akinaka & Associates, Ltd. Located by the airport | 1 |
| 2 | Akinaka and Associates. Airport | 1 |
| 3 | Albert C. Kobayashi at a job site in Waikiki | 1 |
| 4 | BMK Construction, Lanai | 0.9 |
| 5 | City & County, Pearl City | 0.3 |
| 6 | DoD, Pearl Harbor Naval Shipyard | 0.3 |
| 7 | Englekirk, Downtown Honolulu | 0 |
| 8 | Environet Inc. in downtown Honolulu | 0 |
| 9 | Gray, Hong, Nojima & Associates, Inc. downtown Honolulu | 0.1 |
| 10 | Hawaii Engineering Group, Inc. located in downtown Honolulu | 0 |
| 11 | Hawaiian Dredging Construction Company, Inc, Honolulu, HI | 0.9 |
| 12 | Hawaiian Dredging; located in honolulu | 0.9 |
| 13 | HDCC AMCEE job site | 1 |
| 14 | Healy Tibbits | 0.8 |
| 15 | Hensel Phelps Con. Hawaii | 0.9 |
| 16 | Hensel Phelps Construction Co | 0.9 |
| 17 | Hensel Phelps, Honolulu | 0.9 |
| 18 | ICx Transportation Group | 0 |
| 19 | Johnson Controls in Honolulu | 0.3 |
| 20 | Kiewit, waipahu | 1 |
| 21 | Nan Inc | 0.8 |
| 22 | Nordic PCL | 0.9 |
| 23 | Nordic PCL Construction, Inc. / Four Seasons Ko Olina Renov. | 1 |
| 24 | Parsons, Hawaii | 0.2 |
| 25 | Pearl Harbor naval shipyard | 0.3 |
| 26 | Pearl harbor Naval Shipyard | 0.3 |
| 27 | Pearl Harbor Shipyard | 0.3 |
| 28 | R. M. Towill Corporation, Honolulu, HI | 0.3 |
| 29 | San Francisco Public Utilities Commission | 0 |
| 30 | Wilson Okamoto Corporation | 0 |
| | % Construction related jobs of Sp'15 UHM CEE graduates | 54% |

Last but not least, the CEE Chair conducted another poll in May 2018 as part of the CEE department's decision to establish a senior year track with a focus on sustainability. The survey asked current civil engineering students to make one choice out of four areas of focus, i.e. General Civil Engineering, Structures, Sustainability, Construction Engineering; see Question 2 on the next page. Construction Engineering was selected by 33% of the current CEE student undergraduate respondents.

All the above are major indications of strong demand. It should also be noted that the department's Industry Advisory Committee (CEE IAC) which consists of high-level professionals in the civil engineering and construction industry voiced strong support for this proposal at its June 20, 2018 meeting in Holmes Hall.

| | Response Percent | Response Count |
|---|---|---|
| Pre-engineering | 10.34% | 9 |
| Freshman | 3.45% | 3 |
| Sophomore | 12.64% | 11 |
| Junior | 26.44% | 23 |
| Senior (graduating in 2018) | 21.84% | 19 |
| Senior (graduating in 2019) | 25.29% | 22 |

Q2    Display Option ▼    -- Export -- ▼

## If all four options were available right now, what would be your degree preference?

Answered: 88   Skipped: 0
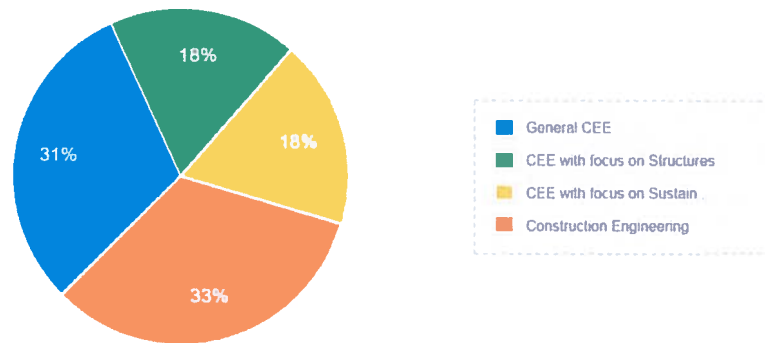


| | Response Percent | Response Count |
|---|---|---|
| General CEE | 30.68% | 27 |
| CEE with focus on Structures | 18.18% | 16 |
| CEE with focus on Sustainability | 18.18% | 16 |
| Construction Engineering | 32.95% | 29 |

4) **Demonstrates how the proposed program responds to national and international needs where Hawai'i and the University have unique or outstanding resources to respond with quality**

The University of Hawaii at Manoa is the only campus in Hawaii that confers degrees in accredited engineering programs. Engineering is critical to the continued development of Hawaii's economy. In addition, for several decades the Department of Civil and

Environmental Engineering has had close ties with the construction industry and the General Contractors Association of Hawaii. For example, Mr. William (Bill) Wilson, past President of Hawaiian Dredging and Construction, is a past member of the CEE Industry Advisory Committee and current member on the Dean's Council, College of Engineering. Mr. Russell Young, President, Albert C. Kobayashi, Contractors is currently a member of the Industry Advisory Committee of the Civil Engineering Department.

The Department has been offering a suite of six Construction Engineering courses for over 30 years, but because of other requirements civil engineering degree students can take only a maximum of three of them:

**CEE 375 Construction Materials** (3) (2 Lec, 1 2-hr Lab) Introduction to the crystalline and molecular structure of materials. Properties of metals, concrete, concrete admixtures, asphalt, wood, and other materials commonly used in construction. A-F only. Pre: 305 (or concurrent); 370. DP

**CEE 471 Construction Methods** (3) Methods of construction, primarily buildings. Construction types: light and heavy wood; steel; plain, reinforced, and prestressed concrete; masonry. Foundations; associated details of frames, walls, roofs, floors, openings, finishes. Disasters, failures, and their causes. Industrialization of the building process. Pre: 375.

**CEE 472 Construction Project Management** (3) Introductory treatment of the management of construction. Construction supervision, contract documents, estimating and bidding, organization, planning and scheduling, administration, business methods, safety, and labor. ENGR majors only. A-F only. Pre: 375. (Cross-listed as ARCH 432)

**CEE 473 Construction Equipment and Methods** (3) Methods and equipment used on horizontal/heavy engineering projects. Available equipment, their production, and how they are used to excavate, move, process, and place the earth. Pre: 375 and senior standing.

**CEE 474 Construction Estimating and Bidding** (3) Estimating science; techniques of estimating quantities and pricing of work for construction contracting; classification of costs, analysis of plans and specifications for estimating; computerized estimating; cash flow, bidding strategy, preparation and submission. A-F only. Pre: 375.

**CEE 476 Construction Planning and Scheduling** (3) To teach the theory and the practice of planning, scheduling, and reporting a construction project through the use of bar chart and CPM. Format to include lectures, text, outside speakers, site visits, discussions, case study, and computers. Pre: 375.

5) **Meets the basic education needs for which there is a demand by Hawai'i residents**

   As noted above, ABET has 28 engineering specialties, and we offer only 4 in the College (UHM offers another 2 outside of the College). Construction Engineering is a popular and valuable engineering major, but we don't offer it. The Construction Engineering program is designed to help us satisfy the demand for some of these other programs of study.

## 2. Program Organization

### A. Provides a description of curriculum organization, total credits to complete the program including all prerequisites requirements, admission policies, advising, and other aspects of the program, with reference to its goals/outcomes.

#### A. 1 Curriculum Organization

The proposed BS degree program in Construction Engineering requires a minimum of 122 credit hours. The required credit hours include the UH general education requirements and those of the program specific to a concentration. All electives are subject to the approval of an advisor. There is mandatory advising prior to registration, every semester.

Students must complete the College of Engineering requirements, which satisfy the University General Education Core Requirements. Two new courses will be needed: one on Construction Law and another on Construction Safety; the School of Law has agreed to cooperate on Construction Law and Construction Safety will be covered by internal and industry-based lecturers. All other courses required for the proposed program currently exist and are taught regularly.

*College of Engineering and University General Requirements*

The table below lists the course requirements for the College of Engineering that is common to all engineering majors. It totals 51 credit hours. For each course, it shows the number of credits and how the course satisfies the University General Education Core requirements (GEC). General Education Core requirements include

- 6 credits of Global and Multicultural Perspectives (FG);
- 3 credits of Quantitative Reasoning (FQ);
- 3 credits of Written Communication (FW);
- 6 credits from Arts (DA), Humanities (DH), and Literatures (DL);
- 6 credits from Social Sciences (DS); and
- 7 credits of Natural Science in Physical Science (DP) and Laboratory (DY).

| Courses | GEC | Credits |
|---|---|---|
| *Written Communication* | | |
| ENG 100 Composition I or approved FW course | FW | 3 |
| *Arts, Humanities and Literature* | | |
| COMG 251 Principles of Effective Public Speaking | DA | 3 |
| One 3-credit elective of DH or DL | DH or DL | 3 |
| *Social Sciences* | | |
| ECON 120 Introduction to Economics, ECON 130 Principles of Microeconomics, or ECON 131 Principles of Macroeconomics | DS | 3 |
| One 3-credit elective of DS | DS | 3 |
| *Global and Multicultural Perspectives* | | |
| Two approved 3-credit FG electives | FG | 6 |

| Symbolic | | |
|---|---|---|
| MATH 241 Calculus I | FQ | 4 |
| MATH 242 Calculus II | | 4 |
| MATH 243 Calculus III | | 3 |
| MATH 244 Calculus IV | | 3 |
| *Natural Sciences* | | |
| CHEM 161/161L, and 162 General Chemistry/Lab | DP/DY | 3/1/3 |
| PHYS 170/170L General Physics I/Lab (4/1) | DP/DY | 4/1 |
| PHYS 272/272L General Physics II/Lab (3/1) | DP/DY | 3/1 |
| *Total Credits* | | 51 |

In addition, a student must complete the Focus Graduation Requirements:

- One Hawaiian, Asian, and Pacific Issues (H) course.
- One Contemporary Ethical Issues (E) course
- One Oral Communication (O) course
- Five Writing Intensive (W) courses

The undergraduate curricula are designed to be completed in eight semesters. In response to this, the engineering degrees have been exempted from the Hawaiian or Second Language requirement of the UH. To receive a Bachelor of Science degree in engineering, a student must adhere to the following:

1. Complete the course work for one of the engineering curricula, which also satisfies all UH Manoa requirements;
2. Maintain a minimum GPA of 2.0 for all registered credit hours; and
3. Maintain a minimum GPA of 2.0 for all upper division courses (numbered 300-499) in mathematics, science, and engineering.

*Program Requirements*

Students in the Construction Engineering program must complete an additional 65 or 66 credit hours:

**Civil Engineering courses** (41/42 credits)

- Comp. Prog. Elective (EE 110,160 or ICS 111) (3 or 4)
- CEE 270 Applied Mechanics I (3)
- CEE 271 Applied Mechanics II (3)
- CEE 305 Applied Probability and Statistics (3)
- CEE 330 Environmental Engineering (4)
- CEE 355 Geotechnical Engineering I (4)
- CEE 361 Fundamentals of Transportation (3)
- CEE 370/370L Mechanics of Materials (3+1)
- CEE 375 Construction Materials (3)

- CEE 381 Structural Analysis (3)
- CEE 489 (B) Surveying and AutoCAD (2) & (C) Professional ethics (1)
- CEE 490 Senior Design Project (3)
- CEE Sustainability Elective (TES) (3)

**Construction Engineering courses** (~15 credits)

- ACC 202 Introduction to Management Accounting (3)
- CEE 472 Construction Project Management (3)
- CEE 476 Construction Planning and Scheduling (3)
- Construction Safety (up to 3 cr.)
- Construction Law (up to 3 cr.)

**Construction Engineering elective courses** (minimum of 9 credits)

- CEE 405 Engineering Economics (3)
- CEE 471 Construction Methods (3)
- CEE 473 Construction Equipment and Methods (3)
- CEE 474 Construction Estimating and Bidding (3)
- Appropriate graduate construction course (details below) (3)

### A.2 Admission Policies

There is no additional admission policy to the Construction Engineering program other than that of admission to the College of Engineering and the University of Hawaii at Manoa. Requirements for admission to UH Manoa are described in the UH Catalog. High school students applying to the College of Engineering should have completed high school course work including Mathematics up to at least trigonometry, with preference for pre-calculus or high school calculus, and one year of high school chemistry and physics with a special emphasis on grades in these courses (B or better preferred).  Students are encouraged to take Advanced Placement courses in these subject areas while in high school and to submit AP scores, but this is not required. The college also uses aptitude tests and high school records in its screening procedure.

Students of the UH system Community Colleges may apply to the College of Engineering for admission as transfer students. Transfer students must have completed ENG 100, MATH 241 and 242, PHYS 170/170L, and CHEM 161/161L and 162 or their equivalents and have a satisfactory GPA.

Students who have not met the admissions requirements directly into an engineering major can enroll as pre engineering (PREN) students. The College offers advising for PREN students, includes them on the email lists for announcements of college activities, and PREN students may register for lower division (100 and 200 level) engineering courses without special overrides provided they meet the prerequisites.

**B. Includes an academic map for certificate of achievement, associate and bachelor degrees that demonstrates on time completion.**

Proposed curriculum check sheet for the BS Construction Engineering degree

| Freshman Year | | | | |
|---|---|---|---|---|
| Fall | | | Spring | |
| ENG 100 | 3 | | MATH 242 | 4 |
| Math 241 | 4 | | PHYS 170/170L | 4 |
| CHEM 161/161L (DP,DY) | 4 | | CHEM 162 | 3 |
| DA, DB, DS, DH, FG, FG* | 3 | | EE 110,160 or ICS 111 | 3/4 |
| | 14 | | | 15/16 |
| Sophomore Year | | | | |
| MATH 243 | 3 | | MATH 244 | 3 |
| Phys 272/272L | 4 | | CEE 370/370L | 4 |
| COMG 251 | 3 | | ACC 202 | 3 |
| DA, DB, DS, DH, FG, FG* | 3 | | DA, DB, DS, DH, FG, FG* | 3 |
| CEE 270 | 3 | | CEE 271 | 3 |
| | 16 | | | 16 |
| Junior Year | | | | |
| CEE 305 | 3 | | CEE 355 | 3 |
| CEE 320 | 4 | | CEE 361 | 3 |
| CEE 375 | 3 | | CEE 381 | 3 |
| ECON 120,130,131 (DS) | 3 | | DA, DB, DS, DH, FG, FG* | 3 |
| Construction Safety | 3 | | Construction Law | 3 |
| | 16 | | | 15 |
| Senior Year | | | | |
| CEE 473 or 474 | 3 | | CEE 405 or 471 | 3 |
| CEE 472 | 3 | | CEE 476 | 3 |
| CEE 489B+C | 2+1 | | CEE 490 | 3 |
| DA, DB, DS, DH, FG, FG* | 3 | | DA, DB, DS, DH, FG, FG* | 3 |
| TES | 3 | | TE, CEE 47x or ** | 3 |
| | 15 | | | 15 |

(*) Must take one of each in order to graduate. No substitutions. **Total Credits: 122/3.**

(**) Any 600-level course in the construction area, presently CEE 601, CEE 602, CEE 604, CEE 606, CEE 614, CEE 620, and CEE 672.

The proposed curriculum above fulfills all UHM core requirements as follows.

**Foundation requirements:**

Written Communication (FW): 3 credits → ENG 100

Quantitative Reasoning (FQ): 3 credits → MATH 241

Global and Multicultural Perspectives (FG): 2 courses → FG, FG

**Diversification requirements:**

Arts, Humanities, and Literatures (DA, DH, DL): 6 credits → DA, DH

Natural Sciences (DB, DP, DY): 7 credits → DB, CHEM 161+161L

Social Sciences (DS): 6 credits → ECON, DS

In addition, the following DB courses are suggested as more appropriate for the proposed program:

- **OCN 101 Introduction to Environmental Science and Sustainability (3)** Introduction to principles of environmental science and sustainability as they apply to ecosystems. Sustainability will be introduced through active learning with an emphasis on sustaining resources and mitigating pollution to ecosystems. Repeatable one time. A-F only. **DB**
- **GEOG 309 Introduction to Biogeography (3)** Introduction to ecosystem concept; environmental adaptations for energy and nutrient transfer; characteristics, dynamics, productivity, and distribution of principal vegetation communities. Human dominance. Pre: sophomore standing or higher, or consent. **DB**
- **PEPS 210 Introduction to Environmental Science (3)** Analysis of our environment with emphasis on understanding relationships and interactions of physical, biological, technological, and political components using scientific methods of inquiry. Food supply and safety, water quality, pollution control, biodiversity, environmental policy. Open to nonmajors. (Cross-listed as NREM 210) **DB**
- **TPSS 156 Natural History and Conservation of Hawai'i Island (3)** The formation of the Hawaiian Islands, establishment of their native terrestrial and marine flora and fauna, and human impacts and conservation. A-F only. Co-requisite: 156L. (Summer only) **DB**
- **TPSS 200 Agriculture, Environment, and Society (3)** Relationship of plants, soils, and the environment, and how they relate to cultural practices and society in agroecosystems with an emphasis on Hawai'i as a model system. **DB**
- **BOT 110 Biodiversity: Evolution, Ecology, and Conservation (3)** Lecture exploring the range of Earth's diversity, the evolutionary processes that generate it, the ecological roles it plays, the consequences of its loss, and the processes by which it can be conserved. A-F only. (Fall only) **DB**

## C. Provides justification for a program that is more than 30 credits for a certificate of achievement or 60 credits for an associate degree or 120 credits for a bachelor's degree.

Because of the requirements of the engineering profession, specific training in certain areas of specialty is necessary for a BS degree in engineering, which increases the total, required credit hours. Currently, the minimum credit hours required are 124 for a BS degree in Civil

Engineering, 125 for a BS degree in Computer Engineering degree, 122 for a BS degree in Electrical Engineering degree, and 125 for a BS degree in Mechanical Engineering.

## D. Describes provisions for articulation with UH Community College degrees for bachelor's degrees.

As the demand for engineers in the State of Hawaii's workforce continues to increase, the University of Hawaii (UH) College of Engineering (CoE) has been looking at innovative academic pathways for students of all ages and educational backgrounds to obtain the necessary knowledge and course work to graduate with an accredited Bachelor of Science (BS) degree in engineering - Civil, Computer, Electrical, and Mechanical.

One such pathway (UHCC-UHM CoE MOU) is to assist students who choose the UH Community College (CC) pathways for various reasons, ranging from simple tuition finances to preparatory course work, to obtain their ultimate goal of a BS in Engineering.

As a student achieves the requirements for an Associate of Science in Natural Science (AS-NS) degree with a Pre-Engineering Concentration from the UH CC, it will provide a direct pathway to travel from the UH CC as a completing sophomore status to the UHM CoE as a continuing junior status. This, in essence, is a direct 4-year degree requirement for a BS in Engineering even though a student may begin at a UH CC.

Currently, the UHM CoE accepts 200+ transfer/AS-NS students on a yearly basis. A high percentage of these UH CC students complete their BS in Engineering requirements and become productive members of the State's engineering community.

## 3. Student Demand

### A. Describes the profile of students who will likely enroll in the program and includes a discussion on the likelihood of the program attracting new students to the campus or existing students.

It is envisioned that students who will enroll in the program will include existing engineering students and new students. According to sample data shown in the previous section and conversations with local practicing engineers who mentor high school students, there exist a fairly large number of students who are interested in pursuing construction related careers. With the proposed degree program in place, we will be able to attract the students who would otherwise go to the mainland to obtain a Construction Engineering degree.

### B. Provides evidence of student interest (i.e. needs assessment)

This has been addressed in detail in section 1.C.2. Student interest is strong and about one-half of recent Civil Engineering graduates pursue a career in construction in spite of the fact that they have had a limited exposure to construction engineering through the curriculum in civil engineering. The proposed program addresses this limitation of graduating underprepared construction engineers via the existing BSCE degree.

## C. Includes an estimate number of majors per year with an explanation on how this number was determined.

As shown in section 1.C.2 survey results, 33% of the students who responded support the establishment of the new program. The estimated number of enrollment in the four year program is about 100. The number is expected to grow as the program becomes more known and established. With existing resources, the program will easily accommodate 100 students from the exiting BSCE program and 50 new students.

| | Previous Year | Previous Year | Current Year | Projected Year 1 | Projected Year 2 | Projected Year 3 | Projected Year 4 |
|---|---|---|---|---|---|---|---|
| | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 |
| **ENROLLMENT** (Fall Headcount) | | | | | | | |
| BS in Construction Engineering | | | n/a | 20 | 50 | 75 | 100 |
| All Engineering Undergraduate | 306 | 310 | 310 | 290 * | 294 | 299 | 300 |
| All Engineering Graduate | 60 | 55 | 58 | 60 | 60 | 60 | 60 |
| **COMPLETION** (Annual) | | | | | | | |
| BS in Construction Engineering | | | n/a | n/a | 5 | 15 | 20 |
| Engineering Undergraduates | 84 | 104 | 110 | 110 | 100 | 100 | 105 |
| Engineering Graduate | 14 | 13 | 15 | 15 | 15 | 15 | 15 |

* We anticipate that some Civil Engineering majors will change to Construction Engineering.

### 4. Program Resources and Efficiency

#### A. Describe resources required for program implementation and first cycle operation

1) **Number, source, and cost of faculty; library requirements; support personnel; estimated cost of supplies, equipment and CIP; facilities to be utilized.**

A number of existing faculty are already active in the areas of the program (e.g., Akiona, Shen and Singh already teach most of the construction courses listed for the proposed degree.) No special library requirements are anticipated. Existing College staff will provide support for the program. Existing classrooms, lab resources, and offices are currently in place that will also be utilized by the program. This new program will increase the efficiency of existing resources and generate additional tuition revenue, especially as it attracts students that would otherwise choose a mainland university.

| CURRENT RESOURCES/FUNDING | Current Year |
|---|---|
| Tuition/Special Fund Allocation | $129,044 |
| General Fund Allocation | $2,058,549 |
| Summer Session Allocation | $73,000 |
| Program/Course Fee Allocation | $228,037 |

| CURRENT ACADEMIC PERSONNEL | Current Year |
|---|---|
| Current Faculty FTE | 15.75 |
| Current Faculty Salaries ($) | $1,783,805 |
| Current Lecturers ($) | $19,000 |
| Current Graduate TAs | 7 |

| | Current Year | Projected Years | | | |
|---|---|---|---|---|---|
| | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 |
| **PROJECTED ACADEMIC PERSONNEL** (I-Faculty) | | | | | |
| Projected New Faculty FTE | 1 | 0 | 1 | 0 | 0 |
| Projected New Faculty Salaries ($) | $90,000 | 0 | $95,000 | 0 | 0 |
| Projected New Lecturers ($) | 0 | 0 | $12,000[1] | $12,000 | $12,000 |
| Projected New Graduate TAs | 0 | 0 | 0 | 0 | 0 |

1. Two lecturers, each teaching one course.

| | Current Year | Projected Years | | | |
|---|---|---|---|---|---|
| | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 |
| **G. TOTAL NEW PROGRAM RESOURCES** (e.g., new positions, lecturers, equipment or software for labs, accreditation fees, insurance, compliance costs, reporting, vendor contracts, etc.) | | | | | |
| Additional lecturer from 2020-21[1] | | | 2 | 2 | 2 |
| Accreditation application | | | | $6,000 | $800 |
| | | | | | |
| **Total New Resources Needed** | | | $107,000 | $18,000 | $12,800 |

1. Two lecturers, each teaching one course. Ongoing

## B. Describe the expected sources of funds, including sources of reallocated funds.

The proposed program uses existing resources. Additional funding can be covered under currently approved funding, except for the new faculty position in 2020-21.

## C. Compare anticipated cost per SSH, cost per major, SSH/faculty, average class size or other quantitative measure with other programs in the college and similar programs on other UH campuses.

New courses in Construction Safety and Construction Law will be developed. We anticipate hiring two lecturers from 2020-2021 to teach one course per year each to teach these courses. We have invested in the hiring of a new faculty member who will teach in the program (2018-2019),. Existing resources are sufficient to support program costs. However, should the program grow as anticipated, we may request to hire a new faculty in 2020-2021 (or later); this is indicated in the table. It should be noted that there is a lot of synergy between the Civil Engineering program and the Construction Engineering program, and all students take courses from both programs. Therefore, a hire in one program also supports the other program.

| | Previous Year | Previous Year | Current Year | Projecte d Year 1 | Projecte d Year 2 | Projecte d Year 3 | Projected Year 4 |
|---|---|---|---|---|---|---|---|
| | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 |
| COURSES, SECTIONS, SSH (Annual) | | | | | | | |
| Projected New Courses | | | 0 | 1 | 2 | 2 | 2 |
| Projected New Sections | | | 0 | 1 | 2 | 2 | 2 |
| Projected New SSH | | | 0 | 100 | 110 | 121 | 133 |
| Current Courses Offered[1] | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| Current Sections Offered[2] | 60 | 60 | 60 | 60 | 60 | 60 | 60 |
| Current Annual SSH[3] | 7,667 | 7,667 | 7,667 | 7,667 | 7,922 | 8,203 | 8,513 |

1) Approximate count depending on electives and cross-listed courses offered.
2) Most course do not have sections; we have sections for labs; all labs are W limited to 20 students
3) Manoa Institutional Research Office reports average SSH for Civil Engineering graduates = 115 (includes non-Civil Engineering courses). Years to graduation = 4.5. Assumed Civil Engineering majors = 300

D. **List similar programs at other UH campuses and describe how the proposed program differs or is similar to these programs. Provide rationale for the new program if there are similar existing program(s).**

There is no other ABET-accredited engineering program that is similar at any UH campus.

## 5. Program effectiveness

### A. Describe the plan for assessing the quality of student learning.

The Construction Engineering program will be evaluated using the assessments used by the Department of Civil and Environmental Engineering with minor modifications for the Construction Engineering program. The Departments have the following assessments:

Course assessments: Every semester, the Department administers a student survey of all courses to determine the effectiveness of the course and its instructor. Course content is also periodically reviewed and assessments are made as part of the ABET accreditation requirements.

The CEE Department already has an Industrial Advisory Committee made up of representatives from industry including the construction industry. They provide feedback from employers of our graduates about the undergraduate program. The board meetings are held twice annually and cover an overview of the program including laboratory tours, and meetings with students.

Senior Project Report Assessments: The Construction Engineering program will require a 3 credit senior project course which is the capstone design course. The quality of a sample of projects is assessed every spring semester by a panel of reviewers from the industry.

The CEE department plans to survey both civil engineering and construction engineering graduates to determine where they get their initial employment after graduation.

**B. Identify relevant program accreditation and plans to meet accreditation requirements.**

College of Engineering will apply for the Construction Engineering program to be accredited by ABET, which is the national accreditation organization for engineering programs. Demonstrating effective assessment of student performance and a process for continuous improvement is a major part of achieving accreditation. The estimated earliest date for ABET accreditation is in year 2022.

## 6. Conclusion

In summary there is strong evidence of the need of an ABET-accredited, construction engineering degree program at University of Hawaii at Manoa. The new degree will not only provide additional educational opportunities to the students in Hawaii, but it may also attract more students nationally and internationally. The new program will provide engineers with necessary technical skillsets for the booming construction industry in Hawaii and the nation, given the overall poor-to-mediocre state of public infrastructure and the need for more development and construction due to continuous population growth. Current resources are sufficient to ensure the successful launch of this program as well as secure its accreditation by ABET like all the existing engineering degrees offered at UHM.

# UNIVERSITY of HAWAI'I
## MĀNOA

UNIVERSITY OF HAWAI'I
BOARD OF REGENTS

19 MAR -7 A9:34

**MEMORANDUM**    RECEIVED    March 4, 2019
RECEIVED

'19 MAR -5 P1:01

UNIVERSITY OF HAWAII
PRESIDENT'S OFFICE

TO:        Lee Putnam, Chair
           Board of Regents

VIA:       David Lassner
           President

VIA:       Donald Straney
           Vice President for Academic Policy and Planning

VIA:       David Lassner
           Interim Chancellor

FROM:      Michael Bruno
           Interim Vice Chancellor for Academic Affairs
           and Vice Chancellor for Research

SUBJECT:   APPROVAL OF A NEW PROVISIONAL MASTER OF ASIAN
           INTERNATIONAL AFFAIRS AT THE UNIVERSITY OF HAWAI'I
           AT MĀNOA

SPECIFIC ACTION REQUESTED:
It is respectfully requested that the Board of Regents approve as provisional the Master
of Asian International Affairs in the School of Pacific and Asian Studies at the University
of Hawai'i at Mānoa.

RECOMMENDED EFFECTIVE DATE:
Fall 2019

ADDITIONAL COST:
Near-term additional costs are limited to an annual recruiting budget of $2,500, which
will be covered by revenue from Asian Studies summer courses. The proposed
program will require the redistribution of teaching duties and schedules among current
faculty, and leverages the expertise of our most recent hire (whose specialty is
international relations in East Asia). Existing capacity in Asian Studies graduate
courses will make it possible to accommodate up to 20 new students with no additional
hire. If enrollments exceed expectations, additional lecturers may need to be hired, but
the cost would be covered by tuition.

PURPOSE:

The proposed Master of Asian International Affairs (MAIA) is a professional degree designed to meet demonstrated workforce needs in the military, government service, education and tourism (in Hawaiʻi and beyond) for professionals who have a solid understanding of Asian geopolitics and the multifaceted (cultural, historical, political and social) determinants and impacts of Asian nations' engagements with their neighbors and the world.

Geared toward students with at least two years of professional experience in fields where prospects for advancement would be enhanced by an understanding of Asia, the MAIA will be structured to accommodate the work schedules of these students: all courses will be offered in the evenings, on weekends, or online. Drawing on the international name recognition and established strengths of School of Pacific and Asian Studies (SPAS) and the Asian Studies Program, the MAIA will bring together Asia specialists from around the UH-Mānoa campus and across Honolulu to create an innovative multidisciplinary program of study. The 30-credit program will include a series of courses on area studies, applied theory, and a capstone experience that asks students to apply their newly acquired knowledge to a project in their own field or to a collaboration with experienced professionals working on real-world problems. In this way, the program will position its graduates, and the organizations they represent, to work productively across cultural boundaries on questions of local, national and global importance, and to make well-informed decisions in an environment in which Asia is increasingly central.

The MAIA program aligns with the System-Wide Guiding Principles and Priorities, one of which is to "increase and diversify enrollment." It also aligns with the UH System's Integrated Academic and Facilities Plan, which prioritizes establishing "new professional master's programs for non-traditional students [that] can serve community needs while generating revenue and building important new relationships" (p. 6).

Furthermore, it is already serving as an opportunity for the Asian Studies Program at UH-Mānoa to explore new forms of collaboration with other Asia-focused institutions in Hawaiʻi, including the Daniel K. Inouye Asia-Pacific Center for Security Studies, the East-West Center, and the Pacific Forum. These institutions could provide students with a level of access to policy-makers, diplomats, and academics and professionals in the field of non-traditional security studies that is perhaps unparalleled outside of Washington D.C. In this way, the MAIA program will leverage the unique resources that Hawaiʻi has to offer to create an educational experience that will benefit working professionals from Hawaiʻi and beyond.

BACKGROUND:
Although the idea of a degree in Asian International Affairs bears some similarity to other degree programs in Hawai'i and nationwide, the MAIA program will be unique in its approach and configuration. Conceptualized as a hybrid between traditional area studies and traditional international relations approaches, and structured as a professional degree program designed to meet the needs of mid-career professionals, it will be distinct from both international relations programs at other universities, and from the existing Asian Studies MA program at UH Mānoa. It has strong potential to draw a new student clientele to Hawai'i, leveraging our unique location and resources and well-established international reputation for expertise on Asia.

The University of Hawai'i does not currently offer any degree programs in international affairs. There are universities on the US mainland (including the Jackson School of International Studies at the University of Washington and the School of Global Policy and Strategy at UC San Diego) that offer International Relations (IR) programs in which students can focus on Asia. The MAIA Program will be distinct from these and other top-ranked International Relations programs in two key ways.

First, it will ground the study of international affairs in a robust understanding of the cultures and societies of Asia. Asian actors' perceptions of what constitutes, for example, "sovereignty," "cooperation," or "security" often differ in fact from their North American counterparts, and understanding this difference in perception is as important as understanding standard international relations theory.

And second, while several IR programs at universities throughout North America require students to specialize in East Asia or South Asia or Southeast Asia, a more holistic approach is better suited to the realities of the international situation in the 21st century. The rise of China as an international actor in Asia, the proliferation of cooperative agreements among Asian nations, and the transnational movements of millions of people within Asia, for example, all call for a comprehensive understanding of the interactions among nations and institutions throughout the region. For this reason, the program will require students to take courses about the Asia region as a whole, not only their particular region or country of interest.

The only other degree similar to the MAIA offered in the UH System is the Master of Arts in Asian Studies (MAAS) that is already offered by the Asian Studies Program in SPAS. The MAIA will differ from the MAAS in three important ways:

- First, the MAAS does not focus on international affairs; it is a broadly interdisciplinary program in which students can study anything from ancient history to contemporary pop culture.

- Second, the MAAS is an academic degree that prepares students who already have some background in Asian Studies for careers in academia, in jobs that require command of an Asian language, or in Asia. By contrast, the MAIA would prepare students with little or no background in Asian Studies to excel in careers where a deep understanding of the Asian context is important but is not the main focus of their work.

- Third, recognizing the distinct needs of working professionals, the MAIA degree program will not require Asian language study (since most of the target population has neither the time to devote to language acquisition nor the professional need for it), and will offer all its courses in evenings, on weekends, or online.

For these reasons, the MAIA program will attract a different kind of student than the MAAS program, so we do not expect that the new program will pull enrollment from the existing program.

The UH-Mānoa Asian Studies Program is uniquely qualified to administer such a program. It is internationally recognized as one of the top programs of its kind, and several senior faculty members are internationally recognized as leading experts in their field. Nine of the ten faculty whose tenure home is in the Asian Studies Program currently offer, or plan to offer, interdisciplinary courses that will be required by or relevant to the MAIA program. Due to its close ties with the Asian area centers in the School of Pacific and Asian Studies, Asian Studies can also draw on over 100 cooperating graduate faculty across the Mānoa campus who teach about Asia, thus providing an unparalleled depth of knowledge about the region.

We have already received enthusiastic expressions of interest in this program from members of the US military stationed in Hawai'i, from secondary school teachers interested in introducing more Asian current affairs into their classes, and from employees of non-profit orgnaizations working with Asian partners or on issues that involve Asia. We envision the program being of intereste to advocacy groups, law firms, financial institutions and other private sector companies working with clients from Asia, and to branches of the Hawai'i state government that engage with Asia through tourism, investment, or immigration.

Finally, although at present Asian Studies does not have the capacity to offer this degree fully online, once it is up and running, we will consider doing so in future. Offering the MAIA degree online would make it an attractive option for professionals in the military, education, business and other fields who are stationed throughout Asia and the Pacific, as well as on the US mainland. In this regard, we believe the program has immense potential for growth.

ACTION RECOMMENDED:
It is recommended that the Board of Regents approve as provisional the Master of
Asian International Affairs in the School of Pacific and Asian Studies at the University of
Hawaiʻi at Mānoa.

Attachment: Proposal for Master of International Asian Affairs

cc:    Executive Administrator and Secretary of the Board Oishi
       Assistant Vice Chancellor and Dean Sutton

Proposal for a New Degree Program in the

School of Pacific and Asian Studies:

Master's in Asian International Affairs (MAIA)

Asian Studies Program
School of Pacific and Asian Studies

Prepared by:

Cathryn Clayton, Associate Professor and Chair, Asian Studies
Young-A Park, Associate Professor and Graduate Chair, Asian Studies
Kristi Govella, Assistant Professor, Asian Studies
Anna Stirr, Associate Professor, Asian Studies
Lonny Carlile, Associate Professor, Asian Studies

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**Executive Summary**

The Asian Studies Program in the School of Pacific and Asian Studies seeks approval for a proposed new graduate degree program: the Master's in Asian International Affairs (MAIA). This degree is designed for working professionals who do not have academic background in the study of Asia but whose careers would be enhanced by a deeper understanding of contemporary Asian geopolitics. The target audience for this program are early-to-mid-career managers, policy-makers, educators, and advisers in government, international businesses, and non-governmental organizations, in Hawai'i and beyond, who need or wish to engage with the Asian region. The program will enable them to address issues of global and regional significance—such as security, trade, human rights, and regional cooperation—through a deeper understanding of the domestic and regional factors that shape the actions of stakeholders from the Asian region. This will better position our graduates, and the organizations they represent, to work productively across cultural boundaries on questions of national and global importance, and to make well-informed decisions in a global environment in which Asia is increasingly central.

Asia looms large in global affairs. It is home to almost 60% of the world's population, accounts for over a third of global GDP, and boasts some of the most dynamic economies in the world. Asia leads the world in the pace of urbanization and poverty alleviation, but remains home to two-thirds of the world's poor. Its middle class is expected to grow from 50 million to 3 billion by the year 2030, creating not just new consumer demand, but also new political demands and unprecedented challenges for the natural and human resources of the world. At the same time, Asia remains haunted by histories of war, famine, genocide, colonization, revolution, cultural degradation, and the long-term effects of some of the largest experiments in political, economic and social engineering ever attempted. Contemporary points of conflict have long and complex histories, and regional cooperative frameworks are overlaid with economic competition and rival sovereign claims whose roots are as much cultural and historical as they are geopolitical. Meanwhile, China's rise is fundamentally reshaping regional politics and economies in ways that will have long-lasting effects around the world.

In short, the twenty-first century is no longer an age in which the developed counties of North America and Europe write the rulebook for the rest of the world to follow. Governments, companies, non-profits and other organizations seeking to engage with Asia need professionals who have a deep and dynamic understanding of the complex factors that shape Asian actors' engagements with the world, be it in the realm of diplomacy, advocacy, public policy, international trade, or military cooperation. Appreciating why and how Asian perspectives on these issues may differ both from American perspectives and from each other is a crucial part of this understanding.

Drawing on the international name recognition and established strengths of School of Pacific and Asian Studies (SPAS) and the Asian Studies Program, the MAIA would bring together Asia specialists from around the UH-Mānoa campus and across Honolulu to create an innovative multidisciplinary program of study. The 30-credit program would include a series of courses on area studies, grounded/applied theory, and a capstone experience that calls students to apply their

newly acquired knowledge to a project in their own field or to a collaboration with experienced professionals working on real-world problems.

Unlike the MA in Asian Studies (MAAS), the MAIA will not prepare students to pursue a PhD or an academic career, nor for careers in diplomacy or intelligence that require knowledge of an Asian language. Rather, it is designed to prepare generalists who will have the necessary knowledge to deal sensitively with complex international and domestic issues in the Asia region in their respective professions.

The MAIA program is designed to highlight the existing strengths of the UH-Mānoa faculty. The Asian Studies Program has fifteen faculty members who teach interdisciplinary courses on Asia, and 75 Cooperating Graduate Faculty who teach and research on Asian issues in units across campus. In addition, more than 200 faculty affiliated with the seven Asian area centers in SPAS provide an unusually deep and varied set of courses about Asian international affairs. For this reason, the proposed MAIA program can be initiated with existing resources.

This program will support the University's strategic goals of promoting "understanding of cultural expression in Hawai'i and the Asia-Pacific;" and contributing to workforce development by "expand[ing] professional programs and provide students with more opportunities for developing 21st century skills." It will align with the System-Wide Guiding Principles and Priorities, one of which is to "increase and diversify enrollment." It will contribute to the Integrated Academic and Facilities Plan, which calls for "new professional master's programs for non-traditional students [that] can serve community needs while generating revenue and building important new relationships." It will support the Strategic Plan for Recruitment, which suggests that active duty military and veteran enrollment, as well as local student enrollment and local engagement, are priorities over the next six years. And finally, it will embody the core values of UH-Mānoa: academic rigor and excellence; integrity and service; and aloha and respect.

## I.  Program Purpose and Outcomes

The Master's in Asian International Affairs is designed for mid-career professionals, individuals wishing to switch careers, or post-graduates with a well-defined professional direction who may not have an academic background in Asian Studies but whose career requires them to engage with Asia or Asian issues. The program will provide a rigorous course of advanced study of the geopolitical, economic, regional relationships of contemporary Asian nations that is grounded in an understanding of Asian cultures and perspectives. The broader objective is to meet the demonstrated workforce needs—in the military, government service, education and business—for professionals with a solid understanding of the multifaceted (cultural, historical, political and social) determinants and impacts of Asian nations' engagements with their neighbors and the world.

This innovative new program represents a hybrid between traditional area studies and traditional international relations approaches. It would meet the concrete professional development needs of a broad spectrum of government and private sector employees in Hawai'i and beyond. It would draw on the phenomenal collection of resources and perspectives that are the result of Hawai'i's history as a crossroads between Asia, the Pacific Islands, and North America. In so doing, it would educate future local, state, and national leaders who are well-positioned to engage in a sensitive, sensible, and thus more successful manner with a variety of actors and partners in the Asian region.

The MAIA program takes as its point of departure three key principles. First is that success in international affairs does not result from the mere application of broad theories to particular problems. For example, Asian actors' perceptions of what constitutes "sovereignty," "cooperation," "security," or "rights" often differ from those of their North American counterparts, and understanding the nature of and reasons for this difference in perception is at least as important as understanding the theories themselves. In this sense, the program in Asian International Affairs takes as its first priority providing students with a robust understanding of and respect for the cultures and societies of Asia, and how cultural, historical and social factors impact diplomacy, trade and security decisions.

Second, while many International Relations programs at universities throughout North America offer regional specializations in East Asia or South Asia or Southeast Asia, a holistic, cross-regional approach is better suited to the realities of the international situation in the 21st century. The rise of China as an international actor in Asia, the proliferation of regional cooperative agreements among Asian nations, and the transnational movements of millions of people within Asia, for example, all call for a comprehensive understanding of the interactions among nations and institutions throughout the region. For this reason, the program would require students to take courses about the Asia region as a whole, not only their particular region or country of interest.

Third, as international affairs in the 21st century are fundamentally concerned with questions of war, peace, law, economic distribution, and human rights, practitioners must be able and willing to reflect on the ethical consequences of different positions and paths of engagement. Ethical reasoning and critical reflection skills will form the bedrock of core courses in the program.

The following **program objectives** are based on these principles:

1) to produce professionals in Asian International Affairs who have an advanced understanding of Asian geopolitics, cultures and international relations, and who can apply that knowledge in the creation and evaluation of policy in government, education, business and non-profit work;

2) to provide the opportunity for advanced training to members of the Hawai'i workforce in areas of Asian international affairs that are important to the future of the state;

3) to enhance the national and international standing of the University of Hawai'i at Mānoa in the fields of International Affairs and Asian Studies, and strengthen partnerships with the business community and government stakeholders in Hawai'i, the US mainland, and the Asia-Pacific region;

4) to aid in educating future leaders and policymakers, enabling them to make decisions and draft policies that will contribute to the well-being of the Asia-Pacific region of which Hawai'i is an integral part.

Four **student learning objectives** (SLOs) follow from both the principles and program objectives. Graduates of the MAIA program will be able to

1) demonstrate an advanced understanding of key sources and modes of conflict and cooperation in contemporary Asia;

2) demonstrate advanced understanding of diverse Asian perspectives on issues of regional and global significance;

3) accurately interpret and critically assess research on Asian international affairs, and express their analyses concisely;

4) reflect critically on the ethical consequences of different paths of international engagement in the Asia-Pacific.

These program SLO's map closely onto five of the seven recently approved **Advanced Degree Institutional Learning Objectives** (ILOs) for UH-Mānoa. MAIA graduates will be able to:

-Demonstrate comprehensive knowledge in the field of Asian International Affairs.

-Critically analyze, synthesize, and utilize information and data related to this field.

-Proficiently communicate and disseminate information in a manner relevant to the field and intended audience.

-Conduct projects as a responsible and ethical professional, including consideration of and respect for other cultural perspectives.

-Interact professionally with others.

In short, the MAIA will prepare students to address complex diplomatic, economic, security and cultural issues within the Asian region as they encounter them in the course of their work.

**Program Fit**

**A) Mission Alignment**

The MAIA program aligns with and contributes to the UH mission and strategic plans in five key ways:

a. It aligns with the System-Wide Guiding Principles and Priorities, one of which is to "increase and diversify enrollment."

b. It aligns with and strengthens the Strategic Plan's Vision and Values, which states that UH-Mānoa provides "a world-class education and performing scholarly work and service in areas of critical importance to our state, the nation, and the entire Asia/Pacific region." (Overview of Strategic Vision and Values," p.2). This program will provide a world-class education to professionals in Hawai'i, the nation, and the Asia-Pacific region by drawing on faculty expertise and institutional resources at UH-Mānoa and in Honolulu that have been built up over decades and make our school unique in the state and the nation.

c. It aligns with and contributes to achieving the UH System's Integrated Academic and Facilities Plan, which emphasizes the potential for Mānoa to establish "new professional master's programs for non-traditional students [that] can serve community needs while generating revenue and building important new relationships." (Integrated Academic and Facilities Plan, p. 6).

d. It aligns with the UH-Mānoa Strategic Plan for Recruitment, which suggests that active duty military and veteran enrollment is a priority over the next six years.

e. Finally, it embodies the core values of UH-Mānoa: academic rigor and excellence (expected of faculty in teaching and students in coursework); integrity and service (concepts that form the foundation of our approach to International Affairs); and aloha and respect (a core expectation of all cross-cultural study and interaction).

**B) Continued Need, Workforce Demand, and Career Opportunities**

The most evident need for the MAIA program in terms of workforce needs in the state of Hawai'i comes from the defense industry. This industry is one of the largest employers in the state of Hawai'i and is of vital importance to the nation and to the stability of the Asia-Pacific region. Since 2012, successive US administrations have made the "Indo-Pacific" region (which stretches from India to the Pacific coast of the Americas) a vital focus for diplomacy and military engagement and cooperation. As a result, all branches of the US military have identified the need to develop a deeper understanding of Asian cultures, societies and politics—not to fight and win wars, but to engage in and encourage the kinds of cooperation that will make the region more stable and secure, and to help build lasting peace in the region. In particular, the US Indo-Pacific Command (INDOPACOM) has expressed interest in seeing UH develop an 18-month Master's program focusing on Asian security studies.

A second target audience is comprised of educators at the secondary level who wish to enhance their students' understanding of Asia and Asia's role in a range of global issues

that will impact their lives, from climate change and transnational migration to poverty eradication and sustainable futures. The Pacific and Asian Affairs Council (PAAC) is a local nonprofit that works with high school teachers and students throughout the state to increase awareness of foreign affairs issues with special attention to Hawai'i's role in the Asia-Pacific region. PAAC has already helped us to reach out to local educators who could benefit from the MAIA, and we plan to partner with them further to engage this important community.

As evidenced from the experience of comparable programs at our peer and benchmark institutions, there is also a market for this kind of program among professionals in diplomacy, public policy, disaster recovery, humanitarian aid, environmental sustainability and cooperation, as well as advocacy on issues such as human trafficking, compelled labor, food and water security, gender equity, and child welfare, among others.

Graduates will have come into the program with at least two years of work experience beyond entry level in fields where prospects for advancement would be enhanced by an understanding of Asia. Organizations that may have an interest in sending their employees to the proposed program, or hiring graduates of the program, include:

- The US government and government contractors needing employees with Asia expertise: the US Military, the US Departments of State, Intelligence Community, Defense, Commerce, Education, Homeland Security, and Justice; and consultants/contractors such as Booz Allen Hamilton.
- Public and private schools (K-12) that wish to enhance their students' understanding of Asia and Asian involvement in a range of global issues.
- Think-tanks, non-profits, and advocacy groups working with Asian partners or on issues that involve Asia.
- Branches of the State of Hawai'i government that engage with Asia through tourism, investment, and immigration.
- Law firms, financial institutions, and other private companies working with clients from Asia who need employees with a solid understanding of the political, economic, social and legal contexts in their clients' home countries.

## C) Matching UH-Mānoa's unique resources with national and international needs.

The Asian Studies Program in the School of Pacific and Asian Studies (SPAS) at the University of Hawai'i at Mānoa is positioned better than any other department or institution in the state—and better than most universities in the nation—to meet the needs outlined above. Asian Studies' close ties with the area centers in SPAS means that it is uniquely situated to be able to draw together an unparalleled number of Asia-focused faculty from across the Mānoa campus. SPAS' name recognition in the community means that it has the ability to draw together Asia experts in other institutions in Honolulu, such as the East-West Center, the Daniel K. Inouye Asia-Pacific Center for Security Studies, Pacific Forum, and the Pacific and Asian Affairs Council.

The MAIA program would be housed in Asian Studies, and students would be able to complete the program entirely "in-house" by taking graduate-level and upper-division undergraduate course offerings with the ASAN designation that would be offered in the evenings, on weekends, or online. Nine of the ten faculty whose tenure home is in the Asian Studies Program currently offer, or plan to offer, interdisciplinary courses that would be required by or relevant to the MAIA program. This includes Dr. Kristi Govella, whose graduate training was in the field of International Relations in Asia and previously worked for the US Department of Defense; Dr. Patricio Abinales, who regularly travels to Washington D.C. to brief State Department officials on Philippine politics; Dr. Lonny Carlile, who teaches a graduate seminar on Asian Security Cultures, and others who teach courses on Ethnic Nationalism in Asia, Muslim Societies in Asia, and China's Foreign Relations. Existing and proposed Asian Studies courses relevant to or required by the new degree program are listed in Appendix II.

In addition, we will actively encourage MAIA students to take courses in other departments. The off-hours scheduling demands of the professional master's program make it difficult for us to coordinate with other departments to confirm course offerings now, but all of the following departments have agreed to allow their faculty to teach in the evenings or online should there be sufficient demand. They have also expressed enthusiasm for an advanced degree program focused specifically on Asian security issues broadly defined, as it has the potential to bring more students, and new kinds of students, into their courses. The following is a non-exhaustive sampling of the departments whose courses would be eligible to count toward the MAIA degree:

a. The Political Science Department has eight faculty members whose area of specialization is International Relations and/or the Asia-Pacific. They offer courses at the graduate and advanced undergraduate level on international relations theory, Asian politics, or both. We have discussed the possibility of including these courses as electives in the MAIA program with the Chair and Graduate Chair in Political Science, and they have responded with enthusiasm, pending scheduling issues.

b. The Richardson School of Law has ten faculty members with Asia-Pacific expertise (most of whom are members of the SPAS area centers). Several of the courses offered through their International Law and Pacific-Asia Legal Studies certificate programs would be of interest to MAIA students. We have discussed with the Dean and Registrar of the Law School the feasibility of including these courses as MAIA electives and they have agreed to allow Law faculty to accept MAIA students in their courses in small numbers. In future, a tuition-sharing agreement may be negotiated if the volume of enrollments justifies it.

c. The Matsunaga Institute for Peace and Conflict Resolution regularly offers courses on the theory of conflict, the practice of mediation, and international perspectives on human rights and conflict resolution that could benefit MAIA students. We have approached the Institute and they are eager to enhance cooperation with Asian Studies through the MAIA program. Most of the Matsunaga Institute's courses are already offered online or in evenings/weekends.

d.  The Department of Urban and Regional Planning offers several courses on planning, emergency services and disaster relief in Asia. They have indicated that MAIA students would be welcome in these classes, several of which are already offered in the evenings.

e.  The Anthropology Department offers courses that examine several relevant issues – politics, health, development, tourism—in cross-cultural contexts. The Department Chair and Graduate Chair have indicated that in principle, MAIA students would be welcome in several of these courses, pending scheduling issues and individual faculty approval.

In short, the career-driven, area-focused MAIA will complement existing programs and has the potential to draw together faculty and students across college lines, benefitting not just Asian Studies, but the entire campus. A non-exhaustive list of the courses currently offered in other departments that would be accepted for credit in the MAIA program is included in Appendix III.

We also see this as an opportunity to explore new forms of collaboration with other Asia-focused institutions unique to the state of Hawai'i: namely, the East-West Center, the Daniel K. Inouye Asia-Pacific Center for Security Studies, and Pacific Forum. These three institutions could provide students with a level of access to policy-makers, diplomats, and academics and professionals in the field of non-traditional security studies that is perhaps unparalleled outside of Washington DC.

## II. Program Organization

### A. Admission Requirements

In addition to the requirements for admission to UHM Graduate Programs, admission to the MAIA program will require two years of work experience beyond the entry level in fields in which knowledge of Asia would be advantageous (as detailed above on p. 7). Required application materials include:

-a statement of purpose;
-resume or curriculum vita;
-academic transcripts;
-short essay demonstrating the applicant's ability to think and write analytically;
-at least two academic or professional letters of recommendation;
-TOEFL or IELTS score for non-native speakers who do not have degrees from English-language schools. Recommended scores: TOEFL = 100; IELTS = 7.5.

### B. Degree requirements (in addition to Graduate Division requirements)

The degree program requires students to take a total of 30 credits, of which:

-at least 18 must be at the 600 level or higher;

-not more than 14 credits may be taken online;

-at least 15 credits must be ASAN courses. These must include:

1. CORE THEMATIC REQUIREMENTS (6cr): At least <u>two</u> of the following four graduate seminars:

    a. ASAN 626 <u>Capitalism in Contemporary Asia</u> (3 cr)
    b. ASAN 629 <u>Asian Security Cultures</u> (3 cr)
    c. ASAN 687 <u>Conflict and Cooperation in Asia</u> (3 cr) (to be created)
    d. ASAN 689 <u>International Relations of Asia</u> (3 cr) (to be created)

2. CORE AREA REQUIREMENTS (6cr): At least <u>two</u> of the following three courses:

    a. ASAN 630 <u>Southeast Asia Now</u>: an overview of the region including Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor-Leste, Vietnam. (3 cr)
    b. ASAN 651 <u>East Asia Now</u>: an overview of the region including China (including Taiwan, Hong Kong and Macau), Japan, and Korea. (3 cr)
    c. ASAN 654 <u>South Asia Now</u>: an overview the region including India, Pakistan, Bangladesh, Nepal, Afghanistan, Bhutan, Tibet, Sri Lanka, and the Maldive Islands. (3 cr)

3. CAPSTONE (3cr):

    ASAN 710, MAIA Capstone (3 cr)

The remaining 15 credits of electives must be Asia-related (defined as having at least 25% course content dealing with Asia) unless they provide important theoretical or methodological training, in which case the student may petition to count up to 6 credits of non-Asia related courses. The Graduate Chair, in consultation with the MAIA Steering Committee, would decide on the appropriateness of the courses being petitioned.

## Program Highlights

**Flexibility and Interdisciplinarity.** Half of the 30 credits are fulfilled through core requirements, and half through electives. The core required courses introduce students to Asian issues and perspectives from an irreducibly interdisciplinary approach that combines history, political economy, anthropology, law, and religion, thus broadening their understanding of the cultural and historical contexts for the specific issue or region at hand. The electives allow students to combine this broad interdisciplinary knowledge with a more thorough understanding of particular issues or cases (such as water security in China, for example) that are important to their career field.

**Course Format.** All courses will be scheduled at times or in formats that will facilitate attendance by nontraditional students: for example, in the evenings or on weekends, offered as intensive short courses (during summers or semesters), online, or in a hybrid format (a short period of intensive face-to-face meetings, followed by independent work and, ideally, face-to-face assessments at the end of the course). The MAIA program administrator will work with instructors to decide on the method of delivery that best suits the instructor's strengths and the students' needs. As needed, we would provide face-to-face sections for online courses so that international students and others who cannot take online courses (including those who have already taken 14 credits of online courses) can fulfill their requirements.

**Capstone Experience.** The MAIA program will offer a capstone course that allows students to gain course credit for work on a real-world problem or issue. ASAN 710 would allow students two options, both under the supervision of a faculty member.

    Option 1 would allow students to work with a UH faculty member to apply the knowledge they have learned to a project relevant to their workplace or career goals (such as writing a policy brief, a syllabus/lesson plan, or a project development plan). This option would provide students and their employers with concrete career benefits while allowing students to gain experience applying their Asia knowledge to problems specific to their career field. The students would present their final product publicly as the culmination of the capstone experience.

    Option 2 would assign individuals or small teams of students to collaborate, under the supervision of a UH-Mānoa faculty member, with members of the security, diplomacy, advocacy or industrial sectors in Hawai'i as they work to address a carefully defined real-world problem, or one aspect of a problem, specific to their field. Initially, we would partner with the Daniel K. Inouye Asia-Pacific Center for Security Studies in developing this option. Each year, DKI-APCSS brings in hundreds of "fellows," mid-career professionals from the government, military, and non-profit fields from 44 countries across the Indo-Pacific region, for four-week courses. Prior to arriving, each fellow must formulate a project they intend to implement in their home country. Past fellows have implemented election safety plans in Myanmar, drafted new

cybersecurity legislation for Mongolia, and tackled cross-border immigration issues in Southeast Asia. Prior to the start of their capstone course, MAIA students would be able to indicate their preference, from among APCSS fellows from dozens of countries, for partners whose projects are of particular interest to them. They would apply their knowledge of Asian international affairs to work collaboratively with the fellow in conceptualizing, researching and drafting his or her project. Each team would produce a report with actionable findings, and an oral briefing on their findings, as the culmination of the capstone experience. This option would enable students to gain experience and create valuable networks of expertise and support. As the program moves forward, we would explore potential collaboration with the East-West Center and other community partners.

Halfway through the semester prior to that in which they intend to do the capstone, and in consultation with their adviser, students would choose to pursue Option 1 or Option 2. This would allow enough lead time to make the logistical arrangements necessary for Option 2.

## Curriculum Map: Core Courses and Learning Outcomes

| | ILO1 | ILO2 | ILO3 | ILO4 | ILO5 |
|---|---|---|---|---|---|
| ASAN 651, 654, 655* | ✓ | ✓ | ✓ | ✓ | ✓ |
| ASAN 626, 629, 687, 689* | ✓ | ✓ | ✓ | ✓ | ✓ |
| ASAN 710* | ✓ | ✓ | ✓ | ✓ | ✓ |
| | | | | | |

| | PLO1 | PLO2 | PLO3 | PLO4 |
|---|---|---|---|---|
| ASAN 651, 654, 655* | ✓ | | ✓ | ✓ |
| ASAN 626, 629, 687, 689* | ✓ | ✓ | | ✓ |
| ASAN 710* | ✓ | ✓ | ✓ | ✓ |
| | | | | |

| | SLO1 | SLO2 | SLO3 | SLO4 |
|---|---|---|---|---|
| ASAN 651, 654, 655* | ✓ | ✓ | ✓ | ✓ |
| ASAN 626, 629, 687, 689* | ✓ | ✓ | ✓ | ✓ |
| ASAN 710* | | | ✓ | ✓ |

*new courses

## Advising & Administration

The program would be administered by the Asian Studies Graduate Chair, to be nominated by the SPAS Dean and appointed by the Graduate Dean. The Graduate Chair would be responsible for the day-to-day administration of the MAIA program (in addition to overseeing the MA program in Asian Studies). These responsibilities would include working with the Asian Studies chair, and with faculty and department chairs in other departments, to ensure that enough relevant courses are offered, in the format needed, for students to be able to complete the degree 18-24 months.

The Graduate Chair would be supported by a MAIA Steering Committee. This committee would include at least some members of the MAIA Planning Committee, as well as the instructional faculty who are most involved in teaching for the program. In principle, the Steering Committee

would include one member for each of the major Asian regions covered by the Asian Studies Program (China, Japan, Korea, the Philippines, Southeast Asia, South Asia).

The Steering Committee members would also serve as the MAIA admissions committee, and would either act as academic advisers themselves, or oversee the process of finding an appropriate academic adviser for each student. Students would be encouraged to meet with their advisers at least twice a year to plan their course of study. Advisers will all work with standardized MAIA program requirement checklists, to help guide students through the process of choosing electives that will meet the degree requirements (including limits on the number of online credits).

## III. Student Demand

### A. *Student profiles*

The MAIA program would undoubtedly attract new students. This is because it targets a different population than our existing programs, and because the structure and scheduling will facilitate participation by working professionals. As stated above, we expect the program to attract early-to-mid career professionals in the military, government, non-profits, business and education, primarily in Hawai'i but also from the mainland US and around Asia, for whom a solid understanding of Asian international affairs will enhance their career prospects.

### B. *Evidence of Student Interest*

In order to demonstrate and assess the initial interest in the MAIA program, we have met with a number of potential local partner organizations, including Indo-Pacific Command, East-West Center, Pacific and Asian Affairs Council, Pacific Forum, and the Daniel K. Inouye Asia-Pacific Center for Security Studies. Representatives from these organizations have expressed interest in working with us at various stages of the recruitment and implementation process for this program.

In October 2018, we also conducted an informal, small-scale online survey utilizing snowball sampling, asking two of these partner organizations to forward the survey link to their colleagues. Because this survey is not representative, it cannot be used to assess the general level of interest in the program or to adjudicate the relative interest amongst the target audience groups; it should be viewed as an illustrative tool that provides clear evidence of strong interest in the MAIA program in at least a portion of our target audience. Out of 45 total respondents, 84% said that they would apply or consider applying for the program. 49% were interested in studying Northeast Asia, 31% in Southeast Asia, and 20% in South Asia. Students' topical interests reflected the strong demand for an interdisciplinary approach to the region, with culture, politics, security/conflict, and economics/business topping the list of issue areas. Due to the survey sampling method, the majority (89%) of the survey respondents resided in Hawai'i. Because the initial wave of survey sampling focused on the education community, we are currently in the process of expanding this survey to gather data from the military and government as well, but based on our conversations with representatives, we anticipate the same kind of interest from these groups. The survey results are provided in Appendix I.

In the comments section of the survey, responders offered the following support:

> *Hopefully this program gains interest because there are many opportunities in Asia that have been reinvented in recent times.*

> *Good idea! Position Hawaii as bridge between Mainland and Asia. I think this is a key area where much of the future lays.*

> *Thank you for getting the ball rolling with this. I think this is a critical gap that UHM should definitely fill with a reputable program.* **UHM should and can be the Asia Pacific-focused Georgetown SFS equivalent.** *The future of Hawaii will depend on the knowledge economy and strong UHM programs will play a critical role in that.*

In addition to this survey, we regularly receive inquiries from professionals in education, business and government (including from liberal arts college and community college instructors on the mainland US who have completed the East-West Center's "Infusing Asia into the Curriculum" summer program, or who have otherwise become interested in Asian Studies and wish to enhance their teaching portfolio) as to whether it is possible to complete a graduate degree in Asian Studies without a language requirement and/or while holding down a full-time job (i.e., taking courses in the evenings, on weekends, online, or, for educators, during the summers only). This program will enable us to respond in the affirmative to such inquiries.

In the current Master of Arts in Asian Studies degree program, we have a number of students from the military as well as civilian employees of the Department of Defense. Some of these students have told us they believe there would be a large potential pool of their peers interested in a course of advanced study focused on Asian geopolitics and security issues that can be completed in the evenings or online, using military benefits. For this reason, in addition to FAOs, we believe individual mid-ranking members of the military and their civilian colleagues comprise another potential market for this degree.

It is not easy to gauge demand for this program from Asia, but in recent years we have had Asian governments send mid-career diplomats to our existing MA in Asian Studies program. The field of Asian Studies is flourishing in many Asian universities, as countries in Asia become cognizant of the need to better understand and engage proactively with their neighbors. For this reason, we believe the shorter time-to-degree and tighter focus on Asian International Affairs would, with vigorous, targeted marketing, make this program attractive to a range of professionals from around the Asian region. Their participation in the program could only enhance the educational and networking potential for local and mainland US students.

*C. Estimate number of majors per year, and explain how this number was determined.*
The anticipated number of the initial cohort will be 6-8 students. This is based on the survey mentioned above. As the program becomes established, and with energetic marketing, we anticipate this number to grow to 20 students per year within five years.

| | Previous Year | Previous Year | Current Year | Projected Year 1 | Projected Year 2 | Projected Year 3 | Projected Year 4 |
|---|---|---|---|---|---|---|---|
| | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 |
| **ENROLLMENT** (Fall Headcount) | | | | | | | |
| Projected: MAIA | | | 0 | 6 | 10 | 15 | 20 |
| Undergraduate | 35 | 32 | 35 | 37 | 39 | 40 | 40 |
| Graduate | 27 | 19 | 23 | 23 | 23 | 23 | 23 |

| | Previous Year | Previous Year | Current Year | Projected Year 1 | Projected Year 2 | Projected Year 3 | Projected Year 4 |
|---|---|---|---|---|---|---|---|
| | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 |
| **COMPLETION** (Annual) | | | | | | | |
| Projected: MAIA | | | 0 | 0 | 4 | 7 | 10 |
| Undergraduate | 11 | 4 | 11 | 12 | 14 | 17 | 17 |
| Graduate | 12 | 7 | 10 | 12 | 10 | 10 | 10 |

## IV.    Program Resources and Efficiency

A.  Resources required for program implementation and first cycle:

As projected, the program will not require new hires. Redistributing teaching duties within Asian Studies (two faculty members will teach graduate courses exclusively for this program), plus shifting the schedule or delivery mode of existing courses (from daytime face-to-face courses towards evening, weekend or online delivery) will enable the program to get off the ground with existing faculty. If enrollments exceed the numbers projected, funds to hire extra lecturers may be requested within the next five years, but these costs should be covered by the tuition generated from the higher enrollments.

1.  The new program will not require any new library resources, extra support personnel, specialized equipment, or facilities beyond normal classroom use.
2.  The major source of funding will be tuition revenue.
3.  Within five years we expect enrollments in the new program to average around 20 students. This will almost double our current graduate enrollment. Because we believe firmly in the interdisciplinary approach to area studies, Asian Studies graduate students are encouraged to take courses in other departments; for this reason, a doubling in graduate enrollment does not translate into a doubling of Asian Studies' average class size. However, we estimate that our average graduate class size will increase from approximately 8 to at least 12 students (calculated by excluding ASAN 695, which

students take for 1 credit and which does not count toward faculty workload, and ASAN 699/700, which are not credit-bearing courses). This is on a par with graduate course enrollments in current Social Sciences graduate programs like Anthropology and Political Science (calculated similarly by excluding non-credit-bearing courses like 699/700/800).

| CURRENT RESOURCES/FUNDING | Current Year |
|---|---|
| Tuition/Special Fund Allocation | $30,816 |
| General Fund Allocation | $711,532 |
| Summer Session Allocation | $9,497 |
| Program/Course Fee Allocation | 0 |

| CURRENT ACADEMIC PERSONNEL | Current Year |
|---|---|
| Current Faculty FTE | 10 |
| Current Faculty Salaries ($) | $681,192 |
| Current Lecturers ($) | $11,310 |
| Current Graduate TAs | $30,340 |

| | Current Year | Projected Years | | | | Total |
|---|---|---|---|---|---|---|
| | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 | |
| **TOTAL NEW PROGRAM RESOURCES** (e.g., new positions, lecturers, equipment or software for labs, accreditation fees, insurance, compliance costs, reporting, vendor contracts, etc.) | | | | | | |
| Promotional materials[1] | 0 | $1,000 | $500 | $500 | $500 | |
| **Total New Resources Needed** | **0** | **$1,000** | **$500** | **$500** | **$500** | **$2500** |

1) brochures/mailers, outreach to local schools & military.

| | Current Year | Projected Years | | | |
|---|---|---|---|---|---|
| | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 |
| **PROJECTED ACADEMIC PERSONNEL** (I-Faculty) | | | | | |
| Projected New Faculty FTE | 0 | 0 | 0 | 0 | 0 |
| Projected New Faculty Salaries ($) | $0 | $0 | $0 | $0 | $0 |
| Projected New Lecturers ($) | $0 | $0 | $0 | $0 | $0 |
| Projected New Graduate TAs | 0 | 0 | 0 | 0 | 0 |

| | Current Year | Projected Years | | | |
|---|---|---|---|---|---|
| | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 |
| **COURSES, SECTIONS, SSH** (Annual) | | | | | |
| Projected New Courses | 0 | 2 | 3 | 3 | 3 |
| Projected New Sections | 0 | 1 | 1 | 1 | 1 |
| Projected New Course SSH | 0 | 60 | 90 | 90 | 90 |
| Current Courses Offered[1] | 42 | 40 | 39 | 39 | 39 |
| Current Sections Offered | 44 | 42 | 41 | 41 | 41 |
| Current Annual SSH | 1,555 | 1,600 | 1,600 | 1,600 | 1,600 |

1) includes cross-listings

B. Comparison to similar programs at other UH campuses

The UH System does not offer any degrees in International Affairs or International Relations. The Political Science Department offers a range of courses in International Relations, and it is possible to have a specialization in International Relations at the PhD level, but they are not Asia-focused. The Shidler School of Business offers the Global MBA, which has an Asia-Pacific focus, and the Vietnam track in the Executive MBA program, but these programs are more focused on business and management than international politics and public policy. Public Health has an MPH with a Health Policy and Management specialization, but it is not explicitly Asia-focused. The Spark Matsunaga Institute for Peace and Conflict Resolution offers a graduate certificate in Conflict Resolution, but it does not have a regional specialization. The Law School offers certificates in Pacific-Asia Legal Studies (PALS) and International Law, but no degrees. The Master's in Asian International Affairs will complement and draw together these programs, bringing in new kinds of students who can make new connections between them.

The only other degree similar to the MAIA offered in the UH System is the MA in Asian Studies (MAAS) that is already offered by the Asian Studies Program in SPAS. This program has conferred 39 MA degrees over the past three years (2014-2017). However, it does not focus on international affairs; it is a broadly interdisciplinary program in which students are encouraged to investigate topics ranging from ethnomusicology to ancient history to contemporary cultural studies. In addition, the Asian Studies MA is an academic degree that prepares students who already have some background in Asian Studies for careers in academia, in jobs that require command of an Asian language, or in Asia. By contrast, the MAIA would prepare students with little or no background in Asian Studies to excel in careers where an understanding of the Asian context is important but is not the main focus of their work.

The Asian Studies Program also offers Graduate Certificates, which could fulfill some of this demand, but we have found that a) for some students, advanced degrees rather than certificates are necessary to advance professionally; and b) many military (and ex-military) students wish to use their GI Bill benefits, which are designed to support progress toward a degree, not a certificate (although his funding can be used toward a certificate, it is discouraged by GI Bill administrators).

## V. Program Effectiveness

The quality of student learning will be assessed in the following four ways:

1) Learning objectives will be spelled out in all course syllabi and will form the basis for grading. All MAIA students will be graded on a scale of A-F; only grades of B- or better will count toward the degree.
2) All MAIA students will complete course evaluations at the close of each course. Evaluations will be reviewed by the Graduate Chair to assess strengths and weaknesses in the course offerings.

3) Community partners in the capstone project (ASAN 710) will be invited to submit written reflections on the quality of skills and knowledge of the cohort of students they worked with.
4) For organizations that have sent their employees to the course (such as USARPAC), alumni and their supervisors will be invited to complete a survey one year after graduation asking them to evaluate how the program has enhanced their job performance.

The ongoing ability of the MAIA program to meet the workforce needs in Hawai'i and beyond will be assessed in the following four ways:

1) In the first three years of the program, all students and instructors will be invited to complete an annual survey asking them to evaluate the effectiveness of the program and areas that are in need of strengthening.
2) All graduating students will complete an exit interview either in person or online.
3) The program will be part of the normal Asian Studies Program external review process, which takes place every five years.
4) The program will maintain a MAIA Alumni database and LinkedIn account to track alumni job placement and career advancement.

Finally, while there is no formal accreditation body for international affairs degree programs, APSIA, the Association of Professional Schools of International Affairs (http://apsia.org), is a professional association that represents the top professional schools of international affairs worldwide. It currently has 34 full members and 36 affiliate members. APSIA has a rigorous review process for schools and programs wishing to be admitted. Although the MAIA program would not qualify for full membership in APSIA (primarily because it does not have "significant autonomy" within the university but is one program among several in SPAS), when eligible (after at least three classes graduated from a 2-year master's program), the MAIA program would pursue affiliate status.

## Conclusion

We are convinced of two things: first, that given the current academic climate, a professional degree program in international affairs represents a vital area of potential growth for Asian Studies in particular, and area studies more broadly. And second, that UH-Mānoa has the faculty and community resources necessary to create a world-class professional Master's program in Asian International Affairs. The MAIA program in the School of Pacific and Asian Studies will be an important new direction for SPAS and will help advance the University's core mission of "providing world-class education and performing scholarly work and service in areas of critical importance to our state, the nation and the entire Asia/Pacific region." The program already enjoys the unanimous support of the Asian Studies faculty, who will work hard to ensure its success in attracting a diverse new body of high-caliber students to the University.

**Appendix I. Results of Interest Survey**

Note on Methodology and Interpretation:

This survey was conducted via snowball sampling. A survey link was distributed to respondents via email from an Asian Studies faculty member directly or through a partner organization such as Pacific and Asian Affairs Council or Pacific Forum in October 2018. As a result, the survey is <u>not</u> representative and cannot be used to measure the general level of interest in the program or to adjudicate the relative interest in the program from different target audience groups. However, it is useful as an <u>illustrative</u> tool, demonstrating the existence of strong interest in the MAIA program in at least a portion of its target audience. Due to the survey sampling method, Hawai'i residents and educators were oversampled. We are currently in the process of expanding this survey to gather data from the military and government; based on our conversations with representatives from these groups, we anticipate similar levels of interest in these communities as well. Questions about the survey methodology should be directed to Kristi Govella, Assistant Professor of Asian Studies, at <u>kgovella@hawaii.edu</u>.

## Interest Survey: Master of Asian International Affairs (MAIA) Program

Report generated on November 12th 2018

Opening Text:
The School of Pacific and Asian Studies at the University of Hawai'i at Mānoa is proposing a new Master of Asian International Affairs (MAIA) program. This program is designed for working professionals whose careers would be enhanced by a deeper understanding of contemporary Asia. It is geared toward early-to-mid-career professionals in government, education, the military, policy, advocacy, business, and other fields in Hawai'i and beyond. Innovative interdisciplinary courses will be taught by experts on Asia at the University of Hawai'i, drawing on fields such as political science, economics, history, sociology, anthropology, law, planning, disaster management, and conflict resolution. There is no language requirement. Courses will be offered in either in-person or online formats and be scheduled at times that accommodate the lives of working professionals. Students may complete the program in as little as one year if attending full-time, or they may complete the program on a part-time basis as suits their needs.

Please complete this very short survey to help us assess the interests and needs of potential students. It will take approximately two minutes to complete.

Survey Results:

**If a Master of Asian International Affairs (MAIA) program is offered at the University of Hawai'i at Mānoa, would you be interested in applying? After answering, please click "Next" to proceed.**

| # | Answer | % | Count |
|---|--------|------|-------|
| 1 | Yes | 44.44% | 20 |
| 2 | Maybe | 40.00% | 18 |
| 3 | No | 15.56% | 7 |
| | Total | 100% | 45 |

**What geographic areas are you interested in? (Select all that apply.)**

| # | Answer | % | Count |
|---|---|---|---|
| 1 | Northeast Asia (Japan, Korea, and China, including Taiwan, Hong Kong, and Macau) | 49.15% | 29 |
| 2 | Southeast Asia (Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor-Leste, and Vietnam) | 30.51% | 18 |
| 3 | South Asia (India, Pakistan, Bangladesh, Nepal, Afghanistan, Bhutan, Tibet, Sri Lanka, and the Maldive Islands) | 20.34% | 12 |
| | Total | 100% | 59 |

**What topics are you interested in? (Select all that apply.)**

| # | Answer | % | Count |
|---|---|---|---|
| 1 | Politics | 14.44% | 26 |
| 2 | Security/Conflict | 12.78% | 23 |
| 3 | Economics/Business | 11.11% | 20 |
| 4 | Law | 7.78% | 14 |
| 5 | Gender | 6.11% | 11 |
| 6 | Culture | 17.22% | 31 |
| 7 | Migration | 10.56% | 19 |
| 8 | Religion | 6.11% | 11 |
| 9 | Ethnic Nationalism | 9.44% | 17 |
| 10 | Other (please specify) | 4.44% | 8 |
| | Total | 100% | 180 |

**Other (please specify):**

Health, mental health, comparative mental health

International Relations – Travel

Global trade

History

Technology, Computers

History

Educational practice

Social Innovation, climate change, political ecology

## What is your current or intended professional field? (Select all that apply.)

| # | Answer | % | Count |
|---|---|---|---|
| 1 | Military | 2.22% | 1 |
| 2 | Education | 62.22% | 28 |
| 3 | Advocacy | 2.22% | 1 |
| 4 | Government | 13.33% | 6 |
| 5 | Planning | 0.00% | 0 |
| 6 | Business | 8.89% | 4 |
| 7 | Other (please specify) | 11.11% | 5 |
| | Total | 100% | 45 |

## Other (please specify):

International exchange

Intelligence

Journalism

Journalism, Law

Nonprofit

## Where do you currently reside?

| # | Answer | % | Count |
|---|---|---|---|
| 1 | Hawai'i | 89.19% | 33 |
| 2 | Mainland United States | 8.11% | 3 |
| 3 | Outside the United States | 2.70% | 1 |
| | Total | 100% | 37 |

## How much work experience do you have?

| # | Answer | % | Count |
|---|---|---|---|
| 1 | None | 0.00% | 0 |
| 2 | 1-2 years | 8.11% | 3 |
| 3 | 3-5 years | 5.41% | 2 |
| 4 | 6-10 years | 27.03% | 10 |
| 5 | 11-15 years | 16.22% | 6 |
| 6 | More than 15 years | 43.24% | 16 |
| | Total | 100% | 37 |

## Appendix II. Asian Studies Courses relevant to or required by the MAIA

The Asian Studies Program already offers enough courses to enable a graduate student to fulfill the MAIA degree requirements entirely in-house, in the unlikely event that no courses in other departments are taught at times or in formats that would be accessible to MAIA students.

Graduate-level Courses

ASAN 605 Practicum (3)
ASAN 608 Politics and Development in China (3) (Kwok)
ASAN 611 Comparative Muslim Societies in Asia (3)  (Stirr)
*ASAN 626 Capitalism in Contemporary Asia (3) (Govella)
ASAN 627 Ethnic Nationalism in Asia (3) (Clayton)
ASAN 629 Asian Security Cultures (3) (Carlile)
*ASAN 630 Southeast Asian Now (3) (Andaya)
*ASAN 651 East Asia Now (3) (Harwit)
*ASAN 654 South Asia Now (3) (Stirr)
ASAN 686 Law and Society in China (3) (Conner)
ASAN 688 China's International Relations (3) (Kwok)

New Courses:

*ASAN 687 Cooperation and Conflict in Asia (3) (Govella)
*ASAN 689 International Relations of Asia (3) (Govella)
*ASAN 710 MAIA Capstone Seminar (3) (Staff)

Upper-division undergraduate courses (not more than 12 credits)

ASAN 407 Peace Processes in Philippines and Hawaii (3)
ASAN 410 Gender and Politics in US-Okinawa Relations (3)
ASAN 422 Contested Issues in Korean and Japan (3)
ASAN 462 Contested Issues in Contemporary Japan (3)
ASN 463 Gender Issues in Asian Society (3)
ASAN 469 Ethnic Diversity in China (3)
ASAN 480 Culture and Economy of Southeast Asia (3)
ASAN 491G Inter-Asia Mobility and Migration (3)

*Courses required in the MAIA program.

**Appendix III. Existing Courses in Other Departments Relevant to the MAIA**

This is a non-exhaustive list of courses in other departments that could count as electives in the MAIA program. It is intended not to exclude courses or faculty in other departments, but to give a sense of the depth of existing courses at UH-Mānoa that deal with Asian International Affairs. Should the program be approved, faculty in these and other departments would be invited to propose courses for inclusion in the program (in much the same ways as the current Graduate Certificate in International Cultural Studies).

A. The following courses are currently already offered online or in the evenings, are Asia-related, and thus could count as electives in the MAIA program:

Peace and Conflict Studies
PACE 621 Environmental Conflict Resolution (3). Fall & Spring: online
PACE 629/PLAN 629 Negotiation and Conflict Resolution (3). Fall: online; Spring: intensive (4 weeks, Tues night & Sat all day)
PACE 637/WS647/LAW 547 Gender: Law & Conflicts (2-3). On-campus, late afternoon

Urban and Regional Planning
PLAN 625 Climate Change, Energy, & Food Security in Asia/Pacific Region (3). Fall: on-campus, evenings.
PLAN 670 Seminar in Disaster Management & Humanitarian Assistance (3). Fall: on-campus, evenings.

B. The following courses are offered online or on evenings/weekends, and although they are not Asia-focused, they would allow students to do Asia-related work. These courses can count toward the MAIA degree if the student does written work applying the concepts to Asian cases. Must consult with adviser and ask instructor to sign a form confirming Asia-related coursework.

Peace & Conflict Studies
PACE 477 Culture & Conflict Resolution (3) Fall. Spring. Summer: online.
PACE 468 Intro to Facilitation and Organizational Change (3). Fall: online.
PACE 647 Mediation Theory & Practice (3). Fall, on-campus, evenings; spring: online.
PACE 668  Facilitating Community and Organizational Change (3). Spring: On campus, intensive (4 weeks, Tues night and Sat all day).
PACE 650  Dispute Resolution System Design (3). Fall: on campus intensive (4-5 weeks, Tues night and Sat all day)

C. The following courses would count toward the degree in terms of content and/or area focus, but are currently offered during weekdays. The MAIA program would invite instructors, if they are interested, to offer these courses in a format/time frame that would enable working professionals to enroll.  We have spoken to the following departments, and these are the courses they have suggested could be a good fit, pending scheduling issues:

Anthropology
ANTH 417 Political Anthropology
ANTH 481 Applied Anthropology
ANTH 463 Anthropology of Global Health & Development

Political Science
POLS 630 International Relations
POLS 633 International Conflict Resolution
POLS 635 Topics in International Relations
POLS 680 Asian and/or Pacific Politics
POLS 685 Topics in Asian or Pacific Politics
POLS 780 Politics of Regions

Urban and Regional Planning
PLAN 630 Urban & Regional Planning in Asia (3)
PLAN 633 Globalization & Urban Policy (3)
PLAN 634 Shelter & Services in Asia (3)

D. Courses in the William S Richardson School of Law would be valuable additions to the MAIA Program. Currently, these courses are often offered in the evenings or late afternoons, but because 500-level courses cannot count as graduate courses, Asian Studies would invite interested instructors to cross-list them with Asian Studies at the 600 level.

LWPA 514 Law & Society Japan
LWPA 564 International Criminal Law
LWPA 565 Law & Society in Korea
LWPA 585 International Law
LWPA 586 Law & Society in China
LWPA 588 International Human Rights Advocacy
LWPA 589 International Law, Transitional Justice, and War Crimes Tribunals
LWEV 523 International Environmental Law
LWEV 593 International Ocean Law

# UNIVERSITY of HAWAI'I·
## MĀNOA

February 27, 2019

MEMORANDUM

TO:      Lee Putnam, Chair
         Board of Regents

VIA:     David Lassner
         President

VIA:     Donald Straney
         Vice President for Academic Policy and Planning

VIA:     David Lassner
         Interim Chancellor

FROM:    Michael Bruno
         Interim Vice Chancellor for Academic Affairs
         and Vice Chancellor for Research

SUBJECT: APPROVAL OF NEW PROVISIONAL MASTER OF SCIENCE
         PROGRAMS IN INFORMATION SYSTEMS, FINANCE
         AND MARKETING MANAGEMENT

SPECIFIC ACTION REQUESTED:
It is respectfully requested that the Board of Regents approve as provisional the
following Specialized Master of Science Programs in the Shidler College of Business at
the University of Hawai'i at Mānoa:

- MS in Information Systems (MSIS);
- MS in Marketing Management (MSMM); and
- MS in Finance (MSF).

RECOMMENDED EFFECTIVE DATE:
Effective Fall 2020.

ADDITIONAL COST:
The proposed programs will be administered through the Shidler Executive Education
Program and will have a joint budget for advertising and recruiting, estimated at
$225,000. Faculty members will teach in the program in an overload format, and faculty
directors will be selected from existing faculty and also serve in an overload base. All of
these costs will be covered using tuition revenue generated by the programs.

PURPOSE:

Today, more and more students are looking to pursue a one-year masters degree in specialized business areas as opposed to an all-encompassing two-year MBA degree. Shidler already has specialized master's degrees in two of its five academic units (Master of Accounting in the School of Accountancy, and Master of Human Resource Management in the Department of Management and Industrial Relations). The proposed three specialized master's programs represent the remaining three academic units' efforts to meet the demands of the students in pursuing more in-depth knowledge in Information Systems (MSIS) from the Department of Information Technology Management, Marketing Management (MSMM) from the Department of Marketing and Finance (MSF) from the Department of Financial Economics and Institutions.

Information technologies (IT) are ubiquitous in today's economy, as information system applications are developed and diffused across industries and throughout society at a dizzying pace. Designing, implementing, and managing IT innovations in ways that bring value to organizations, employees, the economy, and to society generally requires information systems (IS) professionals with in-depth domain knowledge of business and organizational requirements, along with understanding of digital technologies. The Master of Science in Information Systems (MSIS) is designed to provide advanced managerial and technology knowledge and skillsets that graduates need to meet the demand for highly skilled information technology and systems (IT/IS) professionals in Hawai'i and elsewhere. IS professionals will contribute to business, not-for-profit, and government enterprises in Hawai'i, all of which require employees who are innovative, agile, technology-adept, and responsive to today's technology- powered economy.

The MSMM program will meet the need for more highly trained marketing managers in the State. Given the size and importance of our State's travel, retail, and other service industries, there is a pressing need for marketing managers who understand the importance of building long-term customer relationships through continuous quality improvement and perceived value. While a BBA in Marketing represents a very useful entry-level degree for many positions in the field, increasing competition and a rapidly changing economic environment require higher levels of understanding for success. The proposed MSMM program will provide students with in-depth knowledge in the principles and practices of marketing and broaden their opportunities to work in marketing-related careers. The overall objective of the program is to provide Hawai'i resident students and others with more extensive marketing management knowledge and training that will benefit both private and public sectors in our community.

The proposed MSF program will provide students in-depth knowledge in the principles and practices of finance and broaden their opportunities to work in finance-related careers. The financial industry has become increasingly complex in its operations and regulatory requirements. In order to succeed, finance professionals are often required to use large sum of data in conjunction with

sophisticated financial processes to analyze and solve problems for organizations in rapidly changing environments. While a BBA in finance represents a useful entry- level degree for many positions in the field, the complexity of contemporary financial and risk management requires systemic and in-depth training on financial theory and practice beyond what is possible within the undergraduate study. As a result, the MSF often becomes a necessary level of academic training for specialized financial careers beyond the entry level. The financial industry is one of the largest industries in the State and has been growing rapidly. The proposed MSF program will rigorously recruit students from the Shidler College and the local community and offer them expert training tailored for future global financial markets. These talented individuals will in turn serve in the local real estate, financial services and energy sectors, hence promoting the growth of local economy.

BACKGROUND:
Pursuant to Board of Regents Policy 5.201: Instructional Programs, "The Board shall approve the establishment of all new instructional programs granting academic credit leading to a degree or credential, upon recommendation by the President."

The UHM Shidler College of Business offers AACSB-accredited undergraduate degrees in Accounting, Finance, Management Information Systems, Entrepreneurship, Human Resource Management, Management, Marketing and International Business. The College also offers the Master of Business Administration, Master of Accounting and Master of Human Resources Management. The College has a doctoral program in Business Administration as well.

At present, the Shidler College of Business offers the MBA - a "generalist" degree with few functional concentrations. Demand for specialized programs focused on functional areas such as finance, information technology, and marketing has increased significantly over the past several years. As a result, such programs are either complementing or even replacing traditional MBA programs. These specialized graduate programs require little or no work experience and thus attract new undergraduates and international students who want to obtain additional skills and become more competitive in the marketplace. The programs are also popular with industry practitioners, who want to increase their understanding of and ability to use the most current theories and technologies in their respective fields. As such, the proposed programs are aligned with the Integrated Academic and Facilities Master Plan. "UH Mānoa must also continue to meet the professional workforce needs of Hawai'i in areas such as education, medicine, nursing, law, business, social work and engineering," (page 4). Finally, you will find that through planned coordination with our undergraduate programs, the proposed degree addresses the implications for UH Mānoa's graduate enrollment management as well. "Graduate enrollment management should focus particularly on attracting the best students to UH Mānoa graduate and professional programs defined as strategic. UH Mānoa can also do more to recruit UH undergraduates into some of its graduate programs, particularly master's degree programs."

All three specialized master's programs are a full-time, one-year graduate degree programs that requires 30 credits to complete. These proposed programs are designed to complement our undergraduate programs under UH Mānoa's combined degree pathway guidelines, where up to 9 credit hours of coursework[1] taken as an undergraduate in the senior year may be counted toward the master's degree. As such, students will be able to complete the BBA and professional master's degree in 5 years (or less). These programs will be particularly attractive to Shidler undergraduate students, as one additional year of course work will open the door to career opportunities beyond the entry level.

The goals of all three specialized master's programs at UH Mānoa are:

- To provide students with the knowledge and skill set to pursue excellent careers as experts in the fields of marketing management, finance, and information system management.
- To provide the economy in Hawai'i with highly skilled graduates.
- To help enhance the economic competitiveness of the State of Hawai'i.

As these programs will not only complement our current undergraduate and graduate offerings, the programs make sound academic sense for the Shidler College of Business. The knowledge and skillsets that graduates acquire through the proposed programs will in turn provide them with enhanced professional job and income opportunities in the Hawai'i economy.

The proposals were reviewed favorably by the Mānoa Faculty Senate in November 2018, and the Council of Chief Academic Officers in January 2019.

ACTION RECOMMENDED:
It is recommended that the Board of Regents approve as provisional the following Specialized Master of Science Programs in the Shidler College of Business at the University of Hawai'i at Mānoa:

- MS in Information Systems (MSIS);
- MS in Marketing Management (MSMM); and
- MS in Finance (MSF).


Attachment(s)
    MSIS Proposal MSMM Proposal MSF Proposal

cc:    Executive Administrator and Secretary of the Board Kendra Oishi
       Dean V. Vance Roley

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[1] One 400-level course and two 600-level courses; or three 600-level courses.

## Master of Science in Information Systems

### I. Program Purpose and Outcomes

#### A. Describe purpose of proposed program in terms of meeting student, community or State needs.

Information technologies (IT) are ubiquitous in today's economy, as information system applications are developed and diffused across industries and throughout society at a dizzying pace. Designing, implementing, and managing IT innovations in ways that bring value to organizations, employees, the economy, and to society generally requires information systems (IS) professionals with in-depth domain knowledge of business and organizational requirements, along with understanding of digital technologies. The Association of Information Systems (AIS) characterizes IS professionals in this way: *"They focus on technology and a domain of application and are experts in strategizing, developing, applying, modifying and sustaining technology to solve problems or leverage new IT-enabled opportunities. IS professionals work with and rely on computer scientists and engineers to create platforms and focus on understanding requirements and integrating technologies to design solutions that solve practical day-to-day problems and increasingly, lead digital innovation"* (Mandviwalla, Harold, and Yastrernsky, 2016, p. 4).

The Master of Science in Information Systems (MSIS) is designed to provide advanced managerial and technology knowledge and skillsets that graduates need to meet the demand for highly skilled information technology and systems (IT/IS) professionals in Hawai'i and elsewhere. IS professionals will contribute to business, not-for-profit, and government enterprises in Hawai'i, all of which require employees who are innovative, agile, technology-adept, and responsive to today's technology-powered economy. The knowledge and skillsets that graduates acquire through the program will in turn provide them enhanced professional job and income opportunities in the Hawai'i economy.[1]

#### B. Identify program outcomes, what the student will know and be able to do at program completion.

The MSIS program is designed in alignment with the MSIS 2016 Global Competency Model for Graduate Degree Programs in Information Systems, endorsed by the Association for Computing Machinery and the Association for Information Systems (Topi et al., 2017). (Also see Appendix 1.) The program builds on the knowledge and competencies students develop in an undergraduate IS or computer science degree program or through post-graduate work experience (verified with appropriate testing) related to the role of information systems in organizations, data, information, content management, IT

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[1] According to the salary survey conducted by National Association of Colleges and Employers, the average starting salary projection for Class of 2017 management information systems (MIS) undergraduate majors is $59,642 and, with a Master's Degree in Information Systems, an average starting salary of $81,955. A 2015 study by the AIS cited an average BBA/MIS salary of $57,817 and MSIS salary of $67,632, an 18% salary increase for MSIS graduates (Mandviwalla et al., 2016, p. 5).

infrastructure (including computer networks), IS management and operations (including IS security), and systems development and deployment. Upon completion of the MSIS program, graduates will have developed the following areas of competency:

1. Apply in-depth understanding of information technology capabilities and appropriate technological trends to provide information system solutions that are aligned with organizations' strategies.
2. Apply sustainable approaches, as well as appropriate technical and management techniques, to design, implement, and maintain IT infrastructure, information systems, and data services.
3. Develop and implement IT-enabled business processes for work units, teams, organizations, or markets to improve business activities and performance.
4. Develop or support organizational policies, processes, and technologies for data and information management that account for business, legal and regulatory requirements, and ethical considerations.
5. Assess IT/IS risks and generate solutions for risk avoidance, cybersecurity management, and disaster recovery to protect organizational assets and ensure business continuity.

**C. Describe the fit of the proposed program with system/campus mission and state need. Describe how the program addresses the following:**

**1) Aligns with the UH System mission and academic master plan and the campus mission and academic plan.**

Aligned with Hawai'i Graduation Initiative (HGI) Action Strategy 3, the MSIS curriculum responds directly to the strong and immediate need for a skilled IT workforce in the local community statewide, nationally, and globally. It targets knowledge areas in STEM, data science, and cybersecurity. With the proposed program, the University of Hawai'i at Mānoa will be able to prepare IS professionals for current and growing demands, while keeping the State of Hawai'i competitive in the IT market. The curriculum promotes technological innovation and supports growth in a highly skilled technology workforce to help the University of Hawai'i at Mānoa reach the goal of Hawai'i Innovation Initiative (HI2) and, in particular, economic diversification and more high-quality, highly-skilled jobs.

To pave the way for economic diversification, faculty of the Shidler College of Business Department of IT Management, following HI2 Action Strategy 2, have worked in partnership with the CIO Council of Hawai'i and the State of Hawai'i's Office of Information Management and Technology to identify areas of IT labor force development and promote IT/IS careers among undergraduates. Continuing this partnership with the MSIS program, on-the-job training and internships will strengthen students' ability to apply knowledge and skillsets acquired throughout the course of study to existing business needs and to advance innovation. The curriculum, together with a robust capstone requirement for industry-focused projects, will enable students to build immediate skills, while applying their new knowledge through participation in service-oriented projects, even before graduation.

The University of Hawai'i strategic initiatives speak to the fact that the "effective use of technology is inherently linked to the value of sustainability and the growth of community. 'Smart' technologies will allow us to emerge as a stronger and more organizationally sustainable campus and will expand our connections locally and globally." An educated and trained IS professional workforce is needed for Hawai'i to reach its goals in effective use of information technology to support sustainability initiatives.

Finally, the MSIS program is designed with High Performance Mission-Driven System (HPMS) Action Strategy 2 in mind. Instructional technology and innovative scheduling of course delivery will be used to reach students on neighbor islands and those who remain in workplace employment while in the program.

The proposed program is aligned with the Integrated Academic and Facilities Master Plan. "UH Mānoa must also continue to meet the professional workforce needs of Hawai'i in areas such as education, medicine, nursing, law, business, social work and engineering," (page 4). Finally, you will find that through planned coordination with our undergraduate programs, the proposed degree addresses the implications for UH Mānoa's graduate enrollment management as well. "Graduate enrollment management should focus particularly on attracting the best students to UH Mānoa graduate and professional programs defined as strategic. UH Mānoa can also do more to recruit UH undergraduates into some of its graduate programs, particularly master's degree programs, (page 5).

2) **Provide evidence of continuing need for the program, projections of the number of graduates, of career and graduate education opportunities for those completing the proposed program**

Due to increased global dependency and rapid advancements in information technology, an increasing demand for information systems and application software, and the evolving complexity of cybersecurity threats, employment in information technology and systems (IT/IS) related occupations is growing faster than the average for all other occupations. The program will help students obtain positions such as business / computer system analyst, application developer, information security analyst, and information systems manager. It will also provide students with knowledge and skills that are necessary for advancing to positions such as chief information officer (CIO) and chief technology officer (CTO). The career opportunities that are available for MSIS graduates are illustrated in Table 1.

**Table 1: Outlook for IS-related Jobs in the U.S.A.**

|  | Projected Job Growth (2014 - 2024) | Job Opening due to Growth and Replacement (2014 - 2024) | Median Annual Salary (2016) |
|---|---|---|---|
| Computer System Analyst* | 20.9% | 191,600 | $87,220 |
| Applications Developer* | 18.8% | 238,000 | $100,080 |

| | | | |
|---|---|---|---|
| Database Administrator* | 11.1% | 39,200 | $84,950 |
| Computer Network Architect* | 8.7% | 31,500 | $101,210 |
| Information Security Analyst* | 17.9% | 25,500 | $92,600 |
| Information Systems Manager* | 15.4% | 94,800 | $135,800 |
| Chief Information Officer** | N/A | N/A | $152,617 |

Source: *U.S. Bureau of Labor Statistics; **PayScale.com

A 4-year undergraduate degree, such as a BBA/MIS major, is an entry point for students to begin an IS career, but advanced study through masters-level work enhances first-job prospects, and continuing education for alumni enhances career advancement opportunities. For instance, a 2015 survey of graduates of 30 U.S. universities offering the Masters of IS degree reported 65% of graduates with placement at graduation and 94% placement within 6 months of graduation with an 18% increase in base starting salary, compared to BBA graduates (AIS, 2016, pg. 8). According to the survey conducted by the National Association of Colleges and Employers in 2017, a Master's in Information Systems is among the top 10 graduate degrees that most employers are attracted to.

The MSIS program is targeted to graduate 16-20 students per year, with annual enrollments of 30-40 accounting for part-time progression of some students through the program. The program will appeal to current undergraduates in the Shidler College BBA program in an intended 4-1 pathway to the MSIS. Pathways for undergraduates at other University of Hawai'i 4-year colleges will also be designed in future, if there is demand.[2]    Students in a 4-1 pathway are anticipated to account for approximately 40- 60% of MSIS graduates. Other graduates will be IS professionals working in Hawai'i (including MIS major alumni) and professionals seeking a career change to the IS field. The MSIS degree will be of interest to military personnel with bachelor's degrees and experience in the IS/IT field, as they enter the private sector. As MSIS will be a STEM-qualified program, the on-the-job professional training option will be attractive to international students seeking an IS/IT career.[3]

3) **Include a market analysis of the need of the program by addressing the professional, economic, social and workforce needs of the State of Hawai'i.**

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[2] A 9/27/17 meeting with faculty at UHWO indicated the Bachelors of Applied Science in cybersecurity students would not seek an MSIS degree, as their pathways to career and higher education are tightly focused. The general business curriculum currently does not include MIS majors, but in future there may be some interest. Discussions with UHH faculty on possible pathways are planned before program start-up.

[3] MSIS qualifies in multiple categories, e.g., 11.0101, 11.0103, 11.0104, 11.0199, 11.0501, , 11.1001, 11.1005, 11.1006, 11.1099.  See https://www.ice.gov/sites/default/files/documents/Document/2014/stem-list.pdf

Demand in the State of Hawai'i parallels the demand nationally, highlighted above. The Hawai'i Department of Labor indicated in an October 2016 news release for statewide employment forecasts that the information technology industry will see a 2.8% growth from 2014 - 2024, creating an additional 240 jobs in the field, with occupational projections for the computer and mathematical fields to see a net increase of 1,000 new positions, a gain of 10.2% between 2014 and 2024. Not only will additional computer and information systems professionals be in demand over the next decade, management positions are a growing concern for many decision makers who see a widening gap in the requisite skillset for sorely needed IS management. The MSIS degree is designed to address these workforce gaps.

In a March 2016 interview, the Chief Innovation Officer of the Office of Information and Management and Technology for the State of Hawai'i, Mr. Todd Nacapuy, stated, "For the governor, IT is a recognized priority. He is very supportive of all of our initiatives and workforce development. He really understands that if we don't start doing something to develop an IT workforce for the State of Hawai'i, then we are going to continue to have failed IT projects. We've had multiple, large-scale projects fail in the past because we don't have the skilled workers to do it. And it's not that the state workforce can't do it, it's just that we don't have enough of them." [4] Mr. Nacapuy called attention to the need for skilled IT

professionals to support various kinds of activities, noting, "We support roughly 80,000 state employees in 65,000 seats — we have roughly 800 IT workers for them. Every department is undermanned as far as supporting any type of IT initiative within the departments and anything that goes statewide."

Demand for well rounded IS professionals is not limited to the public sector. Mr. Alan Ito, the President of the CIO Council of Hawai'i, has stated that there is a need for graduates with advanced training and practical experiences in dealing with all aspects of IT/IS project implementation, management, and maintenance. This demand spans across commercial entities of large, medium, and small size from various industries such as banking, insurance, healthcare, tourism, and retail. Firms in all economic sectors need highly skilled IS professionals to help upgrade their information systems to provide better online services and to manage cybersecurity threats.

4) **Demonstrates how the proposed program responds to national and international needs where Hawai'i and the University have unique or outstanding resources to respond with quality.**

The international, national, and statewide need for IS professionals with enhanced knowledge and competencies in IS/IT topics is compelling. The Shidler College of Business, and in particular, the Department of IT Management and its faculty, have outstanding resources and competencies in the IS/IT field and knowledge domain to carry out this program. Each faculty member is a recognized leader in his or her area of study and teaching in the IS/IT field. Table 2 summarizes these areas of expertise.

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[4] http://www.govtech.com/computing/Conversation-with-a-CIO-Hawaii-Todd-Nacapuy.html

The Department of IT Management also works collaboratively with colleagues from the Department of Information and Computer Sciences, the Library and Information Science Program, and the School of Communication in the Interdisciplinary PhD Program in Communication and Information Sciences.

Through this institutional network, the MSIS program will be able to access expertise in closely aligned areas among UHM faculty.

**Table 2: Shidler College of Business' Department of IT Management Areas of Expertise**

| Faculty Members | Areas of Expertise |
|---|---|
| Tung Bui<br>*Professor and Chair of Information Technology Management Matson Navigation Company Chair of Global Business Co-Chair, Hawaii International Conference on Systems Sciences Director, APEC-Study Center Director, PRIISM (Pacific Research Center for Information System* | Computer-supported group decision and negotiation<br>Electronic commerce and the digital economy Economic evaluation of information technology |
| Hongmei Chen<br>*Professor of Information Technology Management* | Big data system design and development Service engineering<br>Social CRM Green computing |
| Elizabeth Davidson<br>*Professor of Information Technology Management*<br>*W. Ruel Johnson Distinguished Professor* | Information technologies in organizational settings<br>Health information technology diffusion and assimilation<br>Human resource information system |
| Rick Kazman<br>*Professor of Information Technology Management* | Software architecture design and analysis<br>Architecture/Design analysis tools and methods<br>IT economics |
| Randall Minas<br>*Assistant Professor*<br>*Hon Kau and Alice Lee Faculty Fellow*<br>*Faculty Advisor, Information Technology Management Association* | Human-Computer Interaction and User Experience Design<br>NeuroIS and cognitive neuroscience Health information technology Societal impacts of technology usage |
| Dan Port<br>*Associate Professor of Information Technology Management* | Strategic, economic, and empirical methods in software engineering<br>Application development |
| Bo Xiao<br>*Associate Professor of Information Technology Management Shidler College Distinguished Associate Professor* | Human-Computer Interaction Information reduction and visualization Health information technology |
| Anthony Vance<br>*Associate Professor of Information Technology Management Danny & Elsa Lui Distinguished Associate Professor* | Cybersecurity<br>Neuroscience applications to information security |

Finally, the Department of ITM organizes the Hawai'i International Conference on System Sciences (HICSS), the longest-standing academic conference in information systems and technology (51 years). (See HICSS.org.) Each year over 1,000 leading scholars from academic, public, and private sectors globally attend HICSS, and leading scholars regularly visit the Mānoa campus to contribute to research and curriculum in conjunction with HICSS. During the past five decades, research first presented at HICSS has advanced innovations in data science, cybersecurity, digital transformation, health informatics, IS/IT infrastructure, and so on. In addition to their individual research and scholarly programs, the ITM department has been recognized as leaders in the IS field through their leadership in designing and conducting the HICSS conference each year.

### 5) Meets the basic education needs for which there is a demand by Hawai'i residents.

The MSIS program will be of interest to Hawai'i residents with an IS-related background who would like to enhance their job and income opportunities and those without an IS-related background who are interested in entering the IT job market. Current Shidler College BBA students and alumni with a management information systems specialization have expressed interest in the MSIS program. A survey of current MIS majors in September 2017 indicated that 40-50% would consider continuing in a 4-1 pathway or returning to school for an advanced degree. At student development events, the IS professionals who have mentored recent alumni and CIOs leaders of Hawai'i businesses have expressed support for an MSIS program that involves practical training to help develop the IS/IT workforce in Hawai'i. An in-state program associated with the only research one institution (University of Hawai'i at Mānoa) and the nationally-recognized Shidler College of Business will provide students with an educational advantage that other programs (such as remote, online masters programs) cannot – the opportunity to learn from and network with Hawai'i firms and professionals to develop their practical knowledge and career opportunities.

## II. Program Organization

### A. Provide a description of curriculum organization, total credits to complete the program including all prerequisite requirements, admission policies, advising, and other aspects of the program, with reference to its goals/outcomes.

The Masters of Science in Information Systems is a 30-semester hour Plan B masters degree (48 semester hours, for students lacking all undergraduate prerequisites). Students entering the program are expected to have an undergraduate degree with an emphasis in information systems and technologies within a business organizational environment. Following graduate policy, students must have a 3.0 (B) GPA for admission. The profile of entering students will be similar to that of BBA graduates with an MIS undergraduate major. Students whose educational background differs from this profile can apply for prerequisite waivers with equivalencies (e.g., computer science majors) or will be required to complete undergraduate preparation prior to enrollment in the MSIS. Waivers of prerequisite undergraduate coursework with appropriate testing will be offered to working IS professionals without the

undergraduate prerequisites.

A 4-1 pathway, based on Manoa's combined bachelor's/master's programs guidelines for undergraduates, will be proposed after the MSIS program is approved. This pathway will allow current students to carry over 9 units of credit in approved MSIS courses (see below), in accord with UH/UHM policies. Admission to the MSIS 4-1 pathway will be open to undergraduate students at UHM and to students at UHWO and UHH (if there is a demand for this option) with approved course equivalencies for prerequisites.

An MSIS faculty director will oversee admissions, in conjunction with the Shidler College of Business Graduate Student Office and an admissions sub-committee of ITM Faculty. The faculty director will advise newly admitted students in course selection and progression through the program. The faculty instructor for the Capstone class in spring/summer will oversee the student capstone experience.

Prerequisites for admission:
- Demonstrated ability to code in at least one programming language (e.g., PHP, C++, Python, Java) at an advanced-beginner level commensurate with an undergraduate course.
- Bachelors degree with following criteria:
  - Equivalencies to undergraduate MIS core curriculum (ITM352, 353, 354, 431) from an accredited 4-year college.
  - General business curriculum, including at least one course each in accounting (equivalent to ACC201 or ACC201) and finance (equivalent to BUS314)
- Undergraduate students in a 4-1 pathway will complete these prerequisites prior to beginning MSIS coursework.
- Students with completed bachelors degree who do not meet prerequisites will complete prerequisites before advancing to MSIS courses.
- No work requirement but internships and/or work experience desirable.

Core (12 semester hours)
- ITM 682 Enterprise Data and Information Management
- ITM 685 Digitally-Enabled Business Processes
- ITM 684 Enterprise System Architecture and Management
- ITM 433 Advanced Security

Electives (12 semester hours)
- BUS 619 Data Analytics and Statistics for Business
- BUS 625 Digital Transformation with Information Systems and Technology
- ITM 680 Project Management, Information Technology and Change
- ITM 683 Business Intelligence and Data Analytics
- ITM 688 Management of Health Information Technology and Population Health
- ITM 660 Special Topics in Information Systems, e.g.
  - Big data analytics and visualizations; Data, Text and Web mining
  - Application development for IoT, mobile apps
  - Service analytics and Smart Service Systems

<u>Capstone Experience (6 semester hours)</u>
- ITM 696 for Capstone project (3 semester hours taken twice, or 6 semester hours taken once)

**B. Includes an academic map for certificate of achievement, associate and bachelor degrees that demonstrate on time completion.**

N/A

**C. Provide justification for a program that is more than 30 credits for a certificate of achievement or 60 credits for an associate degree or 120 credits for a bachelor's degree.**

N/A

**D. Describes provisions for articulation with UH Community College degrees for bachelor's degrees.**

N/A (Students in a 4-1 pathway must already be enrolled in a 4-year degree program.)

## III. Student Demand

**A. Describes the profile of students who will likely enroll in the program and include a discussion on the likelihood of the program attracting new students to the campus or existing students.**

Students who will likely enroll in the program include:
1. Current undergraduates students interested in the 4+1 pathway
2. Recent alumni of the Shidler College of Business BBA program in the management information systems major who would like to enhance their job and income opportunities
3. Recent graduates of the Shidler College of Business BBA program and BA/BS programs from other disciplines in the University of Hawai'i System who are interested in entering the IT job market
4. Graduates who hold a bachelor's degree from an accredited U.S. college or university or non-U.S. institution of higher education
5. International students who are interested in building their credentials for employment in the IS profession, particularly those interested in up to 24 months of (STEM) Optional Practical Training in the U.S. after graduation
6. IS professionals or professionals in allied fields seeking to enhance their base of technical knowledge

The MSIS and the 4-1 pathway (to be designed after approval) will support the Shidler College of Business' direct admit program. Under the DAP, more than 70 students per year have enrolled in UH Mānoa from Hawai'i public and private schools, other U.S. states, and

Asia. Direct admission and engagement with the College also enhances student retention. The opportunities to obtain a Master degree in one additional year in the 4-1 pathway in a highly paid and in-demand professional field will further enhance this program.

Recent alumni of the Shidler College of Business will be motivated to return to school for a 1-year full-time or 2-year part-time program. The College successfully fields masters-level programs aimed at working professionals in the Masters of Human Resource Management, as well as MBA programs, indicating that this option is attractive for Hawai'i residents. The College has experience with alternative scheduling and use of instructional technology to facilitate participation by Neighbor Island and working professionals.

Along with other initiatives at the UHM campus to attract international students, the Shidler College of Business has a vibrant and engaged alumni network in Asia, particularly in Hong Kong and Vietnam. The enhanced offering of a 4-1 option for the MSIS, or for a 1-2 year STEM masters course (with up to 24 months of OTP eligibility), will further enhance new student enrollment from these programs.

Finally, for students graduating throughout the UH System, the MSIS offers an opportunity to attend a high quality, accredited program (under AACSB) within the state's university system.

**B. Provide evidence of student interest (i.e. needs assessment).**

The ITM faculty undertook the process of formulating an MSIS degree proposal in large part due to student interest in opportunities for masters-level education. In September 2017, a survey of students currently majoring in MIS indicated that 50% would be interested or very interested in undertaking a Master's degree in information systems. At MIS alumni events, former students articulate their interest in returning for a degree, or their advice to other students to consider doing so. In both situations, their motivations are two-fold.

First, the undergraduate MIS degree, while a useful first-step to a IS professional career, provides a broad, base-line preparation of five (5) major courses within the BBA degree. The BBA itself provides a broad base in business knowledge spanning management, marketing, finance, and accounting that sets apart MIS majors from those with purely technical degrees. However, with firms offering less support for on- the-job training, yet also demanding higher levels of preparation of entry-level hires, reaching the first professional job to gain needed experience is challenging. Second, the IT industry continues to change rapidly, with new technologies, new applications, and new business challenges (such as escalating cyber attacks). Employees need advanced, specialized education and training to meet these challenges. The IT industry continues to complain of a technology "skills shortage" and to rely heavily on international workers via H1B visas or outsourcing firms to fill these gaps. Students are aware that they need heightened skills to compete in these domains, and they must invest in themselves to do so.

It is important to note that a large number of business colleges across the U.S. provide specialized masters degrees, including the MSIS. (See Appendix B for a list of schools.)

Some of these programs date back to the late 1990s; others reflect a shift towards specialized degrees for graduate business education. Given the needs for IS professionals in Hawai'i and the success of MSIS programs in many other similar institutions, we are confident that student interest is more than sufficient to support this vital addition to the Shidler College of Business curriculum.

### C. Includes an estimate number of majors per year with an explanation on how this number was determined.

| | Previous Year | Current Year | Projected Years | | | |
|---|---|---|---|---|---|---|
| | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 |
| **ENROLLMENT** (Fall Headcount) | | | | | | |
| Projected: MSIS | | n/a | 20 | 25 | 25 | 25 |
| BBA in MIS | 59 | 72 | 75 | 75 | 75 | 75 |
| MBA, PhD Business Admin | 260 | 220 | 220 | 220 | 220 | 220 |
| **COMPLETION** (Annual) | | | | | | |
| Projected: MSIS | | n/a | n/a | 20 | 25 | 25 |
| BBA in MIS | 36 | 37 | 37 | 37 | 37 | 37 |
| MBA, PhD Business Admin | 147 | 130 | 130 | 130 | 130 | 130 |

We reviewed data for MSIS programs at other universities (See Mandviwalla et al, 2016 and Appendix 2) and surveyed current students and alumni. Based on this data, the MSIS program is expected to have a steady enrollment of 16 - 20 graduates per year-by-year 3, with 30-40 enrolled annually on a full- and part-time basis. Experiences of the MSIS program at other universities (e.g. Brigham Young University, Provo, where a new ITM faculty has taught) indicate 40% of BBA majors in Management Information Systems continue into their 5th year to acquire a Master's degree. At UHM, 12-16 MIS majors are anticipated in a 4-1 pathway (based on 35-40 MIS majors/year graduating now). An alumni base of over 200 MIS majors in the last 5 years is estimated to provide 10-15 students returning part-time to the MSIS per annum in future years. A projection of 10-15 full-time international students is feasible, with OPT as an added attraction.

## IV. Program Resources and Efficiency

### A. Describe resources required for program implementation and first cycle operation. Number, source, and cost of faculty; library requirements; support personnel; estimated cost of supplies, equipment and CIP; facilities to be utilized.

*Faculty*: The ITM Department currently has 8 FTE tenure-track faculty. No additional FTE are requested to support the MSIS degree program. Some courses will be co-offered to the existing MBA program for efficiency. Some courses will be taught by adjunct lecturers drawn from IS professionals. Courses can be offered as overload and in summer to ensure timely offerings.

| CURRENT ACADEMIC PERSONNEL | Current Year |
|---|---|
| Current Faculty FTE | 8 |
| Current Faculty Salaries ($) | 1,467,696.00 |
| Current Lecturers ($) | 118,603.71 |
| Current Graduate TAs | 1 |

- *Library resources*: MSIS students will use existing resources of the College and UHM.
- *Physical resources*: The proposed MSIS program will utilize the current facility and resources, such as classrooms. The Shidler College of Business operates a computer laboratory, if this facility is needed.
- *Other Resources Required*: The proposed MSIS program will share administrative staff with other Shidler College of Business graduate programs. These departments will absorb incremental costs of supplies and marketing materials. The program faculty director may receive a teaching reduction to attend to administrative duties, particularly during the program startup years. ITM faculty will work with ITS to utilize software or educational service licenses available through campus-wide programs, as required.

**B. Describe the expected sources of funds, including sources of reallocated funds.**
The MSIS program will be funded by student tuition. No reallocation of funds is required.

| CURRENT RESOURCES/FUNDING | Current Year |
|---|---|
| Tuition/Special Fund Allocation | 2,896,805.00 |
| General Fund Allocation | 9,550,035.00 |
| Summer Session Allocation | 645,416.00 |
| Program/Course Fee Allocation | 1,027,500.00 |

| TOTAL NEW PROGRAM RESOURCES (These expenses are shared across the 3 proposed Shidler Master's Degrees) | | | | | |
|---|---|---|---|---|---|
| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | |
| Promotional Expenses | $20,000 | $15,000 | $10,000 | $8,000 | |
| Executive Ed Staff Expenses | $10,000 | $12,000 | $15,000 | $15,000 | |
| Outreach Overhead | $30,000 | $30,000 | $30,000 | $30,000 | |
| Total New Resources Needed (for MSMM, MSF, MSIS programs) | $60,000 | $57,000 | $55,000 | $53,000 | TOTAL: $225,000 |

**New Program Resources**
(total needed for proposed MS in Marketing Management, MS in Finance, and MS in Information Systems)
- Promotional Expenses: Includes advertising, brochures, fliers and promotional trips.
- Executive Education Staff Expenses: Includes books/lecture materials and computer, network expenses

- Outreach College Overhead: Outreach College administrative fees of $40 per credit student effective through Summer 2017 (assuming same fees).

C. **Compare anticipated cost per SSH, cost per major, SSH/faculty, average class size or other quantitative measure with other programs in the college and similar programs on other UH campuses. Complete the cost template and narrative.**

|  | Previous Year | Current Year | Projected Years | | | |
|---|---|---|---|---|---|---|
| **COURSES, SECTIONS, SSH** (Annual) | **2017-18** | **2018-19** | **2019-20** | **2020-21** | **2021-22** | **2022-23** |
| Projected New Courses |  | n/a | 2* | 0 | 0 | 0 |
| Projected New Sections |  | n/a | 2* | 0 | 0 | 0 |
| Projected New Course SSH |  | n/a | 120 | 150 | 150 | 150 |
| Current Courses Offered | 15 | 17 | 17 | 19 | 19 | 19 |
| Current Sections Offered | 17 | 19 | 19 | 21 | 21 | 21 |
| Current Annual SSH | 1,099 | 1,011 | 1,011 | 1,491 | 1,491 | 1,491 |

*\* Two new courses: ITM 682, ITM 696*

The MSIS program will be offered by the Department of ITM, which operates within the Shidler College of Business. Shidler College of Business departments support the BBA degree (with over 1200 students and 9 different majors), the MBA degree, and the PhD degree and also share across the departments a large portion of the BBA and MBA curriculum. For instance, the ITM department staffs the equivalent of 6.0 FTE in the non-departmental (shared) "BUS" curriculum at undergraduate and masters levels, in addition to 2.5 FTE in the undergraduate MIS major. Thus, MSIS statistics, such as cost per SSH or cost per major, cannot meaningfully be compared to wholly departmental programs in other UHM colleges.

To provide a partial basis for comparison of efficiencies of the proposed MSIS program, we compared the number of sections offered, students enrolled, student semester hours, and average class sizes for other departments that offer a professional masters degree and/or a technically focused masters degree. For instance, the Masters of Social Work and Library Science are professional degrees that working professionals take to become certified or advance professionally. The Masters in ICS, EE, CEE, and ME are technically-oriented masters degrees. The Learning, Technology and Design (LTEC) masters provide professionally oriented technical training to teachers. We included Nursing and Social work as examples of large (for UHM) masters programs. We also included the MBA program offered by Shidler College of Business, which includes both the BUS core offerings and specialized courses from its 5 departments, the Masters of HRM, and the Masters of Accounting.

Table 3 presents these approximate numbers for comparisons for fall, 2016 enrollments. Note that only 500- and 600-level course offerings are included; 699-directed readings (typically offered to individual students) are excluded. Using the conservative estimates of a steady flow of 30-40 MSIS students taking two to four different courses per semester,

and four different MSIS course offerings, we believe the MSIS can be offered efficiently compared to comparable professionally-oriented masters offered at UHM.

Table 3: Comparison of MSIS efficiencies with other programs at UHM and Shidler College

|  | Sections offered | Total SH offered | Student registrations | SSH across classes | Average class size |
|---|---|---|---|---|---|
| MSIS (est) | 4 | 12 | 60 | 180 | 15.0 |
| ACC | 4 | 8 | 63 | 172 | 15.8 |
| BUS(*) | 38 | 67.5 | 634 | 1513 | 16.7 |
| FIN(*) | 4 | 12 | 91 | 273 | 22.8 |
| HRM | 5 | 15 | 200 | 600 | 40.0 |
| ITM(*) | 1 | 3 | 26 | 78 | 26.0 |
| MIR(*) | 2 | 6 | 56 | 168 | 28.0 |
| MKT(*) | 2 | 6 | 44 | 132 | 22.0 |
| MBA (*) | 47 | 94.5 | 851 | 2164 | 18.1 |
| ICS | 9 | 3 | 84 | 218 | 9.3 |
| LIS | 16 | 42 | 149 | 447 | 9.3 |
| TIM | 7 | 19 | 27 | 79 | 3.9 |
| LTEC | 19 | 51 | 226 | 606 | 11.9 |
| CEE | 13 | 35 | 73 | 185 | 5.6 |
| EE | 7 | 21 | 36 | 108 | 5.1 |
| ME | 3 | 4 | 27 | 71 | 9.0 |
| SW | 24 | 70 | 442 | 1318 | 18.4 |
| NURS | 42 | 93 | 647 | 1784 | 15.4 |

Data extracted via Institutional search at https://www.hawaii.edu/irodr/courseSearchDisplay.do

**D. List similar programs at other UH campuses and describe how the proposed program differs or is similar to these programs. Provide rationale for the new program if there are similar existing program(s).**

The proposed MSIS program will not duplicate current offerings. While it shares a focus on IT with Master of Science in Computer Science degree program, the MSIS focuses on project management, strategic applications of packaged IT/IS capabilities, and applied workflow and process improvements through implementation of IT systems. In contrast, a Master's in computer science provides more mathematically and technically-oriented coursework in programming of software and hardware applications. Given the extent and variety of IT/IS workforce needs, the MSIS and ICS masters will contribute to the Hawai'i's job market in complementary ways.

**5. Complete a risk assessment, if needed (e.g. insurance needs, vendor contract review, off-campus site management, etc.).**

N/A

## V. Program Effectiveness

### A. Describe the plan for assessing the quality of student learning.

The AACSB International accredits the Shidler College of Business and its degree programs. As such, the College and Department of ITM are required to establish and employ systematic measurements of student learning that facilitate continuous improvement of pedagogy and course content to help ensure delivery of a high quality educational experience. The College maintains a standing Faculty committee, the Learning Assessment Committee, that works with department chairs, program directors, and the College's Curriculum and Programs Committee to develop and implement such measurement systems. The Department of IT Management will work with this committee to develop a similar system for the MSIS Program, in accordance with the MSIS Curriculum Guideline (Appendix 1).

Assessment will include analysis of achievement of learning objectives within each of the four core courses of the MSIS through faculty evaluation of specific central assignments completed by all students. Student learning goals will accommodate specialization, reflected across the nine (9) areas of competencies identified in the MSIS Global Competency Model, in the mix of elective courses students choose (See Appendix 1). Assessment will be evaluated in each course, as well as in the Capstone project experience. Percentages of students who exceed, meet, or fall below expectations on those assignments will be monitored and compared from within each cohort and across cohorts. The faculty director, department chair, and ITM faculty will use this information to make improvements in curriculum and pedagogy, as needed, to better achieve central learning objectives.

In addition, student course evaluations for every course will be shared with the faculty director to enable improvements on the part of individual faculty within the MSIS Program. Finally, employers will be surveyed bi-annually to evaluate the curriculum content and to report on experiences with MSIS-educated employees. This feedback will be utilized to improve the program.

### B. Identify relevant program accreditation and plans to meet accreditation requirements.

The Shidler College of Business at the University of Hawai'i at Mānoa is accredited by the AACSB International. The MSIS program will follow AACSB International requirements for accreditation as one of the programs offered by the College and will not adversely affect accreditation. If the program has been approved to start in Fall 2019, we will include the program to our next AACSB accreditation in Fall 2020.

### References:

Topi, Heikki; Karsten, Helena; Brown, Sue A.; Carvalho, João Alvaro; Donnellan, Brian; Shen, Jun; Tan, Bernard C.Y.; and Thouin, Mark F. (2017) "MSIS 2016 Global Competency Model for Graduate Degree Programs in Information Systems," *Communications of the Association for Information Systems*: Vol. 40 , Article 18. Available at: http://aisel.aisnet.org/cais/vol40/iss1/18

Mandviwalla, Munir, Harold, Crystal, and Yastremsky, David. (2016) Information Systems Jobs Index 2015. Published by the Association for Information Systems and Temple University, Fox School of Business. Available at: http://isjobindex.com

Hawaii Department of Labor https://labor.hawaii.gov/wp-content/uploads/2016/10/20161005Employ- Projs2014-24-1.pdf

U.S. News & World Report http://money.usnews.com/careers/best-jobs/rankings/best-technology-jobs

The following materials are extracted from the document, *MSIS 2016 Global Competency Model for Graduate Degree Programs in Information Systems* (Topi et al, 2017). This report, commissioned and approved by the professional organizations, The Association for Information Systems (AIS) and the Association for Computing Machinery (ACM), was developed by leading scholars in the IS academic and professional fields, based on industry needs, existing curriculum, and future developments in the field. The Proposed MSIS program draws on this guideline to re-vision courses currently offered by the department and to develop, as needed, new course offerings to enable students to achieve competencies.
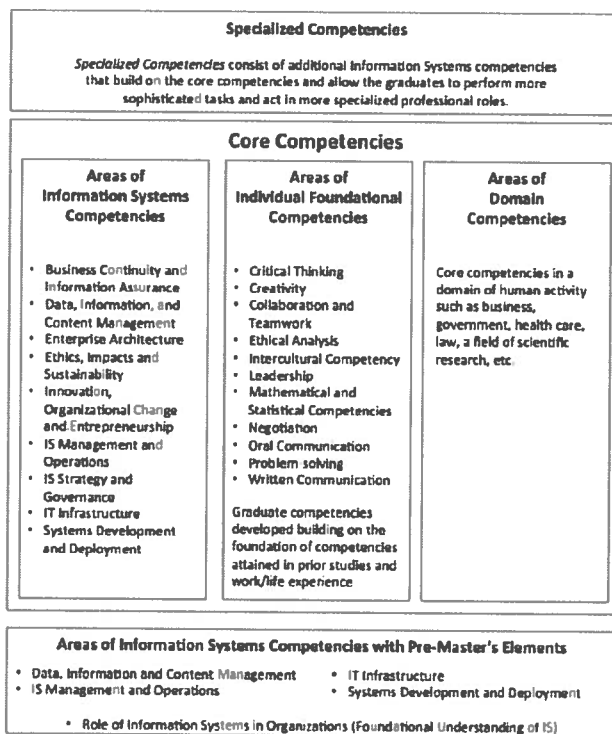
The model depicted here assumes that incoming MSIS students have an undergraduate level preparation in IS topics (areas of information competencies with Pre-Master's elements). The purpose of the masters is to extend and deepen knowledge and competency in areas of Information Systems practice. Students also further their individual foundational competencies, for instance in critical thinking or negotiation, through pedagogical design and program experiences. Students may focus on domain competencies, for instance, in the healthcare field, where there is a growing need for health informatics specialists who understand healthcare settings and how to collect and utilize data for organizational and process improvements.

The following summaries, extracted from this report, provide a brief overview of the nine Areas of Information Systems Competencies depicted above.

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**Specialized Competencies**

*Specialized Competencies* consist of additional Information Systems competencies that build on the core competencies and allow the graduates to perform more sophisticated tasks and act in more specialized professional roles.

**Core Competencies**

| Areas of Information Systems Competencies | Areas of Individual Foundational Competencies | Areas of Domain Competencies |
|---|---|---|
| • Business Continuity and Information Assurance<br>• Data, Information, and Content Management<br>• Enterprise Architecture<br>• Ethics, Impacts and Sustainability<br>• Innovation, Organizational Change and Entrepreneurship<br>• IS Management and Operations<br>• IS Strategy and Governance<br>• IT Infrastructure<br>• Systems Development and Deployment | • Critical Thinking<br>• Creativity<br>• Collaboration and Teamwork<br>• Ethical Analysis<br>• Intercultural Competency<br>• Leadership<br>• Mathematical and Statistical Competencies<br>• Negotiation<br>• Oral Communication<br>• Problem solving<br>• Written Communication<br><br>Graduate competencies developed building on the foundation of competencies attained in prior studies and work/life experience | Core competencies in a domain of human activity such as business, government, health care, law, a field of scientific research, etc. |

**Areas of Information Systems Competencies with Pre-Master's Elements**

| | |
|---|---|
| • Data, Information and Content Management | • IT Infrastructure |
| • IS Management and Operations | • Systems Development and Deployment |

• Role of Information Systems in Organizations (Foundational Understanding of IS)

Figure ES1. MSIS 2016 Competency Structure

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**1. Competencies in the area of Business Continuity and Information Assurance (BCIA)**

Area description: the Business Continuity and Information Assurance competency area

mainly concerns the continuity, auditing, and assurance of information systems. It generally covers areas such as risk avoidance, security management, and quality auditing. The challenging issues related to business continuity and information assurance span from tactical and strategic to technical and operational levels. They often involve a range of processes from management, such as policy and standard setting, to hands- on skills, such as system contingency and recovery planning.

## 2. Competencies in the area of Data, Information, and Content management (DATA)

Area description: the Data, Information, and Content management area covers competencies that enable graduates to be effective contributors in processes that improve the domain's ability to achieve its goals using structured and unstructured data and information effectively.

## 3. Competencies in the area of Enterprise Architecture (EARC)

Area description: Enterprise architecture has two aims: managing the complexity of information systems and technologies and aligning these systems/technologies with the organization's strategy. The area covers competences that enable graduates to participate in planning, building, using, maintaining, and evaluating architectures.

## 4. Competencies in the area of Ethics, Impacts and Sustainability (ETIS)

Area description: the Ethics, Impacts, and Sustainability competency area covers the conceptualization and implementation of environmentally and socially sustainable IT solutions that are aligned with the responsibilities of organizations and in compliance with legislative and regulatory requirements and industry standards. This competency area addresses key questions such as environmental and social sustainability, safety and health, privacy, and integrity. It also covers the impact of IT on the nature of work and workplaces and explores how culture and ethics (internal pertaining to organizations and external pertaining to stakeholders) shape behavior. These areas tend to be aligned with a strategic or a tactical level of organizational decision-making.

## 5. Competencies in the area of Innovation, Organizational Change, and Entrepreneurship (IOCE)

Area description: the Innovation, Organizational Change, and Entrepreneurship area covers the capability to recognize and exploit the potential afforded by current and upcoming technologies to address existing and new business opportunities. This area also includes competencies required to understand and to intervene in different forms of domain activities (e.g., work units, work teams, processes, organizations, markets, society setting) in order to use information technologies to improve the way those business activities are structured and performed.

## 6. Competencies in the area of IS Management and Operations (ISMO)

Area description: the IS Management and Operations area covers the capability to develop, maintain, and consistently improve domain performance while providing appropriate information systems, services, and infrastructure. The capability focuses externally on creating value for the domain and internally on IS staff motivation, performance, and accountability.

7. **Competencies in the area of IS Strategy and Governance (ISSG)**

Area description: the IS Strategy and Governance area covers the creation and implementation of long- term plans for designing, delivering, and using organizational information systems to achieve strategic domain goals and objectives. This area also covers monitoring and controlling organizational IS resources to ensure alignment with and achievement of strategies, goals, and objectives.

8. **Competencies in the area of IT Infrastructure (INFR)**

Area description: the IT Infrastructure area covers competencies that allow graduates to contribute to needs analysis for and design and implementation of effective, technically correct IT infrastructure solutions.

9. **Competencies in the area of Systems Development and Deployment (SDAD)**

Area description: the Systems Development and Deployment area covers the design of information systems and services, including the design of how humans interact with and how they experience IT artifacts. It also includes competencies related to systems implementation and the deployment of systems to organizational use.

**Appendix 2: Examples of U.S. Universities with Master of Science in Information Systems Programs**

| Institutions | Program Type | Duration | Tuition |
|---|---|---|---|
| Carnegie Mellon University | Master of Information Systems Management | 1-2 years | $22,750 - $23,435 |
| University of Arizona | Master of Management Information Systems | 1-2 years | $13,832/semester |
| Purdue University | Master of Science in Business Analytics and Information Management | 1 year | $29,000 |
| Baylor University | Master of Science in Information Systems | 1-2 years | $14.247/semester |
| University of Washington | Master of Science in Information Systems | 1 year | $8,250/quarter |
| M.I.T (Joint Engineering & Management) | Master of Systems Design and Management | 1-2 years | $27,810/term |
| N.Y.U. | Master of Science in Management and Systems | 2 years | $16,551/semester |
| University of Illinois, Urbana/Champaign | Master of Science in Technology Management | 1 year | $16,280 FA, SP $8,130 SU |
| Indiana University | Master of Science in Information Systems | 2-3 semesters | $7,800/semester |
| Cornell University | MPS in Information Science | 1 year | $25,356/semester |
| University of Maryland, University Park | Master of Information Management | 2 years | $7,812/semester |
| Temple University | Master of Science in IT Auditing and Cybersecurity | 3 semesters | $9,852/semester |
| Claremont Graduate Institute | Master of Science in Information Systems and Technology | 1-2 years | $14,776/semester |
| San Diego State University | Master of Science in Information Systems | Not specified | $7,223/semester |
| Syracuse University | Master of Science in Business Analytics | Not specified | $1,443/credit |
| Brigham Young University | Masters in Information Systems | 1-2 years | $5,821/semester |

Sources: Individual school websites and http://grad-schools.usnews.rankingsandreviews.com/best- graduate-schools/top-science-schools/computer-systems-rankings

**COUNCIL OF HAWAII**

Members of the Board of Regents
University of Hawai'i

February 23, 2019

*Subject: Letter of Support for the Master of Science in Information Systems proposed by the Department of Information Technology Management (ITM), Shidler College of Business*

Dear Distinguished Members:

On behalf of the CIO Council of Hawai'i, I am writing this letter to support the application of the Shidler College of Business to offer a Master of Science in Information Systems (MSIS), scheduled to debut in Fall 2019, if approved.

The CIO Council of Hawai'i includes the Chief Information Officers (CIOs) and other information technology (IT) leaders from public, private, business, and nonprofit organizations in Hawai'i and was formed to provide members a cooperative educational forum for information sharing and networking. One of the issues identified in 2014 was the need for Council members to better articulate what our organizations are needing in new graduates from the institutions of higher education in the State of Hawai'i and to foster a better relationship with these organizations, including the University of Hawai'i (UH), and to establish lines of communications to convey these needs.

Over the last four years, the CIO Council has established a close relationship with the UH and the Shidler Department of Information Technology Management (ITM) to exchange information and to learn about ITM's plans and direction and to provide relevant feedback. The Council has also provided annual scholarships and mentorships to ITM students to help better align the expectations of graduates and employers of these graduates.

Given the rapid changes in information technology and the belief that the needs of employers could be better addressed by our institutions of higher education, the CIO Council has anxiously followed the development of the MSIS Program. We believe that the MSIS is a way to provide our State with an IT workforce equipped with knowledge and skills beyond the bachelor level. In addition to the 4+1 program allowing students to acquire this knowledge and skills through an additional year, the proposed MSIS would also help support the continuing education needs of the incumbent IT workforce in the State.

To compete in an increasingly competitive world driven by digital transformation, the CIO Council endorses the offering of a MSIS at the University of Hawai'i with the hope to grow and retain the best IT talent in Hawai'i.

Yours sincerely,

Alan S. Ito, Board Chair
CIO Council of Hawai'I | https://medium.com/cio-council-of-hawaii | alan.ito@hawaiipacifichealth.org

## Master of Science in Marketing Management

### I.  Program Purpose and Outcomes

#### A.  Purpose of Program in terms of Meeting Student, Community, State Needs

The proposed Master of Science in Marketing Management (MSMM) is a full-time one-year non-thesis, Plan B marketing graduate degree program that requires 30 credits to complete. Developed and managed by the Shidler College of Business Department of Marketing in cooperation with the Executive Education unit within the College, the MSMM program will meet the need for more highly trained marketing managers in the State.

Given the size and importance of our State's travel, retail, and other service industries, there is a pressing need for marketing managers who understand the importance of building long-term customer relationships through continuous quality improvement and perceived value. Though a BBA in Marketing represents a very useful entry-level degree for many positions in the field, increasing competition and a rapidly changing economic environment require higher levels of marketing knowledge for success.

In addition, as noted in this proposal, starting salaries for marketing managers with Masters' degrees are significantly higher than starting salaries for graduates with BBA degrees only. Furthermore, many students in fields such as health care, social work, communication, and others would greatly benefit from having a Master's degree in marketing. Some may be recent graduates, others more experienced professionals who correctly believe that advanced marketing training will help them excel in their current and future positions.

Finally, in today's global world, it is important to consider ways to continue attracting foreign students who will bring diverse perspectives and experiences to the classroom. The MSMM will no doubt attract many foreign students who are interested in obtaining a professional business degree in the U.S. in a reasonable amount of time. Hence, on multiple fronts, the proposed MSMM will meet student, community and State needs.

#### B. Expected Program Outcomes

The proposed MSMM program will provide students with in-depth knowledge in the principles and practices of marketing and broaden their opportunities to work in marketing-related careers. A single cohort track is currently envisioned with services marketing management and brand management as curriculum content emphases. The overall objective of the program is to provide Hawai'i resident students and others with more extensive marketing management knowledge and training that will lead to higher level and more lucrative positions within the private and public sectors. In pursuit of this objective, graduates of the MSMM Program will have:

1

1.   A deep understanding of the important role that ethical and sustainable marketing management play in enabling business and non-profit organizations in Hawai'i and beyond to establish long-term, mutually beneficial relationships with customers;

2.   The ability to analyze the interaction of marketing and social, technological, economic, and political forces on organizations' strategies and tactics;

3.   Skills in marketing research and data analytics that are critical to scientific collection and analysis of primary and secondary data that will enable organizations to build their brand;

4.   The technical know-how needed to apply data analytics in order to improve employment of segmentation tools to improve interactions with key target markets, while successfully positioning the brand in the marketplace;

5.   A broad understanding of customer buying behavior, for example, knowledge of the different stages in the buyer decision process and the role that professional sales plays in many buying situations, particularly those that involve business-to-business transactions;

6.   Expertise regarding the new-product development process and the challenges faced by smaller entrepreneurial firms seeking to promote adoption and diffusion of their innovative goods and services;

7.   An in-depth appreciation of the role of integrated marketing communications, for example, advertising, sales promotion, public relations, personal selling, and internet marketing/social media, in effective brand management;

8.   Clear insights into ways to practice marketing management in ethical and sustainable ways that are responsive to relevant social criticisms of marketing;

9.   A strong ability to apply the knowledge, concepts, and tools critical to effective management of marketing opportunities and challenges in a global context.

## C. Program Fit with the UH System/Campus Mission & State Need

### 1. Alignment with UH System Mission and Academic Master Plan as well as Campus Mission and Academic Plan

The proposed MSMM program is aligned with the Hawai'i Graduation Initiative (HGI) Goal, which seeks to increase the educational capital of the state by increasing the participation and completion of post-secondary degrees by students, particularly Native Hawaiians, low-income students, and those from underserved regions and populations and preparing them for success in the workforce and their communities. It is also consistent with HGI Action Strategy 3 in that the program anticipates and aligns curricula with community and workforce needs as well as with Hawai'i Innovation Initiative Goal 2, which calls for the creation of more high-quality jobs and diversification of Hawai'i's economy.

Furthermore, the proposed MSMM program will align with of the University's six-year strategic direction, in particular, Hawai'i Innovation Initiative (HI2), the goal of which is to "create more high-quality jobs and diversify Hawai'i's economy by ...innovation, research, education and training enterprise that addresses the challenges and opportunities faced by Hawai'i and the world..." (University of Hawai'i Strategic Directions, 2015–2021). The proposed MSMM program aims to provide our students with knowledge of cutting-edge marketing theory and skills that will help address the contemporary challenges in many industries of Hawai'i.

In addition, the proposed program is aligned with the Integrated Academic and Facilities Master Plan. "UH Mānoa must also continue to meet the professional workforce needs of Hawai'i in areas such as education, medicine, nursing, law, business, social work and engineering," (page 4). Finally, through planned coordination with UH Manoa undergraduate programs, the proposed degree addresses the implications for the University's graduate enrollment management as well, which states: "Graduate enrollment management should focus particularly on attracting the best students to UH Mānoa graduate and professional programs defined as strategic. UH Mānoa can also do more to recruit UH undergraduates into some of its graduate programs, particularly master's degree programs," (page 5).

2.  **Continuing Need for Program, Projections of Numbers of Graduates as well as Graduate Education Opportunities for Those Completing the Program**

At present, the Shidler College of Business offers the MBA - a "generalist" degree without functional concentrations. Demand for specialized programs focused on functional areas such as accounting, finance, information technology, marketing, and management has increased significantly over the past several years. As a result, such programs are either complementing or even replacing traditional MBA programs. These specialized graduate programs require little or no work experience and thus attract new undergraduates and international students who want to obtain additional skills and become more competitive in the marketplace. The programs are also popular with industry practitioners, who want to increase their understanding of and ability to use the most current theories and technologies in their respective fields.

The MSMM Program is expected to graduate approximately 20 students per cohort. Full-time student cohorts will run from mid-August to early mid-August of the following year (12-month program, 30 credit hours, fall – 9-12 credit hours; spring – 9-12 credit hours; summer 1 – 3-6 credit hours; summer 2 – 3-6 credit hours). Hence, the predicted steady state is approximately 20 students per year.

Should students desire to continue their graduate education, they will have the option to apply for admission to a PhD program with a specialty in marketing at the Shidler College of Business or some other graduate program in business. It's conceivable that graduates could also decide to apply for admission to our Global MBA, Executive MBA, or some other MBA program. However, given the solid business core, a BBA coupled with an MSMM degree is likely to limit the advantage of also obtaining an MBA due to repetition of coursework.

### 3. Market Analysis of Need for Program

Understanding and addressing customer problems more effectively than other market competitors is increasingly critical to long-term success of the firm or organization. Because of increasing competition, demand at the national level for professionals with master's level marketing knowledge and skills is strong and growing. Within all sectors of Hawai'i's economy, marketing managers with advanced training will improve the profitability of their firms or the contributions of their social organizations. As a result, the need for highly trained marketing managers will continue to grow. At present, given knowledge and skill levels required for marketing managers, obtaining a professional position following completion of a BBA in marketing with a clear career path is not straightforward. Advanced training at the master's level will increase opportunities for graduates as the degree will squarely address the need for professionals with sophisticated customer and brand management understanding and skills.

Appendix A lists information regarding advantages of having a Master's of Science in Marketing Management (versus a BBA in Marketing) in terms of job opportunities and income.

Appendix B provides examples of positions that are available to business school graduates with bachelor's versus master's degrees in marketing.

Appendix C provides examples of similar master's programs in marketing at leading U.S. universities.

Appendix D describes course offering in the proposed MSMM.

Appendix E presents the results of a small sample survey of current marketing junior and senior majors. The results provide a preliminary indication of positive demand for the MSMM.

### 4. Program Responsiveness to Unique and Outstanding Resources of UH

The Shidler College of Business is uniquely positioned to deliver an outstanding educational experience through the proposed MSMM. The Department of Marketing is highly productive in terms of cutting-edge research published in leading business and social science journals. Its Faculty offer a wide variety of marketing courses from brand management to internet marketing to sales management to marketing for new ventures and as such has a great depth of experience providing state-of-the-art marketing management education. The graduate courses planned for the MSMM (please see Appendix D) take advantage of that breadth and depth of experience. In addition, the diversity of our Faculty in terms of their own life experiences and home cultures indicates that students in the MSMM will gain a wide-ranging view of the marketplace with cases and practical applications from throughout the Asia Pacific Region. And, of course, the University of Hawai'i overall offers a tremendous level of social, economic, and cultural education experiences that are essential to effective marketing management in today's global economy.

## 5. How Program Meets Basic Education Needs Demanded by Hawai'i Residents

Targeted student pools in Hawai'i are expected to come from the undergraduate UH system and overall Hawai'i population. Marketing, management, psychology, and economics majors will receive advanced marketing training and will develop conceptual understanding and applied skills that will enhance their professional abilities and appeal on the job market. In addition, such skills are sorely needed for both employers and employees in Hawai'i.

However, an important aspect of a graduate education in our State is exposure to diversity of cultures and life experiences. Hence, we are excited by the prospect of strong international student enrollment in the MSMM program, especially from East and Southeast Asia where marketing management is increasingly in demand as economies develop and move from industrial production to service and consumption-based. Third, UHM's foreign university partners in the 3+2 program where students can enroll in the MSMM program after their senior year.

## II. Program Organization

### A. Curriculum organization, total credits to complete the program including all prerequisites requirements, admission policies, advising, and other aspects of the program, with reference to its goals/outcomes.

The proposed Master of Science in Marketing Management (MSMM) is a full-time, one-year non-thesis, Plan B marketing-graduate-degree program that requires 30 credits to complete. Up to 9 credit hours of marketing-related coursework (including one 400-level and two 600-level courses) taken as an undergraduate within the Shidler College of Business in the final two semesters (or summer sessions) at UH Manoa will be allowed to be used toward the 30-credit-hour requirement, provided a minimum of 141 credits total for both bachelor's and master's degrees with a minimum of 21 hours of master's coursework (inclusive of thesis or capstone hours) not double counted. Details of the potential pathway under Manoa's combined bachelor's/master's programs guidelines will be discussed and potentially approved by the Department of Marketing and the Office of the Vice Chancellor for Academic Affairs at a later date, assuming approval of the overall program by the campus and Board of Regents.

The MSMM program will provide students with in-depth knowledge in the principles and practices of marketing and broaden their opportunities to work in marketing-related careers. Courses will be organized into three core sections, each of which comprises an important body of knowledge for future marketing managers with an advanced degree: (1) Marketing Tools; (2) Marketing Strategy; and (3) Brand Management.

The first core area provides students with a deeper understanding of and ability to use marketing research, data analytics, customer relationship management databases, and other technical tools that are essential to successful marketing management in the 21st century. A ready example involves enhancing students' ability to analyze social media metrics to determine the success or failure of a viral brand communications campaign. The second area looks at topics related to longer-term strategic management issues such as the latest thinking

and approaches to services management, expansion into global markets, and salesforce organization, training, and support. Finally, the brand management core area offers courses that hone program participants' knowledge of customer psychology and effective two-way communications that build long-lasting relationships between firms and their publics. Throughout all courses, sustainable marketing practices, cross-national considerations, and ethical management will be emphasized.

All applicants will be required to have earned an undergraduate cumulative GPA of 3.0 or better at the time of application; submit an acceptable GMAT or GRE score (e.g., 40 percentile or better on all test components, taken within the past 5 years); and for foreign students, submit an acceptable TOEFL (e.g., 600/250/100 for paper, computer, internet) or IELTS (e.g., 7) taken within the last 2 years. Applicants who fall below any of the required minimums may be considered under special circumstances by the Department's MSMM Admissions Committee.

An MSMM faculty director will oversee admissions, in conjunction with the Shidler College of Business Graduate Student Office and an admissions sub-committee of Marketing Faculty. The faculty director will advise newly admitted students in course selection and progression through the program. The faculty instructor for the Capstone class in spring/summer will oversee the student capstone experience.

## III. Student Demand

### A. Profile of students who will likely enroll in the program, including discussion of the likelihood of the program attracting new students to the campus or existing students.

The program will attract recent graduates of the University of Hawai'i, recent graduates of other higher education institutions in Hawaii and throughout the United States, and experienced professionals who correctly believe that advanced marketing training will help them excel in their current and future positions. The program will also attract foreign students who are interested in obtaining a professional business degree in the U.S. in a reasonable amount of time.

### B. Evidence of student interest (i.e. needs assessment)

Appendix C offers examples of U.S. Universities with MS in marketing programs. The enrollment data and acceptance rates suggest that there is student interest in a MS in marketing. The program expectation of 20 students per MSMM cohort is well below that of many of the sample universities with MS in marketing programs. In addition, Appendix D presents the results of a small sample survey of current Marketing junior and senior majors at the Shidler College of Business. The findings provide a preliminary indication of positive demand for the MSMM.

**C. Estimate number of MSMM students majors per year with an explanation on how this number was determined.**

| | Previous Year | Current Year | Projected Years | | | |
|---|---|---|---|---|---|---|
| | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 |
| **ENROLLMENT** (Fall Headcount) | | | | | | |
| Projected: MS in Marketing | | n/a | 20 | 25 | 25 | 25 |
| BBA Marketing | 161 | 209 | 200 | 200 | 200 | 200 |
| MBA, PhD Business Admin | 260 | 220 | 220 | 220 | 220 | 220 |
| **COMPLETION** (Annual) | | | | | | |
| Projected: MS in Marketing | | n/a | n/a | 20 | 25 | 25 |
| BBA Marketing | 98 | 115 | 115 | 115 | 115 | 115 |
| MBA, PhD Business Admin | 147 | 130 | 130 | 130 | 130 | 130 |

The MSMM Program is expected to graduate approximately 20 students per cohort. Full-time student cohorts will run from mid-August to early mid-August of the following year (12-month program, 30 credit hours, fall- 9-12 credit hours; spring – 9-12 credit hours; summer 1 – 3-6 credit hours; summer 2 – 3-6 credit hours. Hence, the predicted steady state is approximately 20 students per year.

IV. **Program Resources and Efficiency**

A. **Resources required for program implementation and first cycle operation.**

1) **Number, source, and cost of faculty; library requirements; support personnel; estimated cost of supplies, equipment and CIP; facilities to be utilized.**

| CURRENT ACADEMIC PERSONNEL | Current Year |
|---|---|
| Current Faculty FTE | 8 |
| Current Faculty Salaries ($) | 1,315,272.00 |
| Current Lecturers ($) | 319,748.70 |
| Current Graduate TAs | 5 |

a. Faculty: No additional FTE is needed if enrollment is 40 or less. Some of the elective courses will be taught by adjunct lecturers

b. Library resources: The students in the proposed MSMM program will use existing resources also prescribed at the College and University.

c. Physical resources: The proposed MSMM program will fully utilize the current facility and resources such as classrooms. Any additional resources needed should be fully covered by the revenue generated by the program.

d. Other resources required: The proposed MSMM program is expected to share administrative staff with other Shidler graduate programs. The proposed MSMM program will require one program director who will receive a teaching reduction and/or compensation similar to other existing Shidler graduate programs.

**B. Describe the expected sources of funds, including sources of reallocated funds.**

The program will be funded by student tuition. No reallocation of funds is required.

| CURRENT RESOURCES/FUNDING | Current Year |
|---|---|
| Tuition/Special Fund Allocation | 2,896,805.00 |
| General Fund Allocation | 9,550,035.00 |
| Summer Session Allocation | 645,416.00 |
| Program/Course Fee Allocation | 1,027,500.00 |

| TOTAL NEW PROGRAM RESOURCES (These expenses are shared across the 3 proposed Shidler Master's Degrees) | | | | | |
|---|---|---|---|---|---|
| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | |
| Promotional Expenses | $20,000 | $15,000 | $10,000 | $8,000 | |
| Executive Ed Staff Expenses | $10,000 | $12,000 | $15,000 | $15,000 | |
| Outreach Overhead | $30,000 | $30,000 | $30,000 | $30,000 | |
| Total New Resources Needed (for MSMM, MSF, MSIS programs) | $60,000 | $57,000 | $55,000 | $53,000 | TOTAL: $225,000 |

**New Program Resources** (total needed for proposed MS in Marketing Management, MS in Finance, and MS in Information Systems)

- Promotional Expenses: Includes advertising, brochures, fliers and promotional trips.
- Executive Education Staff Expenses: Includes books/lecture materials and computer, network expenses
- Outreach College Overhead: Outreach College administrative fees of $40 per credit student effective through Summer 2017 (assuming same fees).

**C. Compare anticipated cost per SSH, cost per major, SSH/faculty, average class size or other quantitative measures.**

| | Previous Year | Current Year | Projected Years | | | |
|---|---|---|---|---|---|---|
| COURSES, SECTIONS, SSH (Annual) | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 |
| Projected New Courses | | n/a | 2* | | | |
| Projected New Sections | | n/a | 2* | | | |
| Projected New Course SSH | | n/a | 120 | 150 | 150 | 150 |
| Current Courses Offered | 20 | 24 | 24 | 26 | 26 | 26 |
| Current Sections Offered | 30 | 32 | 32 | 26 | 26 | 26 |
| Current Annual SSH | 2,115 | 2,579 | 3,059 | 3,059 | 3,059 | 3,059 |

*New courses include MKT 648 and MKT 650.*

**D. Similar programs at other UH campuses and differences between proposed program and others that may be similar.**

There are no similar programs offered in the UH System. The MBA degree offered by the Shidler College of Business is a generalist degree designed for individuals with managerial experience but relatively little formal management education. The MSMM degree will attract students who have less or no management experience but who have a strong interest in further developing their expertise in marketing. Such expertise is known to result in higher paying positions with additional responsibilities (see Appendix B). Given that it is a specialist graduate area of study, it is not possible to obtain similar levels of graduate marketing knowledge and training within the MBA Program. Hence, there is a need for a specialized MSMM.

## V. Program Effectiveness

### A. Plan for assessing the quality of student learning.

The Shidler College of Business is an AACSB accredited business college. As such, it is required to establish and employ systematic measurement of student learning that facilitates continuous improvement of pedagogy and course content to help ensure delivery of a high-quality educational experience. The College maintains a standing Faculty committee, the Learning Assessment Committee, that works with Department Chairs, Program Directors, and the College's Curriculum and Programs Committee to develop and implement such measurement systems. The Department of Marketing is currently working with the College Learning Assessment Committee to develop a similar system for the MSMM Program. Assessment is likely to include analysis of achievement of learning objectives within each of the three core sections of the MSMM through Faculty evaluation of specific central assignments completed by all students in the program. Percentages of students who exceed, meet, or fall below expectations on those assignments will be monitored in the fall semester as well as second summer session and compared from within each cohort and across cohorts. That information will be used by the Faculty Director, Department Chair and Marketing Faculty to make improvements that help better achieve central learning objectives. In addition, student evaluations for every course will be shared with the Faculty Director to enable improvements on the part of individual Faculty within the MSMM Program.

### B. Relevant program accreditation and plans to meet accreditation requirements.

The Shidler College of Business at the University of Hawai'i at Mānoa is accredited by the AACSB International. The MSMM program will follow AACSB International requirements for accreditation as one of the programs offered by the College and will not adversely affect accreditation. If the program has been approved to start in Fall 2019, we will include the program to our next AACSB accreditation in Fall 2020.

**Appendix A: Demand for Master of Science in Marketing Management – November 2016**

From: http://www.marketingdegreetoday.com/careers/

| Requires BBA or Less | Requires BBA or Graduate Degree |
|---|---|
| Advertising Account Executive | Media Planner |
| Campaign Manager | Research Analyst |
| Creative Director | Marketing Communications |
| Marketing Analyst | Brand Management |
| Email Marketing Manager | Web Analytics |
| | Marketing Strategist |
| | Online Marketing |
| | Social Media Manager |
| | Product Management |
| | Product Marketing |
| | Product Planner |
| | Sales |
| | Digital Strategist |

## What Can You Do with a Master's in Marketing?

A master's in marketing degree opens the door to career advancement beyond the entry level, which is one reason why such programs are in high demand. Marketing graduates with a master's degree are well prepared to become advertising, promotions, and marketing managers at institutions public and private. According to the US Bureau of Labor Statistics (BLS), advertising, promotions, and marketing managers make an average annual salary of $108,260 per year and can expect a job growth rate of 14% from 2010 to 2020.[1]

With a master's degree and adequate work experience, marketing professionals are prepared to work as top executives overseeing and managing the marketing and advertising efforts of an organization. According to the BLS, general and operations managers and executives earn a median annual salary of $94,400, while chief executives earn an average of $165,080.[2] The job growth rate for all top executives is expected to be 5% between 2010 and 2020.[2]

A master's degree can also equip professionals to teach as adjunct faculty at postsecondary institutions, especially with previous work experience. The BLS reports that the average annual salary of postsecondary teachers is $62,050 per year, and anticipates job growth in this field to reach 17% between 2010 and 2020.[3]

1. Bureau of Labor Statistics: http://bls.gov/ooh/management/advertising-promotions-and-marketing-managers.htm
2. Bureau of Labor Statistics: http://bls.gov/ooh/management/top-executives.htm
3. Bureau of Labor Statistics: http://bls.gov/ooh/education-training-and-library/postsecondary-teachers.htm

From: http://study.com/articles/Jobs_and_Salary_Info_for_a_Masters_Degree_in_Marketing.html

| Career | Marketing Manager | Advertising and Promotions Manager | Sales Manager | Public Relations Manager |
|---|---|---|---|---|
| Education Requirements | Master's degree in marketing may be preferred; bachelor's degree required | Master's degree in marketing may be preferred; bachelor's degree required | Master's degree in marketing may be preferred; bachelor's degree required | Master's degree may be preferred by some employers; bachelor's degree required |
| Projected Job Growth (2014-24)* | 9% | 5% | 5% | 7% for public relations and fundraising managers |
| Median Salary (2015)* | $128,750 | $95,890 | $113,860 | $104,140 for public relations and fundraising managers |

Source: U.S. Bureau of Labor Statistics (BLS)

From: http://www.bls.gov/careeroutlook/2015/article/should-i-get-a-masters-degree.htm#Business

**Table 1. Selected business occupations in which workers with a master's degree earned a premium over workers with a bachelor's degree, 2013**

| Occupation | Employment with bachelor's degree | Percent with bachelor's degree | Employment with master's degree | Percent with master's degree | Median annual wage for bachelor's degree | Median annual wage for master's degree | Wage premium amount | Wage premium percent |
|---|---|---|---|---|---|---|---|---|
| Market research analysts and marketing specialists | 114,105 | 54% | 49,705 | 23% | $65,000 | $90,000 | $25,000 | 38% |
| Marketing/ sales mgrs. | 380,429 | 51% | 125,900 | 17% | $80,000 | $110,000 | $30,000 | 38% |

From: https://www.linkedin.com/pulse/20130528135012-11281694-please-think-twice-before-getting-your-master-s

Marketing is one of the few fields in which holding a master's degree will bump up a person's salary significantly (around 15% above average). Also, if the master's is discernibly different from your undergrad (such as having an Economics master's on top of a bachelor's in Biology), the value actually goes up.

From: http://www.cbsnews.com/media/10-careers-where-a-masters-degree-pays-off/7/

Marketing Directors with a master's degree earn an average of $98,849.61 while those holding the same position with only a bachelor's degree earn an average of $79,133.73. In other words, Marketing Director's with a master's earn 19.5% more than Marketing Directors with only a bachelor's degree.

From: https://www.goodcall.com/news/how-much-more-can-you-make-with-a-masters-degree-01529

People in "marketing and marketing research" with a bachelor's degree earn, on average, $63,000. People in the same field with a master's earn, on average, $81,000.

**Appendix B: Data from Payscale re: Top Employers, Average Salary, and Positions for BBAs and Masters' degrees in Marketing**

From: https://www.payscale.com/research/US/Degree/Business-Management-Marketing

Accessed January 29, 2019

The following information was gathered from Payscale.com. Payscale users provide the website with information regarding their education, jobs, and salaries. Payscale uses these data to generate reports on the types of jobs and salaries that are possible for people with a specific degree. Payscale updates their reports frequently as more data are collected from its users.

## Bachelor of Business Administration (BBA), Marketing Degree

Avg. Salary- $58K

**Top Employers**

- Amazon.com Inc
- International Business Machines (IBM) Corp.
- Target Corporation
- C. H. Robinson Worldwide, Inc.

| Job | Average |
|-----|---------|
| Marketing Manager | $60,167 |
| Marketing Coordinator | $41,908 |
| Marketing Director | $79,132 |
| Marketing Specialist | $48,284 |
| Account Manager | $51,071 |
| Account Executive | $47,341 |

| Job | Average |
| --- | --- |
| Marketing Associate | $45,989 |

## Master of Science (MS), Marketing Degree

Avg. Salary- $63K

## Top Employers

- J.P. Morgan Chase & Co. (JPMCC)
- Worcester Polytechnic Institute (WPI)
- HNTB Corporation
- Dish Network Corporation

| Job | Average |
| --- | --- |
| Marketing Manager | $70,726 |
| Marketing Director | $91,370 |
| Digital Marketing Manager | $70,687 |
| Marketing Specialist | $52,142 |
| Marketing Coordinator | $42,876 |
| Data Analyst | $57,131 |
| Account Manager | $54,400 |

## Appendix C: Examples of U.S. Universities with MS in Marketing Programs

| Institutions | Program Type | Duration | Total Tuition | Fulltime Enrollment | Fulltime Acceptance Rate |
|---|---|---|---|---|---|
| Northwestern University (Kellogg) | Integrated Marketing Communications | 15 months | $84,040 | 1,272 | 20.6% |
| Columbia University | Master of Science in Marketing | 3 semesters | $58,020 | 1,287 | 18% |
| University of Texas—Austin (McCombs) | Masters of Science in Marketing | 1 year | Resident: $33,298 Nonresident: $48,822 | 543 | 29.7% |
| Bentley University | Master of Science in Marketing Analytics | 10-13 courses | $4,225 per 3-credit course | 142 | 75.2% |
| Loyola University – Chicago (Quinlan) | Master of Integrated Marketing Communications | 12-15 courses | $4,488 per course | 557 | 45.6% |
| University of Maryland--College Park | Master of Science in Marketing Analytics | 1 year | Resident: $46,140 Nonresident: $58,350 | 190 | 30.8% |
| Florida State University | Master's in Integrated Marketing Communication | 33-36 credit hours | Resident: $479 per credit Nonresident: $1,110 Per credit | 31 | 58% |
| Georgetown University | Master of Professional Studies in Integrated Marketing Communications | 2 years | $39,138 | 519 | 43.3% |
| Johns Hopkins University | Master of Science in Marketing | 1 year | $64,000 | | |

**Appendix D: Proposed** *Master of Science in Marketing Management (MSMM)* **Curriculum**

Up to 6 credit hours may be waived depending on graduate-level course equivalence. Waived courses would be replaced with courses desired by student and approved by MSMM Faculty Director. Students without a BBA in Marketing or BBA in another business discipline must take BUS 312, MKT 311, and MKT 321 as unclassified graduate students prior to formally entering MSMM program. Those with a BBA in another business discipline may waive BUS 312, assuming a grade of B or better in that course.

**A. Marketing Tools Courses (minimum of 9, maximum of 12 credit hours)**

1) Data Analytics and Statistics for Business (BUS 619)

2) Marketing Research/Data Analytics (MKT 655)

3) Digital Transformation with Information Systems (BUS 625) and/or Business Intelligence and Data Analytics (ITM 683)

4) Creativity in Marketing (MKT 656)

**B. Marketing Strategy Courses (minimum of 6, maximum of 9 credit hours)**

1) Services Marketing (MKT 657) or Advanced Marketing Management (MKT 651)

2) International Marketing Management (MKT 653)

3) Sales Leadership (MKT 650)

**C. Brand Management Courses (minimum of 6, maximum of 9 credit hours)**

1) Strategic Brand Management and Marketing Communications (MKT 654)

2) Digital Marketing Management (MKT 658)

3) Consumer Behavior for Managers (MKT 648)

**D. Mkt Consulting Practicum, Mkt Internship, or Other Mkt "Culminating" Experience, e.g., MKT 690 (Advanced Seminar in Marketing - 3 credit hours required of all students)**

*30 total credit hours*

Please Note: Questions Followed Proposed MSMM Program Description and Consent Form

I would like to learn more about the proposed Masters of Science in Marketing Management at the Shidler College of Business.

| # | Answer | % | Count |
|---|---|---|---|
| 1 | Strongly agree | 37.50% | 12 |
| 2 | Somewhat agree | 40.63% | 13 |
| 3 | Neither agree nor disagree | 15.63% | 5 |
| 4 | Somewhat disagree | 3.13% | 1 |
| 5 | Strongly disagree | 3.13% | 1 |
|   | Total | 100% | 32 |

I would consider applying for admission to the proposed Masters of Science in Marketing Management at the Shidler College of Business.

| # | Answer | % | Count |
|---|---|---|---|
| 1 | Strongly agree | 37.50% | 12 |
| 2 | Somewhat agree | 31.25% | 10 |
| 3 | Neither agree nor disagree | 15.63% | 5 |
| 4 | Somewhat disagree | 9.38% | 3 |
| 5 | Strongly disagree | 6.25% | 2 |
|   | Total | 100% | 32 |

I'm very likely to apply for admission to the proposed Masters of Science in Marketing Management at the Shidler College of Business.

| # | Answer | % | Count |
|---|---|---|---|
| 1 | Strongly agree | 15.63% | 5 |
| 2 | Somewhat agree | 37.50% | 12 |
| 3 | Neither agree nor disagree | 21.88% | 7 |
| 4 | Somewhat disagree | 18.75% | 6 |
| 5 | Strongly disagree | 6.25% | 2 |
|   | Total | 100% | 32 |

I'm interested in applying for admission to the MSMM Program for the Fall term starting:

| # | Answer | % | Count |
|---|--------|---|-------|
| 1 | Fall, 2020 | 28.13% | 9 |
| 2 | Fall, 2021 | 3.13% | 1 |
| 3 | Fall, 2022 | 12.50% | 4 |
| 4 | Other Entry Year of Interest (please indicate Fall term year of interest.) | 15.63% | 5 |
| 5 | I'm not interested in applying for admission to the MSMM Program at this time. | 40.63% | 13 |
| | Total | 100% | 32 |

I would like to learn more about the 4+1 MSMM program in which I can take up to 3 graduate-level classes in my senior year that will be applied to the credit requirement for the master's degree.

| # | Answer | % | Count |
|---|--------|---|-------|
| 1 | Strongly agree | 25.00% | 8 |
| 2 | Somewhat agree | 43.75% | 14 |
| 3 | Neither agree nor disagree | 18.75% | 6 |
| 4 | Somewhat disagree | 9.38% | 3 |
| 5 | Strongly disagree | 3.13% | 1 |
| | Total | 100% | 32 |

I would apply to the 4+1 program with the understanding that I would take up to three graduate level classes in my senior year which would be credited toward the MSMM degree, reducing the credits required for the master's degree.

| # | Answer | % | Count |
|---|--------|---|-------|
| 1 | Strongly agree | 18.75% | 6 |
| 2 | Somewhat agree | 46.88% | 15 |
| 3 | Neither agree nor disagree | 21.88% | 7 |
| 4 | Somewhat disagree | 12.50% | 4 |
| 5 | Strongly disagree | 0.00% | 0 |
| | Total | 100% | 32 |

Please share your thoughts regarding the proposed MSMM. You may list as many or as few as you like. Please number each thought.  Thanks!

1. I think the program of MSMM is a great way to target marketing majors and by having students complete this survey will bring more awareness to this program and what it offers.

1. How would students who have already graduated or are graduating in prior Spring and Fall 2018 be able to get into MSMM?

1. This sounds like a great program! How soon can I apply?

1. I think this is a really good idea to implement this for Shidler marketing students. As a double major in marketing and management, I have a strong interest in this because I've thought of enrolling for my master's but there weren't many benefits to pursue this.

1. If I am understanding correctly, students can take classes their senior year of undergrad..but I'm already a senior so that wouldn't be an option for me. 2. I have worked in marketing positions for the last 3 years, and strongly feel that it is important to further education in digital marketing

1. I think it would be a good idea to implement this into Shidler because it will allow marketing students to have further their education in this field.

1. it was just not my interest

1) I think the MSMM will be a very great opportunity for many graduates to broaden the scope and get better jobs in the real world. I would definitely consider it

Sounds like a great program, I'm sure many students would find this program useful for their intended field of study.

1. This is such a good proposal helping to students to get their masters degree in a shorter period of time and less cost as well. 2. You don't have to waste time in taking classes that you barely need because you can take up to 3 classes in your senior year that will count towards your masters degree

1. I think MSMM will definitely be useful and helpful towards my future career as a marketing major. As I knew that we currently don't have master program in marketing, so I am very excited for this program.

1. Seems value-adding!

**I. Program Purpose and Outcomes**

**A. Describe the purpose of the proposed program in terms of meeting student, community or State needs**

The proposed Master of Science in Finance (MSF) is a full-time, one-year, non-thesis, Plan B finance graduate degree program that requires 30 credits to complete. Developed and operated by the Shidler College of Business Department of Financial Economics and Institutions (FEI) in cooperation with the Executive Education unit within the College, the program will provide students in-depth knowledge in the principles and practices of finance and broaden their opportunities to work in finance-related careers.

The financial industry has become increasingly complex in its operations and regulatory requirements. In order to succeed, finance professionals are often required to use large sum of data in conjunction with sophisticated financial processes to analyze and solve problems for organizations in rapidly changing environments. While a BBA in finance represents a useful entry-level degree for many positions in the field, the complexity of contemporary financial and risk management requires systemic and in-depth training on financial theory and practice beyond what is possible within the undergraduate study. As a result, a master degree in finance often becomes a necessary level of academic training for specialized financial careers beyond the entry level.

The financial industry is one of the largest industries in the State of Hawaii and has been growing rapidly. The proposed master in finance program will rigorously recruit students from the Shidler College and the local community and offer them expert training tailored for future global financial markets. These talented individuals will in turn serve in the local real estate, financial services and energy sectors, hence promoting the growth of local economy. In the long run they will also help enhance the economic competiveness of the State of Hawaii.

**B. Identify the program outcomes, what the student will know and be able to do at the completion of the program**

The proposed MSF program builds on the knowledge students develop in an undergraduate finance or related degree program. Upon completion of the MSF program, graduates will be able to achieve the following outcomes.
1. Students will be able to learn advanced theories and best practices in the financial industry in areas such as corporate financial management, banking, investment management, wealth management, and risk management and insurance.
2. Students will learn comprehensive knowledge necessary for obtaining the CFA (Chartered Financial Analyst®), the FRM (Financial Risk Manager™), and/or the CFP (Certified Financial Planner®) certifications that have become golden standards in the

financial industry. These credentials should significantly broaden career opportunities for students in finance-related fields such as Commercial Banking, Financial Planning, Insurance, Investment Banking, Financial Analysis, etc., and they are often the prerequisite for higher paying positions in these industries. Due to the level of difficulties of those exams and the amount of time required for preparation, it is almost impossible for most of BBA students to pass the certification exams prior to graduation.

3. Students will master in-depth knowledge for conducting practical research in the areas of equity valuation, portfolio management, and risk management and insurance.

4. Students will obtain solid foundation in financial management that will be valuable if they pursue further graduate studies such as PhD program in finance.

## C. Describe the fit of the proposed program with system/campus mission and state need

### 1) Alignment with the UH System mission and academic master plan as well as campus mission and academic plan

The proposed MSF program has its objectives consistent with the mission and strategic plan and outcomes of the University of Hawaii. "The primary mission of the University of Hawaii is to provide environments in which faculty and students can discover, examine critically, preserve and transmit the knowledge, wisdom and values that will help ensure the survival of the present and future generations with improvement in the quality of life."

The proposed MSF program is aligned with: 1) the Hawai'i Graduation Initiative (HGI) 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 populations and preparing them for success in the workforce and their communities); 2) the HGI Action Strategy 3 (anticipate and align curricula with community and workforce needs).

The proposed MSF program will also align with of the University's six-year strategic direction. "Hawai'i Innovation Initiative (HI2) Goal is to create more high-quality jobs and diversify Hawai'i's economy by ...innovation, research, education and training enterprise that addresses the challenges and opportunities faced by Hawai'i and the world..." (University of Hawai'i Strategic Directions, 2015–2021). The proposed MSF program aims to provide our students with knowledge of cutting-edge finance theory and skills that will help address the contemporary challenges in the financial industry of Hawai'i.

The proposed program is aligned with the Integrated Academic and Facilities Master Plan. "UH Mānoa must also continue to meet the professional workforce needs of Hawai'i in areas such as education, medicine, nursing, law, business, social work and engineering," (page 4). Finally, you will find that through planned coordination with our undergraduate programs, the proposed degree addresses the implications for UH Mānoa's graduate enrollment management as well. "Graduate enrollment management should focus particularly on attracting the best students to UH Mānoa graduate and professional programs defined as strategic. UH Mānoa can also do more to recruit UH undergraduates into some of its graduate programs, particularly master's degree programs, (page 5).

2) **Provides evidence of continuing need for the program, projections of the number of graduates, of career and graduate education opportunities for those completing the proposed program, etc.**

Shidler College of Business currently has a full-time MBA program. It is a general degree and does not have distinctive functional concentrations. However, demand for specialized programs focusing on functional areas such as accounting, finance, information technology, marketing, and management has increased significantly in recent years. Unlike the MBA program, the specialized MSF program requires little or no work experience and thus can attract new undergraduate students who wish to obtain broader and in-depth knowledge in finance and to be more competitive in the job market. The MSF program is also appropriate for industry practitioners who want to obtain deeper understanding of theories or up-to-date knowledge in finance.

The MSF program is expected to graduate approximately 20 students per cohort. In addition to industry opportunities in the finance sector, students in the MSF program will also have the option to apply for admission to a PhD program with a specialty in finance at the Shidler College of Business or other universities.

3) **Market analysis of the need of the program by addressing the professional, economic, social and workforce needs of the State of Hawai'i**

Hawaii State has a diverse economy. The service industry, which includes hotels, finance, real estate, and private healthcare, is ranked among the top five industries in the State. As an environmentally friendly industry, the finance sector, especially wealth management, real estate, funds investment, and risk management, has thrived in recent years in Hawaii. In 2015, the employment in the sector of finance, insurance, real estate, rental, and leasing is 46133, accounts for 6.8% of the total employment. (Table 12.14 of the State of Hawaii Data Book, 2016, http://dbedt.hawaii.gov/) The trend has been increasing. Financial companies such as Bank of Hawaii, First Hawaiian Bank, American Savings Bank, are among the state's top 25 employers.

As the flagship campus of the University of Hawaii system, UH Manoa has been the main driving force in the supply of local labor force with advanced education. Shidler College of Business has been providing the state with high quality graduates in all business areas. We expect that the proposed MSF program will have a significant impact over time on satisfying our state's workforce need and stimulating economic growth.

4) **Demonstrates how the proposed program responds to national and international needs where Hawai'i and the University have unique or outstanding resources to respond with quality**

The proposed MSF program will further enhance the reputation of UH Manoa in supplying high quality graduate students in financial management areas to State of Hawaii, Asia-Pacific countries and the U.S. mainland. There is no current graduate program that focuses on finance at UH Manoa. UHM's location and exposure to both Asian and American culture provides a unique

environment for students to learn about American and Asian economies and financial markets, providing them with a competitive advantage in today's job market.

International students graduating from the MSF program will see greater employment opportunities, especially in East and Southeast Asian countries where investment and portfolio management as well as risk management are increasingly in demand as their financial markets grow. UH Manoa has many foreign university partners and the proposed MSF program will offer a unique opportunity for students from partner universities to enroll in the master degree program after their senior year at UHM.

## 5) Meets the basic education needs for which there is a demand by Hawai'i residents

The enrollment of undergraduate students at the Shidler College has been large and steadily growing. The College also has a successful Direct Admit Program (DAP), in which top-tier high school graduating students mostly from Hawaii are directly enrolled in the business program. Many of these undergraduate students are planning to continue their study towards a master degree upon graduation. The proposed MSF program will certainly address their demand.

In addition, undergraduate students from other units in the UH system, such as economics, mathematics and other related majors, will also greatly benefit from attending the MSF program. They will learn theoretical and practical knowledge in financial management. They will obtain the skills that should enhance their marketability in the financial industry.

## II. Program Organization
### A. Provides a description of curriculum organization, total credits to complete the program including all prerequisites requirements, admission policies, advising, and other aspects of the program, with reference to its goals/outcomes.

The proposed MSF program is a full-time, one-year, non-thesis, Plan B finance graduate degree program that requires a minimum of 30-credits to complete. The program will provide students in-depth knowledge in the principles and practices of finance and broaden their opportunities to work in finance-related careers, in areas such as corporate financial management, banking and investment, wealth management, and risk management and insurance. The courses include the foundation courses and functional area courses. The courses will help students to pass the CFA (Chartered Financial Analyst®) exams. In addition, the courses will also help students to prepare for the FRM (Financial Risk Manager™), and/or the CFP (Certified Financial Planner®) certifications. In order to satisfy the requirement of a "culminating experience" for Plan B master's program set by the general Office of Graduate Education, students will complete a research project during the program. Appendix A provides a list of proposed MSF foundation courses and courses in functional areas.

There are two foundation courses that provide essential financial concepts and skills in corporate finance and investment. In addition, there are eight courses in two functional areas. The first functional area is "financial analysis, securities investments and portfolio management," whereas

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the second functional area is "banking, insurance and risk management." Career training will be provided through a series of workshops and internship that will guide and prepare students for taking the necessary steps to transition out of school and into their careers. The workshops will be done during the first semester and they will assist students with focusing their career paths and understanding what is needed to be competitive in their respective industry of choice.

The proposed Master of Science in Finance (MSF) is a full-time one-year non-thesis, Plan B marketing graduate degree program that requires 30 credits to complete. Up to 9 credit hours of finance-related coursework (including one 400-level and two 600-level courses) taken as an undergraduate within the Shidler College of Business in the final two semesters (or summer sessions) at UH Manoa will be allowed to be used toward the 30 credit hour requirement, provided a minimum of 141 credits total for both bachelor's and master's degree with a minimum of 21 hours of master's coursework (inclusive of thesis or capstone hours) not double counted. Details of the potential pathway under Manoa's combined bachelor's/master's programs guidelines will be discussed and potentially approved by the Department of Financial Economics and Institutions and the Office of the Vice Chancellor for Academic Affairs at a later date, assuming approval of the overall program by the campus and Board of Regents. Upon Departmental and Dean's office approval, MSF students may take up to 9 credit hours of related graduate courses in other areas such as information technology, economics, and mathematics, etc.

The admission requires standard test scores such as GMAT or GRE. International students whose first language is not English are required to submit their official TOEFL test scores. The minimum scores for those standardized tests should be comparable to other Shidler graduate programs such as MBA program. Admission requirement also includes an undergraduate cumulative GPA of at least 3.0 at the time of application. The prerequisites for the program are college level mathematics and statistics. Students with deficiency in prerequisites will be directed to take relevant courses in the first semester of the program. Applicants who do not meet the requirements may be considered under special circumstances by the MSF Admissions Committee.

An MSF faculty director will oversee admissions, in conjunction with the Shidler College of Business Graduate Student Office and an admissions sub-committee of MKT Faculty. The faculty director will advise newly admitted students in course selection and progression through the program. The faculty instructor for the Capstone class in spring/summer will oversee the student capstone experience.

## III. Student Demand
**A. Profile of students who will likely enroll in the program, including a discussion on the likelihood of the program attracting new students to the campus or existing students**

The target student pool will mainly come from three fronts:

First, Shidler College undergraduate students in their senior year, particularly the students in the

DAP program (Direct Admit Program). We expect a 4+1 program to be attractive to outstanding Shidler undergraduate students who wish to obtain extensive training in finance subject.

Second, international students, especially those from East and Southeast Asia where investment and portfolio management as well as risk management are increasingly in demand as their financial markets grow.

Third, undergraduate students from the UH system or other U.S. universities in economics, mathematics and other related majors who have solid quantitative training will benefit from attending a one-year MSF program to obtain thorough knowledge in finance and to make them more marketable in the financial industry.

Fourth, UHM's foreign university partners in the 3+2 program, whose students can enroll in the MSF program after their senior year.

## B. Provides evidence of student interest (i.e. needs assessment)

As Bloomberg Business reported[1], a major asset of a MSF degree is the length of completion time. While MBA programs take two-to-three years, students can earn a Master's in Finance in just one year. That means it is more affordable. Furthermore, financial positions are changing and many professionals with MBAs are going back to school to get a Master's in Finance as well to hedge their bets. The types of jobs available with a Master's in Finance are usually in financial management including Commercial Banking, Financial Planning, Insurance Specialists, Investment Banking, Financial Analysis, and Brokers, among others.

The financial crisis in 2008 has demonstrated a much greater need for measuring and managing risks in finance and corporations. Today's financial industry has a big demand for training in risk management, compliance, asset management and financial modeling using Big Data. The job market is hot for graduates of Master of Science in Finance programs. For example, in 2015, 78 percent of employers planned to match or exceed their hiring of finance graduates compared to 2014, and demand is expected to remain strong, according to a study by the Graduate Management Admission Council[2]. The major financial media have reported that the financial crisis have led to more interests in specialized financial training[3].

The Department of Financial Economics and Institutions conducted a MSF interest survey among all Shidler undergraduate students taking "finance", "real estate", and "insurance" classes in fall 2017. There are 196 students who completed the survey. Of them, 89 (or 45% of the

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[1] http://www.gradschoolhub.com/faqs/types-jobs-masters-finance/

[2] http://www.washingtonpost.com/sf/brand-connect/grad-guide-finance-heats-up/

[3] For example, see Financial Times, June 19, 2016, "Experiences of 2008 crisis have led to more interests in financial training." According to the article, "new regulations, new methods of delivery or alternative business models enabled by new technology have been good news for those providing financial training degree courses. A masters in finance is seen as more attractive to graduates because they can get a "deeper dive" into the subject and at a lower cost than with an MBA."

respondents) indicated that they were interested in the proposed MSF program. Among those students who are interested in MSF, 54 (or 61%) are from Hawaii. Furthermore, 58 (or 65%) said they planned to work in Hawaii. These survey data suggest that there is a potential demand for the MSF program among Hawaii students currently enrolled at Shidler. In the meantime, a majority of those students who are interested in the MSF program intend to work in Hawaii, implying that the proposed MSF program will potentially make positive contribution to the quality of local labor force in the financial industry.

Appendix B provides some online information about the demand and compensation for professionals with Master's level finance knowledge and skills. Appendix C provides a partial list of MSF programs in major US universities. Appendix D is MSF interest survey and the summary results.

**C. Includes an estimated number of majors per year with an explanation on how this number was determined.**

| | Previous Year | Current Year | Projected Years | | | |
|---|---|---|---|---|---|---|
| | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 |
| **ENROLLMENT** (Fall Headcount) | | | | | | |
| Projected: MS in Finance | | n/a | 20 | 25 | 25 | 25 |
| BBA in Finance | 181 | 199 | 190 | 190 | 190 | 190 |
| MBA, PhD Business Admin | 260 | 220 | 220 | 220 | 220 | 220 |
| **COMPLETION** (Annual) | | | | | | |
| Projected: MS in Finance | | n/a | n/a | 20 | 25 | 25 |
| BBA in Finance | 127 | 127 | 127 | 127 | 127 | 127 |
| MBA, PhD Business Admin | 147 | 130 | 130 | 130 | 130 | 130 |

The MSF program is expected to graduate approximately 20 students per cohort. Full-time student cohorts will run from mid-August to early mid-August of the following year (12 –month program, 30 credit hours in total, 9 to 12 credit hours in fall semester; 9-12 credit hours in spring semester; 3-6 credit hours in summer 1; 3-6 credit hours in summer 2). The estimated number of students is based on the interest survey of Shidler undergraduate students and estimated enrollment of students from U.S. mainland and international universities.

## IV. Program Resources and Efficiency
### A. Describe resources required for program implementation and first cycle operation.
**1) Number, source, and cost of faculty; library requirements; support personnel; estimated cost of supplies, equipment and CIP; facilities to be utilized.**

a. **Faculty (existing and new FTEs):** No additional FTE is needed if enrollment is 40 or less. Some of the elective courses will be taught by adjunct lecturers.

| CURRENT ACADEMIC PERSONNEL | Current Year |
|---|---|
| Current Faculty FTE | 15 |
| Current Faculty Salaries ($) | $2,736,408.00 |

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| | |
|---|---|
| Current Lecturers ($) | $ 67,847.65 |
| Current Graduate TAs | 5 |

**b. Library resources (estimate of current resources and additional resources required):** The students in the proposed MSF program will use extensively existing Bloomberg terminals as well as other financial databases already available at the Shidler College and UH Manoa library.

**c. Physical resources (space, equipment, etc.):** The proposed MSF program will fully utilize the current facility and resources such as classrooms and financial databases. Any additional resources needed should be fully covered by the revenue generated by the program.

**d. Other resources required (staff, graduate assistantships, etc.):** It is expected that the proposed MSF program will share administrative staff with other Shidler graduate programs. The proposed MSF program will require one program director who will receive teaching reduction and/or compensation similar to other existing Shidler graduate programs.

**B. Describe the expected sources of funds, including sources of reallocated funds.**
The program will be funded by student tuition. No reallocation of funds is required.

| TOTAL NEW PROGRAM RESOURCES (These expenses are shared across the 3 proposed Shidler Master's Degrees) | | | | | |
|---|---|---|---|---|---|
| | **2019-20** | **2020-21** | **2021-22** | **2022-23** | |
| Promotional Expenses | $20,000 | $15,000 | $10,000 | $8,000 | |
| Executive Ed Staff Expenses | $10,000 | $12,000 | $15,000 | $15,000 | |
| Outreach Overhead | $30,000 | $30,000 | $30,000 | $30,000 | |
| **Total New Resources Needed** (for MSMM, MSF, MSIS programs) | **$60,000** | **$57,000** | **$55,000** | **$53,000** | **TOTAL: $225,000** |

**New Program Resources**
(Total needed for proposed MS in Marketing Management, MS in Finance, and MS in Information Systems)

- Promotional Expenses: Includes advertising, brochures, fliers and promotional trips.
- Executive Education Staff Expenses: Includes books/lecture materials and computer, network expenses
- Outreach College Overhead: Outreach College administrative fees of $40 per credit student effective through Summer 2017 (assuming same fees).

**C. Compare anticipated cost per SSH, cost per major, SSH/faculty, average class size or other quantitative measure with other programs in the college.**

| | Previous Year | Current Year | Projected Years | | | |
|---|---|---|---|---|---|---|
| COURSES, SECTIONS, SSH (Annual) | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 |
| Projected New Courses | | 0 | 0 | 0 | 0 | 0 |
| Projected New Sections | | 0 | 0 | 0 | 0 | 0 |
| Projected New Course SSH | | 0 | 0 | 0 | 0 | 0 |
| Current Courses Offered | 32 | 34 | 34 | 34 | 34 | 34 |
| Current Sections Offered | 36 | 41 | 41 | 41 | 41 | 41 |
| Current Annual SSH | 2,037 | 2,521 | 3,001 | 3,001 | 3,001 | 3,001 |

**D. List similar programs at other UH campuses and describe how the proposed program differs or is similar to these programs. Provide rationale for the new program if there are similar existing program(s).**

There are no similar programs offered in the UH System. The MBA degree offered by the Shidler College of Business is a generalist degree designed for individuals with work experiences but relatively little formal management education. The proposed MSF program will attract students who have less or no work experience but who have a strong interest in obtaining comprehensive and in-depth knowledge in finance, ideally completing one or more certifications in the financial management field. The master degree will help students obtain higher paying positions with additional responsibilities. Given that the program is a special area of graduate study, it is not possible to obtain similar levels of training within the MBA Program. Hence, there is a need for a specialized finance master program.

## V. Program Effectiveness
### A. Describe the plan for assessing the quality of student learning.

The proposed program will be assessed relative to the best MSF programs offered by academic institutions on the mainland. Graduating students will be surveyed to provide constant feedback on how to improve the programs content. The Shidler College of Business is an AACSB accredited business college. Therefore, the college is required to establish and employ systematic measurement of student learning that facilitates continuous improvement of pedagogy and course content to help ensure delivery of a high quality educational experience. The College maintains a standing Faculty committee, the Assurance of Learning Committee, that works with Department Chairs, Program Directors, and the College's Curriculum and Programs Committee to develop and implement such measurement systems. The Department of Financial Economics and Institutions will work with the College Assurance of Learning Committee to develop a similar system for the MSF Program. The assessment is likely to include analysis of achievement of learning objectives within each of the core concentrations of the MSF program. Achievement indicators may include, for example, the number of students who pass the various certifications examinations. In addition, student evaluations for every course will be shared with the Faculty Director to enable improvements on the part of individual Faculty within the MSF Program.

**B. Identify relevant program accreditation and plans to meet accreditation requirements.**

The Shidler College of Business at the University of Hawai'i at Mānoa is accredited by the AACSB International. The MSF program will follow AACSB International requirements for accreditation as one of the programs offered by the College and will not adversely affect accreditation. If the program has been approved to start in Fall 2019, we will include the program to our next AACSB accreditation in Fall 2020.

**Appendix A: Proposed Master of Science in Finance (MSF) Curriculum**

(All courses listed below are existing courses in UHM catalog)

1. **Foundation Courses in Corporate Finance and Investments**

   BUS 629: Managerial Finance
   FIN 634: Investment Analysis and Management

2. **Courses in Functional Areas (courses can be overlapping across functional areas)**

   *Financial Analysis, Securities Investments and Portfolio Management*

   ACC 581: Financial Accounting 1
   FIN 633: Problems in Business Finance
   FIN 653: Portfolio Optimization
   FIN 654: Financial Derivatives
   FIN 655: Financial Forecasting

   *Banking, Insurance and Risk Management*

   FIN 625: International Monetary Systems and Global Financial Markets
   FIN 639: International Banking
   FIN 656: Insurance and Risk Management

3. **Culminating experience**

   Following the requirement of a "culminating experience" for Plan B master's program set by the general Office of Graduate Education, students will complete a research project through consulting practicum, finance internship or other "culminating" experience, e.g., FIN 661 (Research Seminar – 3 credit hours required of all students)

**Appendix B: Descriptive data about demand for Master of Science in Finance Program and Career information**

1) The information below is from http://www.worldwidelearn.com/online-education-guide/business/finance-major.htm

*Finance* Salaries and Career Outlook Data

| Career | Total Employment | Annual Mean Wage | Projected Job Growth Rate |
|---|---|---|---|
| Financial Analysts | 268,360 | $95,320 | 11.7% |
| Financial Managers | 531,120 | $134,330 | 6.8% |
| Loan Officers | 303,870 | $75,170 | 8.1% |
| Personal Financial Advisors | 197,580 | $118,050 | 29.6% |
| Securities, Commodities, and Financial Services Sales Agents | 319,280 | $102,860 | 9.5% |

Source: 2015 Occupational Employment Statistics and 2014-24 Employment Projections, Bureau of Labor Statistics, BLS.gov.

2) The information below is from: http://www.bls.gov/careeroutlook/2015/article/should-i-get-a-masters-degree.htm#Business

**Selected business occupations in which workers with a master's degree earned a premium over workers with a bachelor's degree, 2013**

| Occupation | Employment with bachelor's degree | Percent with bachelor's degree | Employment with master's degree | Percent with master's degree | Median annual wage for bachelor's degree | Median annual wage for master's degree | Wage premium amount(1) | Wage premium percent |
|---|---|---|---|---|---|---|---|---|
| Securities, commodities, and financial services sales agents | 113,110 | 54% | 32,865 | 16% | $90,000 | $170,000 | $80,000 | 89% |
| Financial managers | 400,770 | 41 | 182,678 | 19 | 78,000 | 110,000 | 32,000 | 41 |
| Property, real estate, and community association managers | 92,579 | 27 | 23,380 | 7 | 56,000 | 76,000 | 20,000 | 36 |

Footnotes
(1) The wage premium represents the wage increase for workers with a master's degree over that for workers with a bachelor's degree in the occupation
Source: U.S. Census Bureau, American Community Survey

3) The information below is From: http://www.master-of-finance.org/salary/

The highest Master of Finance salary for Masters in Finance degree holders are vice president for finance positions with a median annual salary range of $170,000. Finance directors and senior financial analysts

can also earn as much as $154,000 and $83,000 in median pay respectively. However, the demand for these top positions is quite narrow. The U.S. Bureau of Labor Statistics reports that jobs for financial managers are expected to grow by 8 percent from 2008 until 2018. This is because of increasing investment complexity, the changing regulatory environment and emerging global finance. Financial managers can earn as much as $99,330 in median salary. Entry level financial analysts earn an average salary of $74,350. These professionals work for banks and retirement funds. They also offer assistance for people who are buying stocks, commodities and bonds. Meanwhile, personal financial advisors earn a median salary of $64,750. These professionals offer advice to help people with their financial and estate planning. High-end insurance underwriters can earn about $126,000 yearly.

4) The information below is from:
https://www.payscale.com/research/US/Degree=Master_of_Finance_(MFin)/Salary#by_Job

Employees with a Master of Finance (MFin) Degree Median Salary by Job

| Job | National Salary Data |
|---|---|
| Financial Analyst | $61,076 |
| Senior Financial Analyst | $82,741 |
| Chief Financial Officer (CFO) | $140,000 |
| Financial Controller | $78,695 |
| Finance Manager | $89,004 |
| Portfolio Manager | $98,920 |
| Vice President (VP), Finance | $135,948 |
| | |
| Country: United States. Currency: USD. Updated: 14 Jan 2017. Individuals Reporting: 428 | |

5) The article below provides description of the demand for MSF graduates. It is from Washington Post BrandStudio (http://www.washingtonpost.com/sf/brand-connect/grad-guide-finance-heats-up/)

The 2008 market meltdown brought big changes to the way banks, investment houses and other players operate in the finance industry. It's brought about a lowered tolerance for risk, along with stricter compliance regulations and accounting controls. The crisis's aftereffects aren't limited to Wall Street—it's changed how finance students prepare for their careers. Industry professionals say demand is strong worldwide for professionals in risk management, corporate finance and asset management.

"The financial crisis demonstrated a much greater need for measuring and managing risks in finance and corporations," said Michael Faulkender, associate professor and director of the Master of Finance program at the University of Maryland's Robert H. Smith School of Business. "Risk management is a hot topic."

Risk is just one subject that graduate finance students will need to conquer to be competitive in today's job market. Training in compliance, asset management and financial modeling using Big Data can also provide a big edge. "There are some pretty consistent skillsets that firms want today," said Allan Eberhart, finance professor and director of the Master of Science in Finance program at Georgetown University.

Outside the Beltway, nationally ranked MS finance programs include Massachusetts Institute of Technology, Princeton, Vanderbilt, Washington University in St. Louis and the University of Southern California. And with business now truly global, institutions that offer world-class postgraduate finance programs can be found all over the map. Top-rated institutions outside the United States include the London Business School, the University of Cambridge and HEC Paris.

**Finance jobs are on the rise**

The job market is hot for graduates of master of finance and master of science in finance programs. Last year, 78 percent of employers planned to match or exceed their hiring of finance graduates compared to 2014, and demand is expected to remain strong, according to a study by the Graduate Management Admission Council.

Several factors are driving this trend. While Wall Street does not traditionally recruit from graduate programs, preferring instead to hire undergraduates for grueling internships, other sectors of the industry more than compensate for that.

Corporations are looking for individuals with advanced financial skills that complement many departments. One student in Georgetown's program is an Anchorage, Alaska-based engineer at a major oil company. He's taking advantage of the school's flexible online options to prepare for a role in the company's portfolio investment unit.

Tech startups are another growing destination for finance graduates. Ride and room-sharing companies and other app-based operations are seeing big growth, fueled by private funding. Currently, there are 147 privately held companies worth more than $1 billion, so-called unicorns, compared to 83 just a year ago. "There's much more private equity and venture capital than there was 10 years ago," Faulkender said.

The unicorns also drive hiring indirectly. Founders and CEOs at those firms often position them for acquisition, and potential buyers need professionals with deep valuation skills. "Valuation is a huge area," Eberhart said. For example, students in Georgetown's MSF program are working with a major, international consulting company to help its executives arrive at a valuation for a tech startup it's considering acquiring.

**Real-world experience attracts employers**

With this kind of hands-on work experience, master in finance students are some of the most sought after postgraduates. "We're focused on experiential learning," Faulkender said. "Our students are working with real companies to solve the situations they're confronting."

Maryland's graduate finance students have worked with the World Bank on mortgage portfolio structuring and with private companies on capital budgeting. Georgetown students went to Africa to help a private bank value its various services across the continent. "These are not book reports where everybody claps politely," Eberhart said. "Our students built this incredibly complex model."

**The numbers on paper**

MF and MSF programs typically take about one to two years at between $30,000 to $50,000 per year for tuition and fees. But it's usually well worth it. The average salary increase for Georgetown students is 43 percent, with the median at 65 percent. But students need to be well prepared and have strong backgrounds in math and statistics. The average GMAT score for students entering the University of Maryland's program is 700. "We're able to be very selective," Faulkender said.

Many students have also completed, or will complete, the Chartered Financial Analyst program, which is seen as complementary to an MSF. "Our grads have significantly higher pass rates" on the CFA exam, Faulkender said.

Georgetown's McDonough School of Business also offers executive education and other programs that can be custom tailored for professionals and organizations. Executive MBAs and master's in international business and policy are available in full-time and evening MBA programs. MSB students graduate "global ready," said Chris Kormis, associate dean and chief marketing officer.

Looking ahead, demand for jobseekers with master in finance degrees is expected to remain strong for the foreseeable future, driven by globalization, regulatory reform and the increasing complexity of investment portfolios.

"All of our students were employed after graduation," Eberhart said.

### Appendix C: Examples of U.S. Universities with Master of Science in Finance Programs

| Institutions | Program Type | Start Date | Duration | Total Tuition | Enrollment (2016) | Acceptance Rate |
|---|---|---|---|---|---|---|
| MIT | Master of Finance | 2009 | 1 year; 18 months | $75,850; $100,350 | 114 | 14.6% |
| Boston College | MS in Finance | | 1 year | $48,360 | 77 | 6% |
| New York University | MS in Global Finance (executive) (Joint with HKUST) | 2007 | 1 year | $70,800 | NA | 20% |
| UT – Austin | MS in Finance | 2012 | < 1 year | in/out state: $43,000/48,000 | 50 | 29.7% |
| Univ. of Rochester | MS in Finance | | 11 months | $75,000 | NA | 32.8% |
| Indiana Univ. | MS in Finance (online) | 2002 | 18 months | $38,100 | NA | NA |
| Georgetown | MS in Finance (online) | 2014 | 20 months | $69,760 | NA | NA |
| Notre Dame Univ. | MS in Finance | 2015 | 1 year | $57,100 | NA | NA |
| Univ. of Illinois | MS in Finance | NA | 15 months | $59,364 | NA | 32.1% |
| Michigan State | MS in Finance | 2002 | 1 year | in/out state: $37,500/39,600 | NA | NA |
| Texas A&M | MS Finance | NA | 10-month | in/out state: $31,500/44,600 | 50 | NA |
| University of Utah | MS in Finance | NA | 1-year | Resident / Full-Time: $27,200 Resident / Part-time: $31,000 Non-Resident/International. Full-Time: $46,100 | 88 | NA |
| USC | MS in Finance | NA | 1 year | $66,492 | 65 | 7.7% |

Sources: *US News:* Best Finance Programs (2015) and *Poets&Quants* (www.poetsandquants.com), supplemented by information from university websites and faculty in other universities with MS in finance program.

**Appendix D: MSF Interest Survey Data Summary**

**FEI department conducted an in-class survey for Shidler undergraduate students who are taking "finance (FIN)", "real estate (RE)" and "Insurance (INS)" classes in fall 2017 semester.**

**If a one-year MSF program is offered at Shidler College, would you be interested in applying?**

|  | Number of Students | Percentages |
|---|---|---|
| Total students | 196 | 100% |
| Students interested in MSF | 89 | 45% |
| Students not interested in MSF | 42 | 22% |
| Unsure | 65 | 33% |

**Are you planning on attending graduate school?**

| Yes | 115 | 59% |
|---|---|---|
| No | 74 | 38% |
| Undecided | 7 | 3% |
| If yes, attending |  |  |
| 1) immediately after Bachelor's degree | 26 | 23% |
| 2) after 1-2 years of work | 81 | 70% |
| 3) undecided | 8 | 7% |

**The following data are for those students who are interested in MSF (among those 89 students):**

They are originally from:

|  | Number of Students | Percentages |
|---|---|---|
| Hawaii | 56 | 63% |
| U.S. Mainland | 18 | 20% |
| International | 15 | 17% |

Where they plan to work (some students wrote multiple places):

|  | Number of Students | Percentages |
|---|---|---|
| Hawaii | 58 | 65% |
| Others | 49 | 55% |

The job areas they plan to work in (some student chose multiple areas):

|  | Number of Students | Percentages |
|---|---|---|
| Investment Management | 53 | 60% |
| Wealth Management | 30 | 34% |
| Insurance and Risk Management | 21 | 24% |
| IT Related Finance | 20 | 22% |
| Banking | 2 | 2.2% |
| IB Finance | 1 | 1.1% |
| Corporate Finance | 2 | 2.2% |
| Investment Banking | 1 | 1.1% |
| CFA | 1 | 1.1% |
| Real Estate | 5 | 5.6% |
| Data Analytics | 2 | 2.2% |

| Product Management | 1 | 1.1% |
|---|---|---|
| Marketing/Management | 1 | 1.1% |
| Seeking multidisciplinary programs | 1 | 1.1% |
| Sustainable Environment | 1 | 1.1% |

Gender:

|  | Number of Students | Percentages |
|---|---|---|
| Male | 57 | 64% |
| Female | 32 | 36% |

What year they are in (One student did not answer this question):

|  | Number of Students | Percentages |
|---|---|---|
| Freshman | 0 | 0 |
| Sophomore | 0 | 0 |
| Junior | 8 | 9% |
| Senior | 80 | 90% |

Major in (Some students wrote double majors):

|  | Number of Students | Percentages |
|---|---|---|
| Finance | 76 | 85% |
| Others | 34 | 38% |

The document below is the interest survey distributed to students who are currently taking finance, real estate, and insurance classes in fall 2017.

**Master of Science in Finance Interest Survey**

Please take a few minutes to fill out the following survey. By doing so you will be helping us find out if a Master of Science in Finance is something of interest to you.

**The name of the class you are taking now:**_____ (Note: if you completed this survey in another class, you do not need to fill out this survey again. Thank you for your time!)

Background Information

**GENDER:**     □ MALE     □ FEMALE

**What year are you in:**

   □ Freshman    □ Sophomore   □ Junior   □ Senior

**I was originally from:**

   □ Hawaii    □ U.S. Mainland

   □ International *(Please specify country)*_____

Academic

**Your major (If you have not decided, you can write "undecided")** _____

**Are you planning on attending graduate school?**

   □ Yes     □ No

   *If so, **when do you plan to attending?*** (Please see the other side)

   □ Immediately after my Bachelor's degree

   □ After I work for one or more years

**If a one–year Master of Science in Finance (MSF) program is offered at Shidler, would you be interested in applying?**

(For your information, the MSF is a <u>one-year non-thesis master degree program</u> with 10 courses that focus on advanced corporate finance, accounting, investment and wealth management, insurance, and IT related finance. The MSF program will help students prepare for CFA (Charter Financial Analyst), CFP (Certified Financial Planner), and FRM (Financial Risk Manager) and other certifications that are gold standard credentials in financial industry. The MSF degree will provide you with broad and in-depth knowledge and skills that you need to work in the financial industry beyond the entry level.)

   □ Yes     □ No     □ Unsure

   *If yes, check next to which area you plan to work in?*

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□ Investment Management                □ Wealth Management

□ Insurance and Risk Management        □ IT related Finance

□ Other (please specify) _____

Professional

**Where do you plan on getting a job (e.g., Hawaii, U.S. mainland, foreign countries, etc.)?**


**What industry do you plan on working in when you graduate?**

**Thank you for your time! If you are interested or curious in our Master of Science in Finance program, please include your name and email below. (You may leave them blank)**

NAME _____

EMAIL _____