University of Hawai‘i
Maui College

Provisional to Established
Program Proposal

Bachelor of Applied Science (B.A.S) in
Applied Business and Information
Technology (ABIT)

Date of Proposal: Spring 2012
INTRODUCTION

On May 23, 2003, University of Hawai‘i Maui College (then called UH Maui Community College) submitted a proposal to the University of Hawai‘i Board of Regents to add a single baccalaureate degree in Applied Business and Information Technology (ABIT). The ABIT baccalaureate degree combined two-years of new upper-division coursework, with existing lower-division classes. At their June 2003 meeting, the Board approved the proposal.

In 2004, the Accrediting Commission for Senior Colleges and Universities (ACSCU) approved the ABIT program for Eligibility for Initial Accreditation or Candidacy and in June of 2005 approved the Candidacy of the ABIT program. Under the October 2005 Junior and Senior commissions’ revised policy on Joint Accreditation; the college submitted an ACSCU Special Visit Report to precede the Accrediting Commission for Community and Junior College’s (ACCJC) comprehensive accreditation visit in October 2006. In February 2007, the college submitted its Application for Initial Accreditation report to ACSCU. In March 2007, a combined ACSCU/ACCJC review for Initial Accreditation of the ABIT program took place.

At its June 21-22, 2007 meeting, the ACSCU granted initial accreditation for the ABIT program, retroactively effective May 12, 2007 so that ABIT graduates would receive accredited bachelor’s degrees (Appendix A). This followed a June 6, 2007 letter from ACSCU requesting that University of Hawai‘i Maui College (UHMC) submit a progress report addressing issues raised by the accreditation team report dated April 16, 2007. In response to ACSCU’s request, on May 1, 2009 UHMC submitted an interim report detailing the development of the program since initial accreditation. Subsequently, on June 4, 2009, ACSCU responded to the interim report with commendations and recommendations (Appendix B).

In August 2009 UHMC received approval to offer its second baccalaureate degree, triggering a move from the ACCJC to the ACSCU that was approved by ACSCU effective August 24, 2009, the beginning of the fall 2009 semester (Appendix C).

1. Is the program organized to meet its objectives? (Discussion of curriculum, requirements, admissions, advising and counseling, and other aspects of the program, with reference to its objectives.)

The ABIT program, housed in the Business and Hospitality Department (BSH), offers options to students seeking preparation in small to mid-sized business management, e-commerce, social media technologies and related or integrated career opportunities. It provides students with a learning environment where they will develop business, information technology, and interpersonal skills that will make them productive members of society, and equip them to adapt to a frequently changing modern business world.

The mission of the ABIT program at UHMC is to prepare graduates to be productive professionals who can make responsible business decisions and apply information technology wisely in a changing world. The ABIT program mission is congruent with
the mission of UHMC to offer a student-focused educational environment that emphasizes high quality teaching and learning. The ABIT program serves a diverse student population; many ABIT students are first-generation college students. Additionally, the ABIT program is responsive to the needs of both traditional and non-traditional students whose life experiences and commitment to learning enrich the overall educational environment.

The ABIT curriculum stresses entrepreneurship, the effective use of information technology, small island economics, social media technology and e-commerce. The program also includes a strong interdisciplinary liberal arts core with courses in the humanities and social sciences, written and oral communications, and mathematics. These disciplines help students to develop critical thinking skills, to make connections between fields of knowledge, to separate relevant information from irrelevant, to question assumptions, to reflect on the views of other people and cultures, and to explore and analyze alternative explanations to the many aspects of human existence.

The goals for the ABIT Program can be summarized as follows:

- To prepare graduates to develop and own, operate, and/or manage small to mid-sized businesses;
- To work in management and information technology positions in a variety of local and global business settings;
- To help students prepare for entrance into graduate studies.

The following is a listing of the ABIT Program Learning Outcomes (PLO):

### Business Learning Outcomes

**PLO 1** - Apply knowledge of essential business disciplines including accounting, economics, finance, law, management, and marketing, and use business research methods to analyze information in order to develop solid business plans and strategies, and make efficient business decisions.

**PLO 2** - Use leadership and interpersonal skills to promote business ethics, values, and integrity related to professional activities and personal relationships.

### Information Technology Learning Outcomes

**PLO 3** - Demonstrate knowledge of operating system, word processing, spreadsheet, presentation software, database management, computer troubleshooting, web development, and e-commerce.

**PLO 4** - Apply knowledge of Graphical User Interface (GUI) and Event-Driven Programming (EDP) to designing, creating, and testing computer programs.

**PLO 5** - Apply knowledge of E-commerce by designing, creating, and testing appropriate E-commerce sites using development tools.

### General Education Learning Outcomes:

**PLO 6** - Apply critical thinking skills to evaluate information, solve problems, and make decisions.

**PLO 7** - Use information retrieval and technology.

**PLO 8** - Apply quantitative reasoning to enhance independent or group decision-making skills.
PLO 9 - Communicate effectively with others utilizing appropriate forms of written and oral communication methods including multimedia presentations that apply information technologies and serve particular audiences and purposes.

ABIT admission requirements are provided in Appendix D. The specific admission and course requirements that meet each of the following classifications have been approved by the college’s ABIT committee, curriculum committee, and academic senate, and, are clearly defined in writing in the current UHMC 2011-2012 General Catalog (page 23). Three classifications of ABIT and potential ABIT students are currently recognized:

- **Classified**: students who are enrolled at UHMC at junior or higher level, have declared themselves ABIT majors, and have completed the required lower division entrance courses.
- **Provisional**: students who are enrolled at UHMC at junior or higher level, have declared themselves ABIT majors, but have not yet completed the required lower division entrance courses.
- **Pre-ABIT**: students who are enrolled at UHMC and are completing lower division requirements in the Business Careers Option III pathway that leads directly into the ABIT program.

Our stakeholders recognize the ABIT program as preparing self-confident, competent graduates who are able to perform effectively in a dynamic and sophisticated work environment. The following stakeholders are the ABIT programs principal partners:

- Students and alumni
- College administration and faculty
- Employer/business community
- Maui County
- State of Hawai‘i
- Governmental and non-governmental organizations

Moreover, through UHMC’s annual program review process, ABIT faculty and stakeholder groups have continuously reviewed and assessed the strength of the ABIT curricula. The program review process is discussed in greater detail in section 2.
2. *Is the program meeting its learning objectives for students? (An assessment of the quality of student learning as indicated by systematic analysis of student performance with reference to standard expectations, surveys of student satisfaction with instructional aspects of the program, etc.)*

UHMC ABIT faculty members have continued to develop learning-centered courses with specific learning outcomes and attention to assessment. Multiple sources of input, including faculty in business, information technology, and liberal arts working closely with the business community continually address the question of what graduates will be able to do when they complete the ABIT program.

Methods to assess student learning outcomes (SLOs) for each course in the ABIT program are included in all course outlines. Using the course outline as a guide, specific assessment methods used in a particular course are embedded within each course and specified in each course syllabus. These methods may be formative or summative in nature and each is linked to the appropriate SLO. For example, an outcome to “identify the skills that are necessary for success at the upper division level and in the business world” might be assessed via an in-class exercise, by a journal entry, by class participation, and/or by an exam/quiz question. See section 5 for a full discussion of the Program assessment.

Rubrics or other scoring mechanisms have been developed to ensure that students know what they will be expected to learn, how they will be assessed for that particular learning outcome, and how they will be evaluated for their overall performance. For example, the following is an assessment tool for a writing assignment in Humanities:

<table>
<thead>
<tr>
<th></th>
<th>Excellent</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argument: thesis, cohesion, progression</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Evidence: sufficient, appropriate</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Editing and proofreading</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>MLA citations and Works Cited</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total points:</td>
<td></td>
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<td>Total %:</td>
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<td></td>
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<tr>
<td>90-100 = A, 80-89 = B, 70-79 = C, 60-69 = D</td>
<td></td>
<td></td>
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</tbody>
</table>

Such assessment tools allow students to monitor and understand their own development, and can be used to monitor the progression of the entire class. These data provide faculty with a tool to analyze and validate the curriculum, as well as to identify areas of possible improvement. To illustrate, a student who completes Humanities 400 should be able to:

a. describe the steps in a general approach to decision-making and apply critical thinking skills to the process of decision making;

b. demonstrate an understanding of literatures that illustrate theory and applicability of decision making and the understanding of consequences by communicating effectively with others on issues of change and response,
utilizing appropriate forms of oral communication, as well as multimedia presentations;

c. identify the on-going nature of change in personal life, work life and the broader community;

d. describe various responses to change, consider some possible factors that affect those responses and describe how our responses to change affect the broader community as well as how changes in the broader community affect us. Topics will include, but not be limited to, power, justice, and hypocrisy;

e. describe multicultural perspectives that may affect ethical decision making competency;

f. describe how the use of language, especially that which is ambiguous or value-laden, affects others as decisions are made;

g. write papers which clearly define the problems with change and paths to respond;

h. identify and describe the exhaustive and ambivalent nature of decisions and analyze the consequences of decisions made from a critical, practical and ethical standpoint;

i. explain how the ability to adapt to change is influenced by several factors, such as degree of control, past experiences, personal attitudes, motivation, goals, values, culture, timing, and language used to communicate.

These course specific outcomes align with the Program Learning Outcomes for General Education listed in section 1.

The ABIT program culminates with a six-credit capstone course (BUS 495). The capstone course is designed to provide an opportunity for students to utilize and demonstrate the tools and understanding developed during the ABIT program. The course includes strategy formulation and implementation, competitive analysis, and e-commerce as models for problem solving and decision-making in an organizational setting. More specifically, the course integrates the specialized knowledge, theories, research methods, technical skills, and general education concepts that students learn over the course of their study in the ABIT program.

The course is currently team-taught by ABIT faculty members Dr. Debasis Bhattacharya and Dr. Rafael Boritzer. At the beginning of the term, Drs. Bhattacharya and Boritzer review the syllabus with students and discuss expectations for the course. During the term, students submit their completed documents and presentations to the faculty in discrete segments in a sequential format, allowing the ABIT faculty to determine students’ abilities and to revise their work as needed. This process allows for formative and summative assessment of SLOs.
Materials required for completion of the capstone course include the following:

- Project Plan Agreement between faculty and individual student
- Business Plan for the proposed business
- Management Plan for the proposed business
- Marketing Plan for the proposed business
- Technology Plan for the proposed business
- Financial Plan for the proposed business
- Exit Strategy for the proposed business
- Written Project and Programming code for the business website
- Project Presentation and Demonstration
- Reflection Paper
- Weekly Assignments

The capstone course culminates with students giving oral presentations to a wide variety of stakeholders who evaluate the presentations based on an evaluation form designed by Drs. Bhattacharya and Boritzer. The students' oral presentations, supported by PowerPoint application and written reports on their projects, allow faculty and stakeholders to assess students' writing and presentation skills as well as their knowledge. The following external stakeholders participated in the Spring 2011 evaluation of the oral presentations:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonnie Kos</td>
<td>ABIT Advisory Committee, Former VP McDonald’s, Retired</td>
</tr>
<tr>
<td>Joe Sugarman</td>
<td>ABIT Advisory Committee, Publisher</td>
</tr>
<tr>
<td>Pete DeMichele</td>
<td>ABIT Advisory Committee, CPA</td>
</tr>
<tr>
<td>Virendra Nath</td>
<td>ABIT Advisory Committee, Maui Angels Venture Capital Group</td>
</tr>
<tr>
<td>David Fisher</td>
<td>Maui Small Business Consultant</td>
</tr>
<tr>
<td>Mark Ausbeck</td>
<td>ABIT Advisory Committee, HTDC MEP</td>
</tr>
<tr>
<td>John Kevan</td>
<td>Local Entrepreneur</td>
</tr>
<tr>
<td>Ben Ward</td>
<td>Local Technology Developer</td>
</tr>
<tr>
<td>Doug Levin</td>
<td>Local Entrepreneur, CPA</td>
</tr>
<tr>
<td>Tim Georges</td>
<td>ABIT Advisory Committee, Project Manager, Boeing Maui</td>
</tr>
</tbody>
</table>

In general, the reviews from stakeholders through AY 2009-2010 had indicated that ABIT graduates do not possess some of the skills for information technology and financial accounting needed to start and sustain small entrepreneurial organizations on an island economy such as Maui. As a result of this feedback, during fall semester 2011 the ABIT committee revised all Information Technology courses in the ABIT program. In addition, the college hired Mr. Refugio Gonzalez as the third faculty member beginning in the Fall semester 2011. Mr. Gonzalez brings 20 years of finance and accounting experience.

Finally, since its inception the ABIT program has participated in UHMC’s program review process. The program review process at UHMC involves continuous and systematic evaluations of all established programs utilizing Program Review Teams that serve to
support and guide programs as they move towards continuous improvement. The ABIT Program Review follows UHMC’s Self-Study Guide for Annual Assessment and Comprehensive Program Reviews that was developed to satisfy Executive Policy E5.202. For ABIT’s 2010-2011 annual program review, see Appendix E.

3. Are program resources adequate? (Analysis of number and distribution of faculty, faculty areas of expertise, budget and sources of funds, and facilities and equipment.)

Human Resources

There are currently three general funded full-time faculty positions and one part-time counselor who have been hired specifically for the ABIT program. The ABIT full-time faculty members represent business (Assistant Professor Dr. Rafael Boritzer), information technology (Instructor Dr. Debasis Bhattacharya), and Finance and Accounting (Instructor Mr. Refugio Gonzalez). ABIT faculty teaching load is consistent with the current collective bargaining agreement, which stipulates a course teaching-load of five/four classes during any given academic year. As with all UHMC faculty, assigned time can be allocated, subject to the approval of the Chancellor or Vice Chancellor of Academic Affairs, to perform specific non-teaching assignments. Full-time ABIT faculty members receive three credits of assigned time per semester in order to conduct applied research.

UHMC currently has more than a hundred full-time faculty members. Among this faculty are members with master’s and doctoral degrees, who are capable of developing undergraduate curriculum as well as teaching courses both at the lower and upper division level. Several of these faculty members have been involved in the development of the ABIT program.

Doctoral and masters level faculty have been assigned to teach upper-division classes in business, IT, and general education. Additional doctoral-level faculty members with expertise in Humanities and Social Sciences also contribute to ABIT general education curriculum development.

An advisory committee has been established to assist in the development of the ABIT program. The ABIT Advisory Committee (listed below) consists of business and information technology leaders who meet on a regular basis to discuss and advise on the program curriculum. Along with college faculty and staff members the advisory committee participate in the evaluation of students’ work as they progress through the program and play a key role in the evaluation of the work students submit in their senior capstone project. The following Advisory Committee membership represents key businesses in the local community:

- Bart Santiago, Grand Wailea Hotel
- Grant Chun, A&B Properties
- Jamie Dinkelacker, Google
- Virendra Nath, HDEP and Maui Angels
- Tim Georges, Boeing
- Mark Ausbeck, HTDC and MEP
Campus Facilities

The availability of physical resources was an important criterion in the selection of ABIT as UHMC’s first 4-year degree. Funded by the University of Hawai‘i System Capital Improvement Projects (CIP) budget, a total of five new facilities have been constructed on the UHMC campus since 1995. These new facilities include a building used largely by the business division, and a state-of-the-art computer science and media building. Consequently, initial startup costs for physical facilities related to the ABIT program were estimated to be minimal in relation to startup costs of other new baccalaureate programs. Future needs will be reviewed on a regular basis following the University of Hawai‘i System CIP budget process and through recommendations emerging from the UHMC Program Review process. Facilities at UHMC are more than adequate to serve current and future program needs. In AY 2009, the ABIT program received space and resources to establish a study area for students to study, brainstorm, prepare for classes and also hold regular classes. This room is used primarily for the capstone project, where students work to create, refine, prototype and build a working business as their final project in the program.

Moreover, UHMC Information Technology Services, housed in the new Ka`a`ike Technology Center, supports media services (copying and graphic arts), production of distance education online classes and telecourses, as well as computing hardware and software required for instructional purposes. The ABIT program has benefited from the effective use of technology resources (discussed in greater detail under “Class Facilities”). Toward this end, technology resources are reviewed, assessed and updated on a regular basis at both the UHMC and University of Hawai‘i system level.

Class Facilities

UHMC classrooms used by ABIT courses are all equipped with presentation and projection equipment (Elmo, TV, DVD, teacher computers), integrated into the college’s IT network. Additionally programs are presented using distance learning facilities that include e-learning using the Laulima teaching platform, as well as the statewide cable television channel, the Hawai‘i Interactive Television System (HITS) and online.

Financial Resources

In August 2001, the UH Hawai‘i Community College System assigned UHMC’s Chancellor, Dr. Clyde Sakamoto, to direct Project 2 + 4, an effort to explore establishing baccalaureate degrees at UHMC. The UH Community College System allocated $500,000 to Project 2 + 4 for a two-year period. In addition to the system funding, UHMC provided faculty-assigned time, curricular and program development, resources for
baccalaureate faculty appointments, student services and library resources, travel, and other baccalaureate start-up requirements.

To address resource requirements, Project 2 + 4 carryover resources for the 2003-04 and 2004-05 years combined with a U.S. Department of Labor Rural Development Project/Rural Job Training Initiatives (RDP/RJTI) grant helped to develop and implement UHMC’s first baccalaureate degree. The RDP/RJTI grant was awarded to stimulate economic diversity and development, and to specifically support the ABIT baccalaureate degree.

Since accreditation in May 2007, the three full-time ABIT faculty members and one part-time counselor have been funded through General Funds, approved by the Legislature. Additional revenue is generated from ABIT upper-division tuition that in turn supports program lecturers, equipment, supplies, professional development, research, advertising, and recruiting of Maui County high school seniors.

Enrollments, cost, and revenue projections beginning in 2008 are estimated at a 10% per year increase for academic years 2008 – 2011. These increases seem reasonable given past performance and the maturation of the ABIT program. Appendix F presents actual and projected financial data for the periods 2005-13.

UHMC is enjoying a period of enrollment growth since 2009, primarily due to the weak economy as well as the desire of non-traditional students seeking higher education. In addition, the new privately owned and operated 400-bed housing facility serving UHMC students is now in operation. With additional of a second four-year baccalaureate degrees accreditation officially transferred to ACSCU and a subsequent name change completed should considerably strengthen marketing efforts toward increasing ABIT program enrollment.

In AY 2010-2011, UHMC’s Financial Aid Office disbursed $17,000 to nine students. In the Fall semester 2011, $21,000 was awarded and disbursed to seven students. The ABIT program continues to award financial aid to students in need and based on merit. These awards are available to state residents as well as out-of-state applicants.

4. **Is the program efficient? (An assessment of productivity and cost/benefit considerations within the overall context of campus and University “mission” and planning priorities. Include quantitative measures comparing, for example, SSH/faculty, average class size, cost per SSH, cost per major with other programs in the college, on the campus and, as appropriate, similar programs on other UH campuses.)**

As of AY 2011, the ABIT degree combines two disciplines that are in high demand, as evidenced by the increased number of students in the ABIT track and placement of graduates. According to MAPS data, in Fall 2005, when the program was granted Candidacy by the ACSCU, there were 57 students in the ABIT track. By Fall 11, there were 91 students, representing an increase of 59%. Directly after the ACSCU approved the ABIT program for Candidacy in June 2005, recruitment of students for the program commenced. Since that time there has been a steady increase in the number of students
enrolled in the ABIT program. Table 2 shows ABIT program enrollment figures through the end of Fall 2011:

<table>
<thead>
<tr>
<th>Semester</th>
<th>Pre-ABIT</th>
<th>Provisional</th>
<th>Classified</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2005</td>
<td>31</td>
<td>26</td>
<td>0</td>
<td>57</td>
</tr>
<tr>
<td>Spring 2006</td>
<td>33</td>
<td>28</td>
<td>8</td>
<td>69</td>
</tr>
<tr>
<td>Fall 2006</td>
<td>32</td>
<td>19</td>
<td>13</td>
<td>64</td>
</tr>
<tr>
<td>Spring 2007</td>
<td>36</td>
<td>20</td>
<td>17</td>
<td>73</td>
</tr>
<tr>
<td>Fall 2007</td>
<td>35</td>
<td>27</td>
<td>16</td>
<td>78</td>
</tr>
<tr>
<td>Spring 2008</td>
<td>27</td>
<td>19</td>
<td>27</td>
<td>73</td>
</tr>
<tr>
<td>Fall 2008</td>
<td>39</td>
<td>22</td>
<td>20</td>
<td>81</td>
</tr>
<tr>
<td>Spring 2009</td>
<td>33</td>
<td>20</td>
<td>24</td>
<td>77</td>
</tr>
<tr>
<td>Fall 2009</td>
<td>39</td>
<td>16</td>
<td>24</td>
<td>79</td>
</tr>
<tr>
<td>Spring 2010</td>
<td>45</td>
<td>20</td>
<td>24</td>
<td>89</td>
</tr>
<tr>
<td>Fall 2010</td>
<td>49</td>
<td>18</td>
<td>22</td>
<td>89</td>
</tr>
<tr>
<td>Spring 2011</td>
<td>52</td>
<td>21</td>
<td>18</td>
<td>91</td>
</tr>
<tr>
<td>Fall 2011</td>
<td>39</td>
<td>13</td>
<td>18</td>
<td>91</td>
</tr>
</tbody>
</table>

The Academic Program Costs and Revenue Template (appendix F) shows that in AY 2005-06, the ABIT program had 2.0 FTE instructional faculty members, 1.0 FTE in each business and information technology. In AY 2005-06, a 1.0 FTE program counselor was hired to support the ABIT program. In AY 2006-07 a third 1.0 FTE instructional faculty was hired to lead general education. Over the same period, lecturers and non-ABIT faculty have been utilized to support the program. Since AY 2006-2007, the ABIT program has lost two faculty members due to attrition but they have been replaced by two new faculty members. Currently, as of AY 2012, the ABIT faculty comprises of three instructors, focused on marketing and management, finance and accounting, and information technology.

In fall 2007, the program provided a total of 433 SSH. In fall 2010, this increased to 661 SSH, representing a 52% increase. Upper division course offerings have increased from seven in fall 2005 to nineteen in fall 2010, with an average class size increase from 8.2 to 11.8.

The ABIT program is also very cost effective. First, the cost per SSH has declined from $407 in fall 2005 to $321 in fall 2010, and is projected to continue to decline to $315 by 2013. The cost per SSH for a comparable program, UH Hilo Business and Economics upper-division is $441. Since fall 2007, ABIT program expenditures, with the exception of general fund faculty costs, have been supported by tuitions generated from upper-division ABIT courses. These tuition monies have been adequate to sustain all program costs.

5. Evidence of Program Quality. (A qualitative assessment of the program in relation to competing demands for resources by new programs and continuing programs. Accreditation or other external evaluation, student performance [e.g., on external exams], satisfaction, placement and employer satisfaction, awards to faculty and students faculty publication record, evaluation of faculty, etc.)
The program has three goals for students: to prepare graduates to develop and own, operate, and/or manage small to mid-sized businesses; to work in management and technology positions in a variety of local and global business settings; and to help students prepare for entrance into graduate studies. Demonstrating success toward these goals, post-graduation surveys of the alumni indicate that six of the ten have gone on to graduate studies. Of the remaining four, three have gained employment where they are utilizing the skills gained in the program, and the other is starting up a home business that was presented in the Capstone presentation.

Externally, student graduate studies and employer satisfaction surveys have been conducted, and have demonstrated success in both areas. ABIT graduates have reported GPAs in the range of 3.80-3.85 at the graduate level. Employer surveys are indicating satisfactory job performance for all of our graduates. The following comment is taken from a recent survey of employers who have hired ABIT graduates (Appendix G)... Student X was hired as an entry-level student assistant, but has quickly made her way to senior student hire. She has not only been reliable and responsible, but she has also brought along a set of skills that have proved valuable in our office operations."

Finally, the ACSCU required a post-accreditation interim report on the ABIT program in May 2009. The overwhelmingly positive response from the ACSCU contained commendations and recommendations in the following: assessment of student learning; program capacity, growth, and sustainability; faculty scholarship, creative activity and evaluation; and curriculum issues (Appendix B).

6. Are program outcomes compatible with the objectives? (Analysis of numbers of majors, graduates, SSHs offered, service to non-majors, employment of graduates, etc., in relationship to objectives.)

The ABIT program objectives are appropriate functions of the College and the University as they are consistent with the following:

- the mission of the University system, the UH Community Colleges, and the approved academic development priorities of the College;
- the initiatives to diversify the economic base by providing a skilled workforce for the State and County, and to provide greater employment opportunities for State/County workers;
- the need for a labor force with the skills taught by the program.

The development of the ABIT degree was based on community and industry needs, careful analysis, and perceived student benefits. In addition, positive feedback has also been received from various county and state agencies.

Because of the unique nature of the program, that is the combination of two disciplines, comparison to other programs in the UH system is challenging. However, as discussed in section 4, program growth has been steady, as evidenced by the number of majors and graduates. Generally, students are completing the program over a two-and-a-half to three-year period. This is an acceptable time frame for an inter-disciplinary degree that
requires 66 upper-division credits. Moreover, six out of ten graduates have gone on to graduate education, indicating the quality of their academic preparedness.

The ABIT program provides services to non-majors, incumbent workers, and community members through most of the classes in the curriculum. ABIT offers these classes on a regular basis, as evidenced in Appendix D. Most ABIT classes transfer either as electives or required courses to institutions within the UH system.

A total of twenty students have completed the graduation requirements for the ABIT Bachelor of Science degree over the period 2007-10. Table 3 below lists the historic and projected number of graduations of ABIT students through 2014.

<table>
<thead>
<tr>
<th>Table 3: ABIT Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2007</strong></td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

With increased enrollment, increased graduation is expected in the next few years. The success of the program in sending its students into local business and graduate education is sending a positive message to current lower-division students interested in a higher level of education without leaving Maui.

Starting AY 2012, there will be a higher emphasis on math with a requirement for a business calculus course. In addition, two new upper division courses in decision analysis using statistics and finance will align the ABIT degree with the entry requirements for MBA programs, available at institutions such as UH Manoa Shidler School of Business.

7. **Are program objectives still appropriate functions of the college and University?**

(Relationship to University mission and development plans, evidence of continuing need for the program, projections of employment opportunities for graduates, etc.)

The ABIT program meets the following objectives outlined in the UH Community Colleges’ strategic plan (http://www.Hawai`i.edu/offices/cc/cc_stratplan.html and http://www.Hawai`i.edu/offices/cc/strategicplan/Appendix_B_UHCC_Strategic_Outcomes_and_Performance_Measures_2008_2015%20.pdf):

University of Hawai`i Community Colleges Strategic Plan and Strategic Outcomes and Performance Measures, 2008-2015

**Goal B:** A Learning, Research, and Service Network

**Strategic Outcome:** Address critical workforce shortages and prepare students for effective engagement and leadership in a global environment.

**Strategic Outcome:** Increase by 3% per year the number of degrees awarded, and/or transfers to UH baccalaureate programs that lead to occupations where
there is a demonstrated state of Hawai‘i shortage of qualified workers, or where the average annual wage is at or above the U.S. average (2006=$38,651).

**Goal C: Promote Workforce and Economic Development**

**Strategic Outcome:** Contribute to the state’s economy and provide a solid return on its investment in higher education through research and training.

As outlined in Section 6 and below, the ABIT program is addressing precisely these needs within Maui County and the State.

As was discussed in Section 3 UHMC provides a strong information technology infrastructure that robustly supports ABIT program requirements.

Finally, an ABIT degree offers a graduate the possibility of various positions in many different industries, and is also applicable for students who want to start a business. A study commissioned by the National Association of Colleges and Employers (Figure 1) found that six of the of the top ten degrees most in demand by employers are projected within a business and information technology core curriculum (http://www.naceweb.org/salarysurvey/sscover0109.htm):

**Figure 1: Top Degrees in Demand, Bachelor's Level (Business and IT related degrees are highlighted)**

- Accounting
- Mechanical Engineering
- Electrical Engineering
- Computer Science
- **Business Administration/Management**
- Economics/Finance
- **Information Sciences & Systems**
- Computer Engineering
- **Management Information Systems**
- Marketing/Marketing Management

*Source: Job Outlook 2009, National Association of Colleges and Employers*

In closing, this report has demonstrated that the ABIT program has met its objectives, has adequate resources, is producing graduates who are prepared for further study or the workplace, and is strategically positioned to meet the needs of Maui County for many years to come. Maui County’s emergence from a rural-agrarian economy into a participant in the global marketplace makes ABIT an indispensable asset to the community, and to the state. The data provided in this report demonstrates that the ABIT program is healthy, growing, and has earned merit to be moved from a provisional to an established program.
APPENDICES

A  Accreditation Letter, July 6, 2007
B  WASC Interim Report on ABIT Program, June 2009
C  Approval letter to offer second baccalaureate degree
D  ABIT Admission Requirements
E  2010-2011 ABIT Program Review
F  Academic Program Cost and Revenues Template: Provisional to Established
G  Survey of Employer Satisfaction with UH Maui CC ABIT Graduates
APPENDIX A
(Accreditation Letter, July 6, 2007)
Western Association of Schools & Colleges  
Accrediting Commission for Senior Colleges & Universities

July 6, 2007

Clyde Sakamoto  
Chancellor  
Maui Community College  
310 Kaahumanu Avenue  
Kahului, HI 96732

Dear Chancellor Sakamoto:

At its meeting on June 20-22, 2007, the Commission considered the report of the team that conducted the visit on March 7-9, 2007, for Initial Accreditation of the Bachelor of Science Degree program in Applied Business and Information Technology (ABIT) offered by Maui Community College (MCC). The Commission also had access to the report prepared by MCC prior to the visit and a supplement to the team report, which was prepared by the team after its review of your supplemental report on the assessment of the work of the first graduating class of ABIT students. The Commission appreciated the opportunity to talk with you and David Grooms, ABIT Professor and Program Coordinator. Your comments were helpful to the Commission in understanding the context for the ABIT program at MCC and your plans for growth of the program.

MCC’s report for Initial Accreditation of the ABIT program presented a thorough and well-organized review and analysis of MCC and the ABIT program under the four WASC Standards and Criteria for Review (CFR). It was supported by evidence and supplemented with documentation concerning recommendations of the Commission in its previous action letters and of previous team reports.

The Commission found that MCC has been very responsive to issues raised by previous teams and cited in action letters. Among the improvements in the three years since the ABIT program came under WASC Senior Commission review in July 2004 are the appointment of three full-time faculty members
leaders at the system, college and program levels to create a four-year program that meets
the needs of the community is commendable. As noted by the team, "The organization
and all of its members have shown levels of openness and commitment to learning and
continuous improvement that is exemplary of WASC's ideal of a university as a learning
organization."

The Commission acted to receive the team report, endorsed its recommendations and
cited the following areas as needing continuing attention:

**Assessment of Student Learning.** The program has carefully drawn program learning
outcomes and aligned student learning outcomes at the course level. The ABIT
assessment program includes examination conducted by the faculty and industry
representatives of work presented by graduating seniors in a capstone course, using
rubrics that were developed by the faculty. The results are compiled to produce program-
level assessment and recommendations that flow from the results. While only three
students participated in this key capstone experience and graduated in May 2007, the
results of learning were evident in that report. The Commission endorses the
recommendations made by the team in its supplemental report, in which the team
recommended that the program improve the analysis and reporting of the capstone
experience by providing a more thorough discussion of the results and by expanding the
representation of the stakeholder group that reviews portfolios. Annual assessment
reports of the program are conducted, and will be followed by a comprehensive five-year
program review. Because the program is new and has only a few graduates, and because
it may serve as a model for future baccalaureate programs at MCC, careful attention
should be paid to building a strong and replicable assessment program that will
demonstrate achievement of student learning outcomes and form the basis for change and
improvement. (CFR 2.4, 2.6, 2.7, and 4.7)

**Program Capacity, Growth, and Sustainability.** The ABIT program has strong
support from the college, the University of Hawaii system, the legislature and the Maui
community. This support has served the program well and has resulted in an infusion of
resources to build capacity. While this support is solid, expectations for the growth of the
program are evident. Steps should be taken to build enrollment to meet the capacity that
has been created and to further assure the future of the program going forward. (CFR
3.5) Related is the matter of faculty sufficiency and diversity. Because of small
enrollments, building a sufficient core of qualified full-time faculty members has had the
practical result of limiting the number of faculty members to which students are exposed.
This situation should be carefully examined and solutions sought that will in the short-
term and long-term expose students to more faculty members. (CFRs 2.1 and 3.2)

**Faculty Scholarship, Creative Activity and Evaluation.** MCC has addressed earlier
concerns about faculty scholarship appropriate for a baccalaureate-level program by
engaging in meaningful and productive discussions about the character and nature of
applied research and how it can best be supported in the community college setting. The
idea of faculty research outcomes has been developed, and the full-time faculty members
have embraced the idea of engaging in scholarship and research that adds value to the program and links with student work. As noted in the team report, expectations for faculty scholarship and creative activity have not yet been formalized. The College should move forward with its plans to institutionalize the role of scholarship by incorporating these expectations, where appropriate, for example, in policies, evaluation procedures, and plans for individual faculty members. (CFR 2.8, 2.9, 3.3, and 3.4)

Curriculum Issues. MCC has built a strong upper-division curriculum within the major, supplemented by upper-division general education courses specifically developed for ABIT students and taught mainly by one of the new full-time faculty members hired to build capacity in the ABIT program. A campus general education philosophy has been adopted. Assessment of the general education component of the program, in light of the expectations set forth in CFR 2.2, should be conducted to provide the basis for further improvements to and expansion of general education. As suggested in the team report, the faculty may want to ask if graduating students have "breadth ... in all areas of cultural and aesthetic, social and political, as well as scientific and technical knowledge expected of educated persons in this society." A related issue that has arisen as the program has been built is the progression of student learning from the lower to the upper division within the major. An examination should be made of the transition from the lower to upper levels in the ABIT major and changes made as needed to ensure coherence and continuity as students progress to degree. (CFR 2.2).

The Commission acted to:

1. Receive the Initial Accreditation Visit team report and grant initial accreditation to Maui Community College for the Bachelor of Science Degree in Applied Business and Information Technology of Maui Community College.

2. Pursuant to the policy on Initial Accreditation, set the effective date of Senior College Commission accreditation as May 12, 2007.

3. Schedule a combined Capacity and Educational Effectiveness visit for fall 2012 to be held jointly with the WASC Accrediting Commission for Community and Junior Colleges. MCC’s report to ACCJC with a supplement on the ABIT program is due 12 weeks before the visit.

4. Request that five copies of a progress report be submitted by May 1, 2009, addressing the issues raised in this action letter and the major recommendations of the team report, including results of assessment of student learning for graduates of the ABIT program since this date and progress in addressing the other areas cited in this letter. Enclosed is a memorandum providing guidance on the format and content of a progress report.

This action is for the ABIT degree program only. In accordance with Commission policy, should the College intend to offer a second bachelor's degree, prior approval from
the Senior College Commission would be required and the College would need to be reviewed under separate procedures.

In accordance with Commission policy, a copy of this letter will be sent to the President of the University of Hawaii system and the Chair of the UH Board of Regents within one week. The Commission expects that the team report and this action letter will be widely disseminated throughout the institution to promote engagement and improvement and to support the institution’s response to the specific issues identified in them.

Please contact me if you have any questions or comment about this letter or the action of the Commission.

Sincerely,

[Signature]

Ralph A. Wolff
President and Executive Director

RW/aa

cc: John D. Welty
    David McClain, President of the UH System
    Kitty Lagureta, Chair of the UH Board of Regents
    Diane Meyer
    Barbara Beno
    Members of the team
    Teri Cannon

Enclosure
June 4, 2009

Clyde Sakamoto
Chancellor
Maui Community College
310 Kaahumanu Avenue
Kahului, HI 96732

RE: Interim Report on ABIT Program

Dear Chancellor Sakamoto:

At its meeting by conference call on June 2, 2009, a Panel of the Interim Report Committee convened to consider the Interim Report submitted by Maui Community College on May 1, 2009, in keeping with Commission action letter of July 6, 2007, in which the Senior Commission granted initial accreditation of the Maui Community College Bachelor of Science degree program in Applied Business and Information Technology.

The Panel had access to the July 2007 Commission action letter and the Interim Report and supporting documents that you provided. The panel appreciated the opportunity to talk with you and Suzette Robinson, Vice Chancellor of Academic Affairs; Patricia Adams, Interim Assistant Dean of Instruction; Diane Meyer, ALO; David Grooms, ABIT faculty and past program coordinator; Margaret Christensen, ABIT faculty and program coordinator; and Crystal Alberto, ABIT counselor. The conversation helped to enrich the panel’s understanding of your report and your plans for the growth and development of the ABIT program.

Your interim report was very thorough and well organized and addressed the issues raised in the previous action letter directly and with evidence. The issues are set forth briefly below with an analysis of what the panel found.

1. **Assessment of Student Learning.** The panel found that you have made progress in developing a “strong and replicable assessment program that will demonstrate achievement of student learning outcomes....” Annual assessment reports and periodic program review that includes results of assessment provide the structure for a sustainable assessment program. In particular, the panel appreciated the improvements to the way in which you are conducting direct assessment through the capstone course and student portfolios. The panel recommends that you continue developing the tools
that will facilitate this work, including rubrics to assess levels of student achievement in both capstones and portfolios. You may also want to consider other culminating projects or experiences that would enrich this assessment work. Finally, the panel suggests including one or more external reviewers in your upcoming program review. Educators who are from applied technology programs in other four-year colleges and universities would enrich your program review and provide useful insight that could help you plan for the future. (CFRs 2.4, 2.6, 2.7, 4.7)

2. **Program Capacity, Growth and Sustainability.** The panel acknowledges the increase in the enrollment growth and the steps that have been taken to ensure that students are exposed to the teaching of a sufficiently diverse group of faculty members. With three full-time faculty members and a pool of lecturers, the program is addressing the concerns of the team effectively. Over time, the college may wish to develop a plan that would guide it in making decisions about adding full-time faculty as the enrollment grows. (CFRs 2.1, 3.2, 3.5, 4.1)

3. **Faculty Scholarship, Creative Activity and Evaluation.** The panel found that you had made adjustments in teaching loads and provided support for research while also setting up a process to evaluate faculty members’ research. The panel recognized the work that you are doing to develop a culture and support for applied research that is appropriate at the baccalaureate level. Especially appreciated was the conversation that faculty has been engaged in to define applied research and to formulate policies that support a culture of research and scholarship. (CFRs 2.8, 2.9, 3.3 and 3.4)

4. **Curriculum Issues.** The panel found that the faculty had addressed the transition between lower- and upper-division work and added considerable breadth to the upper-division general education work through the development of additional courses and the careful use of highly qualified adjunct faculty members. (CFRs 2.2a, 3.2)

The Interim Report Panel acted to:

1. Receive the Interim Report with commendations and recommendations;

2. Proceed with the combined Capacity and Preparatory Review and Educational Effectiveness reaffirmation visit with ACCJC scheduled for fall 2012.

Please feel free to contact me if you have any questions or comments about this letter or the upcoming visit.

Sincerely,

[Signature]

Therese A. Cannon
Executive Associate Director

cc: Diane Meyer, Accreditation Liaison Officer
    Eduardo Ochoa
    Members of the Interim Report Committee
August 17, 2009

Clyde Sakamoto
Chancellor
Maui Community College
310 Kaahumanu Avenue
Kahului, HI 96732

Re: Proposals for Bachelor of Applied Science in Engineering Technology and Transfer of Accreditation

Dear Chancellor Sakamoto:

At its August 14, 2009 meeting, a panel of the Structural Change Committee considered the proposal of Maui Community College (MCC) to offer the Bachelor of Applied Science in Engineering Technology (MCC's second bachelor's degree) and the related proposal to transfer accreditation of MCC from the WASC Accrediting Commission for Community and Junior Colleges (ACCJC) to the Accrediting Commission for Senior Colleges and Universities (ACSCU). The proposal for transfer of accreditation was submitted in keeping with WASC policy, which mandates that MCC's accreditation be transferred to ACSCU upon the approval of a second bachelor’s degree. The panel had access to the proposals, the letter of July 16, 2009 sent to you on behalf of the Substantive Change Committee, and the report of the July 26-28, 2009 site visit conducted by two members of the Substantive Change Committee and the chair of the previous site teams that had visited MCC on behalf of ACSCU.

The Structural Change Committee endorsed the commendations and findings of the Substantive Change Committee panel and the visiting team. The panel found the proposals to be well-written and documented. The proposed degree program was developed in response to a need in the local community and was designed with considerable consultation with interested stakeholders.

The team that visited MCC and met with administrators and faculty involved in the program found that the curriculum was sound and that initial plans for assessment were promising. Building on the model established with the first baccalaureate degree approved at MCC, new well-qualified full-time faculty members are being retained to teach in the program, and teaching loads have been adjusted to meet good practice expectations for teaching, applied scholarship, and creative activity at the baccalaureate level. MCC’s well-established assessment and program review practices provide a good starting place to monitor and document student learning and achievement. Facilities and equipment needed to support the program have been acquired or are in the process of being acquired.
The team was satisfied that funding for the program is secure, planning has been well thought out, and the infrastructure for the program is in place.

The Commission identified the following areas for further development:

**BASET Curriculum and Assessment Plans.** As noted in the team report, the formal start date of the program is fall 2010, with initial upper-division courses to be offered in fall 2009. The 2009-10 academic year was intended to be used for additional curriculum development in consultation with industry and other constituents and partners. As course content is further detailed, the mapping of outcomes to courses and a schedule of all course offerings should be completed. Additionally, assessment plans should be supplemented with procedures for the collection of examples of student work that are used for assessment purposes and will provide evidence of student learning outcomes. (CFRs 2.2, 2.3, 2.5, 2.12)

**BASET Faculty.** Policies relating to faculty teaching in MCC’s baccalaureate programs should be developed in keeping with Senior College Commission expectations regarding faculty qualifications, workload, and scholarship and creative activity. (CFRs 2.8, 3.2, 3.3, 3.4) The panel also supports the team’s recommendation that the second full-time faculty position for the BASET program be filled as soon as possible with an appropriately qualified and experienced faculty member. (CFRs 2.1, 3.1, 3.2)

**System Oversight and Governance.** Because MCC will continue its mission of offering associate degree-level programs, with most of its students enrolled in those programs, the transfer to ACSCU creates some administrative complications. As noted in the letter of July 17, 2009 and in the team report, MCC will be unique among the community colleges in Hawaii as the only such college that is accredited by ACSCU. The team explored all the related issues and made a number of important findings and recommendations, which the Structural Change panel endorses. Among these findings are that the Senior College Commission’s Standards of Accreditation can be adapted effectively to MCC’s context and that ACSCU can ensure that persons with appropriate community college expertise and background are on teams visiting MCC. The team also understands that MCC will continue to be subject to system-wide policies that apply to community colleges. This matter warrants ongoing exploration and review by the University of Hawaii (UH), MCC and the Senior College Commission over time.

**Start Date of Program.** As noted in the team report, the issue of the technical start date of the program arose during the site visit. WASC ACSCU policy requires that the program be approved before upper-division courses are offered. The UH Regents, however, approved the offering of the upper-division courses in fall 2009 with a formal state date for the program of fall 2010. This bifurcation concerning the start date was provided to allow the faculty more time to develop the course content of the curriculum.
The Commission acted to:

1. Approve the offering of the Bachelor of Applied Science in Engineering Technology with the initial upper-division course offerings in fall 2009 and the formal program start date of fall 2010.

2. Approve the transfer of accreditation of Maui Community College from ACCJC to ACSCU, effective August 24, 2009, the beginning of the fall 2009 semester.

3. Request an Interim Report in spring 2010 to review the issues raised in this letter and the team report, specifically the final curriculum and assessment plans for the BASET program; the hiring of any additional BASET faculty members and progress on the policy issues relating to faculty members teaching at the baccalaureate level; and progress in addressing the issues related to MCC’s unique situation in the UH system as the only community college with Senior Commission accreditation.


Institutions granted the status of Accreditation must use the following statement if they wish to describe the status publicly:

Maui Community College is accredited by the Accrediting Commission for Senior Colleges and Universities of the Western Association of Schools and Colleges, 985 Atlantic Avenue, #100, Alameda, CA 94501, 510.748.9001.

The phrase “fully accredited” is to be avoided, since no partial accreditation is possible. The accredited status of a program should not be misrepresented. The accreditation granted by WASC refers to the quality of the institution as a whole. Since institutional accreditation does not imply specific accreditation of any particular program in the institution, statements like “this program is accredited” or “this degree is accredited” are incorrect and misleading.

Under the enclosed Degree Level Approval Policy of the ACSCU, Maui Community College is granted general degree-level approval to offer degrees at the associate level. In addition, it is approved to offer the following Bachelor of Science degrees: Applied Business and Information Technology and Applied Engineering Technology. Any additional degrees that MCC may wish to offer at the baccalaureate level or higher must be approved through the WASC Substantive Change process. (See the WASC Substantive Change Manual for details.)

In accordance with Commission policy, a copy of this letter is being sent to the President of the University of Hawaii system. The Commission expects that the visit team report and this action letter will be widely disseminated through the institution to promote engagement and improvement and to support the institution’s response to the specific issues identified in them.
MCC is now responsible for annual dues to the Senior College Commission based on its total enrollment. A bill for dues will be sent out under separate cover.

Congratulations to the entire MCC community for achieving this important milestone. Please contact me if you have any questions or comments about this letter or the Commission’s action.

Sincerely,

Ralph A. Wolff
President and Executive Director

cc: Diane Meyer, Faculty Coordinator and Accreditation Liaison Officer
    Linda Johnsrud, Vice President and Acting President, University of Hawaii System
    Barbara Beno, President, Accrediting Commission for Junior and Community Colleges,
    WASC
    Members of the Substantive Change Committee

Enclosure
APPENDIX D
(ABIT Admission Requirements)
Existing ABIT Admission Requirements through Spring 2012

The following requirements and program map are presented in the 2011-2012 UH Maui CC General Catalog, at [http://www.maui.Hawai`i.edu/programs/catalog.php](http://www.maui.Hawai`i.edu/programs/catalog.php). For admission to the UH Maui College ABIT program, students must first meet the following UH Maui College admission requirements.

1. A student may apply for admission as a classified student in the ABIT program upon successful completion of one of the following admission requirements:
   a. Completion of the Business Careers Option III (see page 41 of 2011-12 college catalog) with a cumulative GPA of 2.5 or higher in all courses attempted; or
   b. Completion of an Associates in Arts (AA) degree or higher from an accredited institution with a cumulative GPA of 2.5 or higher in all courses attempted, and completion of the following pre-ABIT course requirements with grade C or better:
      
      ACC 201 or ACC 124 and 125, BUSN 150 or ICS 101, BUS 120, ECON 130, ECON 131, ENG 100, and IS 106.
   c. Completion of an Associate in Applied Science (AAS) or Associate in Science (AS) degree from an accredited institution that includes 54 or more transferable semester credits with a cumulative GPA of 2.5 or higher in all courses attempted, and completion of pre-ABIT course requirements as outlined in 1.b.

2. A student may apply for admission as a provisional student in the ABIT program upon successful completion of the following admission requirements:
   a. Completion of 45 or more transferable semester credits from an accredited institution with a cumulative GPA of 2.5 or higher in all courses attempted. Classified status will be assigned with completion of 54 lower division transferable credits and completion of pre-ABIT course requirements as outlined in 1.b.
   b. Approval of the ABIT Committee
New ABIT Admission Requirements starting Fall 2012

Starting the Fall semester 2012, the ABIT program will provide students with a four year track.

1. A student may apply for admission as a classified student in the ABIT program upon successful completion of one of the following admission requirements:

   ENG 100, ICS 101 or BUSN 150, and MATH 103

2. The new ABIT four year program focuses on a blend of business, information technology and general education courses. Total credits to graduate equals 122.

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<td>ECON 131 – Macro-Economics</td>
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<td>ENG 100</td>
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<tr>
<td>HIST 152 – World Civilizations II</td>
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<tr>
<td>ICS 101 or BUSN 150</td>
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<tr>
<td>MATH 103 – College Algebra</td>
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<td>Hawaiian Emphasis Course</td>
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<td>ENG 209 – Business Writing</td>
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<td>PSY 100 or SOC 100</td>
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<td>MATH 115 – Statistics</td>
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<tr>
<td>ICS 110 – Intro to Programming</td>
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<td>SP 251 or Equivalent Oral Comm Course</td>
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<td>Natural Science</td>
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<td>BLAW – Business Law</td>
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<td>ICS 111 – Introduction to Comp Science</td>
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<td>ICS 200 – Web Technology</td>
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<tr>
<td>MATH 203 or 205 – Biz/Regular Calculus</td>
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<tr>
<td>MKT 300 Principles of Marketing</td>
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<td>ACC 300 Intermediate Financial Acct I</td>
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<tr>
<td>ICS 319 Operating Systems</td>
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<td>ICS 352 Networking and Security</td>
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<td>MGT 310 Principles of Management</td>
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<td>BUS 320 Entrepreneurship</td>
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<td>ICS 360 Database Design and Develop</td>
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<td>ICS 385 Web Development and Admin</td>
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<td>ENG 316 Advanced Research &amp; Writing</td>
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<td>ICS 418 Systems Analysis and Design</td>
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<td>MKT 400 Marketing for the Internet Age</td>
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<td>BUS 310 – Statistical Analysis for Biz</td>
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<td>BUS 495 – ABIT Capstone I</td>
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<td>COM 459 - Intercultural Communication II</td>
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</tr>
<tr>
<td>PHIL 301 or PHIL 323</td>
<td>3</td>
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<tr>
<td>Required Internship (Business or IT)</td>
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<tr>
<td>BUS 496 - ABIT Capstone II</td>
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APPENDIX E

(2010-2011 ABIT Program Review)
Program Mission Statement
The Applied Business and Information Technology (ABIT) program prepares graduates to be successful entrepreneurs, technology professionals and knowledge workers in today’s global economy and environment. The ABIT program is within the mission of the UH Maui College, offering a four year degree that emphasizes high quality instruction and project-based learning. Currently, the ABIT program offers upper-division courses to students who complete their lower division courses in another program (such as Business Careers, Option III). The ABIT program serves a diverse student population, many of whom are first generation college students. The program also adjusts to traditional and non-traditional students, many of whom hold part-time jobs while completing their educational degree. The ABIT program is structured so that students can complete their upper-division courses over a two year period. However, many students take longer to complete this degree based on personal and professional constraints and commitments.

Program Learning Outcomes
The program learning outcomes (PLOs) for the ABIT program is shown below in Table 1:

Table 1: ABIT PLOs

<table>
<thead>
<tr>
<th>PLO</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLO1</td>
<td>Apply knowledge of essential business disciplines including accounting, economics, finance, law, management, and marketing, and use business research methods to analyze information in order to develop solid business plans and strategies, and make efficient business decisions.</td>
</tr>
<tr>
<td>PLO2</td>
<td>Use leadership and interpersonal skills to promote business ethics, values, and integrity related to professional activities and personal relationships.</td>
</tr>
<tr>
<td>PLO3</td>
<td>Demonstrate knowledge of operating system, word processing, spreadsheet, presentation software, database management, computer troubleshooting, web development, and e-commerce.</td>
</tr>
<tr>
<td>PLO4</td>
<td>Apply knowledge of graphical user interface (GUI) and event-driven programming (EDP) to designing, creating, and testing computer programs.</td>
</tr>
<tr>
<td>PLO5</td>
<td>Apply knowledge of e-commerce by designing, creating, and testing appropriate e-commerce sites and development tools.</td>
</tr>
<tr>
<td>PLO6</td>
<td>Apply critical thinking skills to evaluate information, solve problems, and make decisions.</td>
</tr>
<tr>
<td>PLO7</td>
<td>Use information retrieval and technology.</td>
</tr>
<tr>
<td>PLO8</td>
<td>Apply quantitative reasoning to enhance independent or group decision-making skills.</td>
</tr>
<tr>
<td>PLO9</td>
<td>Communicate effectively with others utilizing appropriate forms of oral and written communication methods including multimedia presentations that apply information technologies and serve particular audiences and purposes.</td>
</tr>
</tbody>
</table>

Proposed Map of Program Learning Outcomes by Course
As documented in the ABIT Program Review of 2009-2010, the ABIT program had mapped the above nine PLOs to the outcome of one Capstone course (BUS 495). Based on the recommendation from Dr. John McKee, dated December 28, 2010, there is a UHMC requirement that “each course in the ABIT program review needs to show at what level (0-3) it supports the
program learning outcomes”. Following the recommendation, Table 2 displays a proposed map of 10 of the core business and information technology courses to the corresponding PLO. Note that some courses listed below (ex. FIN 311 and BUS 496) are new courses slated for fall semester of 2012, pending UHMC curriculum approval:

Table 2: Proposed Map of PLO and Selected Courses

<table>
<thead>
<tr>
<th>PLO1</th>
<th>ACC 300</th>
<th>MKT 400</th>
<th>BUS 320</th>
<th>COM 459</th>
<th>FIN 311</th>
<th>ICS 360</th>
<th>ICS 385</th>
<th>ICS 418</th>
<th>BUS 495</th>
<th>BUS 496</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>PLO2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>PLO3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>PLO4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>PLO5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>PLO6</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>PLO7</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>PLO8</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>PLO9</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Proposed Assessment Plan: Time Table
The recommendation from Dr. John McKee, dated December 28, 2010, noted that there is a UHMC requirement that “each PLO needs to be assessed twice during a five-year review cycle”. Following the recommendation, Table 3 displays a proposed assessment plan of the 9 PLOs at least twice during the next five years starting 2011-2012. Note that some courses listed below (ex. FIN 311 and BUS 496) are new courses pending UHMC curriculum approval. Also, the new capstone courses, BUS 495 and BUS 496, will be used to assess all nine PLOs in every year:

Table 3: ABIT Assessment Plan: Time Table

<table>
<thead>
<tr>
<th>Years</th>
<th>ACC 300</th>
<th>MKT 400</th>
<th>BUS 320</th>
<th>COM 459</th>
<th>FIN 311</th>
<th>ICS 360</th>
<th>ICS 385</th>
<th>ICS 418</th>
<th>BUS 495</th>
<th>BUS 496</th>
</tr>
</thead>
<tbody>
<tr>
<td>FA 11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SP 12</td>
<td></td>
<td>PLO 6</td>
<td></td>
<td>PLO 3</td>
<td>PLO 5</td>
<td></td>
<td>PLO 1-9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FA 12</td>
<td>PLO 1</td>
<td></td>
<td></td>
<td>PLO 2</td>
<td>PLO 1</td>
<td></td>
<td>PLO 4</td>
<td>PLO 1-2,</td>
<td>8-9</td>
<td></td>
</tr>
<tr>
<td>SP 13</td>
<td></td>
<td></td>
<td></td>
<td>PLO 3</td>
<td>PLO 5</td>
<td></td>
<td>PLO 7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FA 13</td>
<td>PLO 8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PLO 1-2,</td>
<td>8-9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SP 14</td>
<td></td>
<td>PLO 6</td>
<td></td>
<td>PLO 3</td>
<td>PLO 9</td>
<td></td>
<td>PLO 7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FA 14</td>
<td>PLO 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PLO 1-2,</td>
<td>8-9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SP 15</td>
<td></td>
<td></td>
<td></td>
<td>PLO 1</td>
<td>PLO 9</td>
<td></td>
<td>PLO 7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
I. Analysis

Program Learning Outcome Assessment
In the year 2010-2011, all nine PLOs of the ABIT program were assessed by the learning outcome of one capstone ABIT course (BUS 495) conducted in the spring of 2011. No other courses were used to assess any ABIT PLOs in the year 2010-2011. Based on this limited assessment scheme, the data from the capstone course was the only assessment evidence.

Assessment tools or methods used
The ABIT capstone course, BUS 495, was the only course used to collect assessment data of the ABIT PLOs. The data was collected in two stages. Stage 1 involved convening the ABIT advisory board to review the business proposals of the students in the capstone class. Stage 2 involved mentoring and guiding the students throughout the course of the semester. Stage 3 involved a final presentation by the students to the community, which included members of the ABIT advisory board, faculty, students and staff of UHMC and other attendees. The instrument used to collect assessment evidence during the final presentation involved a brief survey that was handed out to all advisory board members as well as members of the audience present. The results of the survey was tabulated and analyzed by Dr. Debasis Bhattacharya in May 2011.

Summative Evidence
During the year 2010-2011, the evidence collected to assess the PLOs are displayed in Table 4. The evidence was collected solely by the results of a survey conducted during the final presentation of the capstone course BUS 495 in May 2010. This evidence is limited and narrow. Table 4 displays the best match between the survey questions and the corresponding PLO.

Table 4: Assessment Evidence

<table>
<thead>
<tr>
<th>Question from Capstone Survey and Corresponding PLO (in italics)</th>
<th>Survey Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Did presenters show the existence of an “opportunity”?</td>
<td>Q1 to Q4 &gt; 4 score out of 5</td>
</tr>
<tr>
<td>2. Did they convince you of the existence of a “market”?</td>
<td>Q5 to Q7 were average at 3</td>
</tr>
<tr>
<td>3. Do they have a competitive advantage or edge with their “concept”?</td>
<td></td>
</tr>
<tr>
<td>4. Do they exhibit plausible strategic planning?</td>
<td></td>
</tr>
<tr>
<td>5. Have students demonstrated an ability to project the plan’s future income, breakeven point, balance sheet and cash flows?</td>
<td></td>
</tr>
<tr>
<td>6. Students display an ability to use financial ratios in evaluating the company finances, operations and market value.</td>
<td></td>
</tr>
<tr>
<td>7. Is there a “fatal flaw” in their plans?</td>
<td></td>
</tr>
</tbody>
</table>

PLO1 - Apply knowledge of essential business disciplines including accounting, economics, finance, law, management, and marketing, and use business research methods to analyze information in order to develop solid business plans and strategies, and make efficient business decisions.

Did their presentation show overall “planning and execution” skills? Avg. Scores were > 4 out of
<table>
<thead>
<tr>
<th>Student Learning Outcome</th>
<th>5</th>
<th>Avg. Scores were &gt; 4 out of 5</th>
<th>Avg. Scores were &gt; 4 out of 5</th>
<th>Avg. Scores were &gt; 4 out of 5</th>
<th>Avg. Scores were &gt; 3.5 out of 5</th>
<th>Avg. Scores were &gt; 3.5 out of 5</th>
<th>Avg. Scores were &gt; 4 out of 5</th>
<th>Mostly Yes.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLO2 - Use leadership and interpersonal skills to promote business ethics, values, and integrity related to professional activities and personal relationships.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Discussion of general web technology concepts and topics.</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>PLO3 - Demonstrate knowledge of operating system, word processing, spreadsheet, presentation software, database management, computer troubleshooting, web development, and e-commerce.</td>
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<tr>
<td>Demonstration of web site (graphics, layout, usability etc.).</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLO4 - Apply knowledge of graphical user interface (GUI) and event-driven programming (EDP) to designing, creating, and testing computer programs.</td>
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<td></td>
</tr>
<tr>
<td>Explanation of relevant social media and e-commerce technology</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>PLO5 - Apply knowledge of e-commerce by designing, creating, and testing appropriate e-commerce sites and development tools.</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstration of innovation in web technology to support business goals.</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLO6 - Apply critical thinking skills to evaluate information, solve problems, and make decisions.</td>
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<td></td>
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<tr>
<td>Demonstration of social media tools in web site (Facebook, Twitter etc.)</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>PLO7 - Use information retrieval and technology.</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstration of competitive edge using web technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLO8 - Apply quantitative reasoning to enhance independent or group decision-making skills.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did they show examples of “field research”?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall integration of vision, business plan and technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did the presentation match the original Vision and Mission Statement?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLO9 - Communicate effectively with other utilizing appropriate forms of oral and written communication methods including multimedia presentations that apply information technologies and serve particular audiences and purposes.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Starting the year 2011-2012, the ABIT program will develop a rubric to track the nine PLOs in the new pair of capstone courses BUS 495 and BUS 496. A proposed template is shown in Table 5. No rubric was used to collect and analyze data during the review period of 2010-2011.

Table 5: Proposed Assessment Rubric Template

<table>
<thead>
<tr>
<th>Program Assessment Rubric for ABIT Course XXX for YEAR YYYY</th>
<th>Exceeds</th>
<th>Meets</th>
<th>Needs Improvement</th>
<th>No Proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Learning Outcome</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

35
What we discovered about student learning
Given that the results of this program review is entirely based on the data collected at the end of the BUS 495 capstone course in May 2011, the findings are limited and restricted. Key points:

- The final capstone presentation lacked depth in technology and accounting practices
- The students who presented in May 2011 lacked conviction in their business passion
- The choice of business projects limited some students from meeting all PLOs

Given that the ABIT program blends business and information technology, here are other points:

- Students learned a blend of skills covering marketing, finance, accounting, information technology, economics and other general education courses
- Students learned soft skills that included the following: business research, critical thinking, research writing, team collaboration, team and individual presentations
- Students valued a rigorous curriculum when there was relevance to an real life scenario
- Students valued internships and job placements opportunities that provided them with career opportunities and options with local firms and organizations
- Students valued the inclusion of advisory board members during their capstone project

Evidence that results of student learning was discussed with Advisory Board
The capstone course BUS495, taught in the spring semester of 2011 was monitored by several members of the ABIT advisory board. These advisors were present from the initial presentation in February 2011 through the final presentation in May 2011. Several advisors, such as Refugio Gonzalez, Virendra Nath, Tim Georges, Mark Ausbeck and Pete DeMichele provided mentoring, coaching and personalized advisory services to the ABIT students during the entire semester.

Changes made in ABIT curriculum to improve student learning
Several changes were made in the fall of 2011 to improve student learning. These include:

- The ABIT capstone course has been proposed to be split into two courses, ABIT 495 and ABIT 496, to allow students to finalize their business plan in the first fall semester, followed by supporting technology and presentation plan in the second spring semester
- To reflect the skills and experience of the new ABIT faculty, Refugio Gonzalez, two new upper division courses have been proposed in the ABIT curriculum. BUS 310 covers decision analysis using statistics and FIN 311 covers introductory financial investments.
- Several upper division courses in information technology and business require a pre-requisite of math calculus. As a result, a course in business calculus is proposed a part of the ABIT curriculum as a mandatory pre-requisite to upper division ICS courses in IT.
- The senior year course in Marketing, MKT 400, is upgraded to include digital marketing
- A mandatory requirement proposes the inclusion of an internship in the senior year

Program strengths and challenges
Given that the ABIT program is now past its fifth year in existence, here are five strengths:

- The ABIT program blends business and technology disciplines into a unique BAS degree
- Students in the ABIT program are prepared for careers as business entrepreneurs, as well as careers in high technology. Students often enroll in graduate school to pursue advanced degrees. This variety in careers is primarily due to the blended curriculum
- Students value the opportunity to work on internship opportunities with local firms
- Students can avail of merit scholarships, a dedicated ABIT lounge and other amenities
Students can obtain mentoring and guidance from the ABIT advisory board.

As in any other program, the ABIT program also faces specific issues and challenges:

- The existing deficiency in math preparation in calculus, which is subject to change in 2012, hinders students from gaining the depth of knowledge in several IT courses.
- The lack of assessment activities, above and beyond the capstone course, prevents the ABIT faculty and program committee to assess the core ABIT courses against the PLOs.
- Many students fail to take ABIT courses in the recommended sequence. Since many courses are offered only once a year, this results in an overall delay in graduation.
- The number of graduating students in flat over the past two years, and the enrollment numbers do not indicate an upward trend in graduation rates during the years 2012-2016.
- The inability to offer the entire ABIT program as a distance learning program prevents many students who reside outside Maui County to enroll and complete the ABIT program.

UHMC Instructional Annual Report on Program Data

The ABIT program received an overall program health rating for 2010-2011 of Cautionary. Demand and efficiency indicators received a Cautionary rating. Effectiveness was also rated as Cautionary. The SOC code for the ABIT program is 11-1021, and according to the Bureau of Labor Statistics (at URL [http://www.bls.gov/soc/2010/soc111021.htm](http://www.bls.gov/soc/2010/soc111021.htm)), the code represents: 11-1021 General and Operations Managers.

Plan, direct, or coordinate the operations of public or private sector organizations. Duties and responsibilities include formulating policies, managing daily operations, and planning the use of materials and human resources, but are too diverse and general in nature to be classified in any one functional area of management or administration, such as personnel, purchasing, or administrative services. Excludes First-Line Supervisors.

Illustrative examples: Television Station Manager, Radio Station Manager, General Superintendent.

Key data about the program health for ABIT, using SOC 11-1021, is summarized in Table 6:

<table>
<thead>
<tr>
<th>Demand Indicator</th>
<th>Number of Majors (2010-2011) = 39. New &amp; Replacement Positions (County Prorated) = 32</th>
<th>ABIT Score (2010-2011) = 39/32 = 1.22</th>
<th>Healthy Score &gt; 1.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency Indicator</td>
<td>Class Fill Rate (2010-2011)</td>
<td>ABIT Score (2010-2011) = 50%</td>
<td>Healthy Score &gt; 75%</td>
</tr>
<tr>
<td>Effectiveness Indicator</td>
<td>Persistence (Fall to Spring) = 85%</td>
<td>ABIT Score (2010-2011) = 85%</td>
<td>Healthy Score &gt; 75%</td>
</tr>
</tbody>
</table>

In general, the SOC code 11-1021 does not describe the overall employment opportunities available to graduates of the ABIT program, especially in the arena of information technology. The number of ABIT majors demonstrate a flat trend (2008-09: 39; 2009-10: 42; 2010-11: 39) and the number of number of new and replacement positions in the state also shows a flat trend. However, the fill rate for ABIT is at 50% and the persistence (Fall to Spring) is at 85%. The ABIT program management will monitor these indicators and take corrective actions as needed.
II. Action Plan

Planned curriculum changes

The ABIT program has proposed significant changes to the UHMC curriculum committee in terms of the four year program map, as well as the introduction of key upper level courses in decision analysis and finance. The following points highlight the proposed changes:

- Starting 2012-2013 onwards, the ABIT program will be one contiguous four year program. The first two years of instruction will mirror the new Business Career III option.
- The ABIT program map starting 2012-2013 involves several changes to business and management course. Key new courses include BUS 310 (Decision Analysis) and FIN 311 (Investments). The ABIT capstone will be a two semester sequences (BUS 495 and 496).
- Due to the requirement of calculus in several upper division courses, MATH 203 or 205 is proposed as a pre-requisite to upper division ICS courses as well business courses.
- The course on Marketing (MKT 400) has been upgraded to reflect modern technology and marketing methods using online technology, social media and emerging models.
- A mandatory internship project is proposed for all fourth year ABIT students.
- The courses during the first two years of the ABIT program map to the existing courses in the Business Careers Option III. Students can opt out of ABIT and receive a degree in Business Careers, or can join ABIT after completing an AAS in Business Careers III.

Assessment Support for Current and Future Goals

Given that no rubric was used in the 2009-2010 review period, and that all assessment data was collected on the basis of one survey in the capstone course, the amount of data is limited. The advisory board was present and active during the entire capstone course, and was aware of the student learning outcomes that were generated as a result of that capstone course.

Specific Goals for 2011-2012 and beyond

The feedback from Dr. John McKee, dated December 23, 2010, based on the 2009-2010 ABIT program review is incorporated below. As noted above, the ABIT program has proposed to the UHMC Curriculum Committee that the ABIT program be modified to a four year program. Assuming this proposal is approved, the specific goals for 2011-2012 and beyond include:

- The ABIT program will use the Assessment Map and Assessment Plan, as noted above in Table 2 and 3, to assess all nine PLOs, at least two times in five years.
- The two new ABIT capstone courses, BUS 495 and BUS 496, will assess all nine ABIT PLOs every year. The idea is to ensure that the two capstone courses cover all PLOs and that students demonstrate all PLOs in a convincing fashion at the end of the program.
- The evaluation survey used in the capstone courses will be updated to match all PLOs.
- In addition to the assessment feedback provided by the ABIT capstone course, two or more additional courses will be selected for assessment every year for the next five years.
- For each course slated for assessment, the SLOs in the course will be evaluated based on the actual performance of students in the corresponding assignments or project activities.
- An assessment rubric will be used for all courses that are included in the assessment map.
- The end-of-course capstone evaluation, along with other assignments during the two capstone courses, will allow the ABIT program to assess all nine PLOs every year.
- The ABIT advisory committee will review the assessment data every six months, and provide feedback to the ABIT faculty on program modification and curriculum updates.
• Coordinated marketing and recruitments activities with CareerLink to increase enrollment levels in the ABIT program, and to retain existing students in the program
• Increased outreach activities to local Maui County high schools to increase awareness and interest in the new four year ABIT program. This includes Lanai and Molokai
• Active consideration of updating all upper division ABIT courses to a distance learning modality. This could include hybrid classes, proctored exams, and live class streaming

III. Resource Implications

For the next academic year, the following items are requested to be included in the budget:
• Software licenses for ABIT students: $100/student, for 50 licenses or $5000
• Student assistants to coordinate internship and marketing activities: 1 FTE or $15,000
• Upgrades to current computer equipment: $10,000
• Subscriptions to business journals, online databases and other sources: $10,000
• Purchase of new computer equipment for classroom instruction: $25,000
• Travel within the state of Hawai`i for recruitment and marketing: $10,000
• Office supplies, marketing and other materials: $5000
APPENDIX F

(Academic Program Cost and Revenues Template: Provisional to Established)
## Academic Program Cost and Revenues

[Template: Provisional to Established (10/13/2009)]

### ENTER VALUES IN HIGHLIGHTED CELLS ONLY

#### CAMPUS/Program

- **UH Maui College/ABIT**

#### Provisional Years (adjust as needed to show all provisional years) | Projected Years

<table>
<thead>
<tr>
<th></th>
<th>Year 1 Candidacy</th>
<th>Year 2 Accreditation</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Students &amp; SSH</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Headcount enrollment (Fall)</td>
<td></td>
<td></td>
<td>26</td>
<td>32</td>
<td>45</td>
<td>42</td>
<td>43</td>
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<tr>
<td>B. Annual SSH</td>
<td></td>
<td></td>
<td>344</td>
<td>452</td>
<td>433</td>
<td>614</td>
<td>656</td>
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#### Direct and Incremental Program Costs Without Fringe

<table>
<thead>
<tr>
<th></th>
<th>Year 1 Candidacy</th>
<th>Year 2 Accreditation</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>C. Instructional Cost without Fringe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1. Number (FTE) of FT Faculty/Lecturers</td>
<td></td>
<td></td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
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<tr>
<td>C2. Number (FTE) of PT Lecturers</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<tr>
<td>D. Other Personnel Costs</td>
<td></td>
<td></td>
<td>$2,599</td>
<td>$520</td>
<td>$-</td>
<td>$-</td>
<td>$2,000</td>
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<tr>
<td>E. Unique Program Costs</td>
<td></td>
<td></td>
<td>$24,085</td>
<td>$66</td>
<td>$33,234</td>
<td>$51,845</td>
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<td>F. Total Direct and Incremental Costs</td>
<td></td>
<td></td>
<td>$114,375</td>
<td>$157,191</td>
<td>$123,920</td>
<td>$189,982</td>
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#### Revenue

<table>
<thead>
<tr>
<th></th>
<th>Year 1 Candidacy</th>
<th>Year 2 Accreditation</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>G. Tuition</td>
<td></td>
<td></td>
<td>$35,432</td>
<td>$41,940</td>
<td>$67,243</td>
<td>$99,869</td>
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<td>Tuition rate per credit</td>
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<td>$103</td>
<td>$125</td>
<td>$147</td>
<td>$169</td>
<td>$191</td>
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<tr>
<td>H. Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I. Total Revenue</td>
<td></td>
<td></td>
<td>$35,432</td>
<td>$41,940</td>
<td>$67,243</td>
<td>$99,869</td>
<td>$125,296</td>
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</table>

#### J. Net Cost (Revenue)

<table>
<thead>
<tr>
<th></th>
<th>Year 1 Candidacy</th>
<th>Year 2 Accreditation</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>105,627</td>
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<td></td>
<td>115,837</td>
<td>89,911</td>
<td>141,958</td>
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<td>149,189</td>
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#### Program Cost per SSH With Fringe

<table>
<thead>
<tr>
<th></th>
<th>Year 1 Candidacy</th>
<th>Year 2 Accreditation</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>K. Instructional Cost with Fringe/SSH</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>K1. Total Salary FT Faculty/Lecturers</td>
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<td>$104,250</td>
<td>$157,191</td>
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<tr>
<td>K2. Cost Including Fringe of K1</td>
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<td>$140,738</td>
<td>$212,208</td>
<td>$162,101</td>
<td>$247,950</td>
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<tr>
<td>K3. Total Salary PT Lecturers</td>
<td></td>
<td></td>
<td>$10,125</td>
<td>$-</td>
<td>$3,845</td>
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41
K4. Cost Including fringe of K3

<table>
<thead>
<tr>
<th></th>
<th>$ 10,631</th>
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<th>$ 4,037</th>
<th>$ 6,631</th>
<th>$ 6,631</th>
<th>$ 6,631</th>
<th>$ 6,631</th>
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</thead>
<tbody>
<tr>
<td>L. Support Cost/SSH</td>
<td>$ 214</td>
<td>$ 214</td>
<td>$ 214</td>
<td>$ 214</td>
<td>$ 214</td>
<td>$ 214</td>
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<td>Non-Instructional Exp/SSH</td>
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<td>$ 175</td>
<td>$ 175</td>
<td>$ 175</td>
<td>$ 175</td>
<td>$ 175</td>
<td>$ 175</td>
<td>$ 175</td>
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<tr>
<td>Organized Research/SSH</td>
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<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
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<tr>
<td>M. Total Program Cost/SSH</td>
<td>$ 654</td>
<td>$ 683</td>
<td>$ 598</td>
<td>$ 629</td>
<td>$ 610</td>
<td>$ 581</td>
<td>$ 554</td>
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<td>N. Total Campus Expenditure/SSH</td>
<td>$ 385</td>
<td>$ 385</td>
<td>$ 385</td>
<td>$ 385</td>
<td>$ 385</td>
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Instruction Cost with Fringe per SSH

<table>
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<tr>
<th></th>
<th>$ 440</th>
<th>$ 469</th>
<th>$ 384</th>
<th>$ 415</th>
<th>$ 396</th>
<th>$ 367</th>
<th>$ 340</th>
<th>$ 315</th>
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</thead>
<tbody>
<tr>
<td>K. Instructional Cost/SSH</td>
<td>$ 291</td>
<td>$ 309</td>
<td>$ 441</td>
<td>$ 441</td>
<td>$ 441</td>
<td>$ 441</td>
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</tbody>
</table>

Program used for comparison: UH Hilo Bus & Econ-Upper Div

Reviewed by campus VC for Administrative Affairs: (date) 11/3/2009

Instructions

Please include an explanation of this template in your narrative.

A. Headcount Enrollment: Headcount enrollment of majors each Fall semester. Located at url: http://www.iro.Hawai`i.edu/maps/mltitles.asp

B. Annual SSH: Course Registration Report located at http://www.iro.Hawai`i.edu/maps/mltitles.asp. Add the SSH for the Fall and Spring reports to obtain the annual SSH. This is all SSH taught by the program, including to non-majors.

C. Instructional Cost without Fringe (automated calculation): Direct salary cost for all faculty and lecturers teaching in the program.
   C1. Number of full time faculty and lecturers who are > .5 FTE.
   C2. Number of part time lecturers who are < .5 FTE.

D. Other Personnel Cost: Salary cost (part or full time) for personnel supporting the program (APT, clerical lab support, advisor, etc.) This includes personnel providing necessary support for the program who may not be directly employed by the program and may include partial FTEs. Add negotiated collective bargaining increases and 4% per year for inflation thereafter.

E. Unique Program Cost: Costs specific to the program for equipment, supplies, insurance, etc. For provisional years, this would be actual cost. For established years, this would be projected costs using amortization for equipment and add 4% per year for inflation thereafter.

F. Total Direct and Incremental Cost: C + D + E

G. Tuition: Annual SSH X resident tuition rate/credit

H. Other: Other sources of revenue including grants, program fees, etc. This should not include in-kind contributions unless the services or goods contributed are recorded in the financial records of the campus and included in Direct and Incremental Costs in this template.

I. Total Revenue: G + H

J. Net Cost: F - I This is the net incremental cost of the program to the campus. A negative number here represents net revenue (i.e., revenue in excess of cost.) If there is a net cost, please explain how this cost will be funded.

K. Instructional Costs with Fringe/SSH: (K2 + K4) / B
   K1. Salaries without Fringe of Full Time Faculty and Lecturers who are > .5 FTE based on FTE directly related to the program. Add negotiated collective bargaining increases and 4% per year for inflation thereafter.
   K2. K1 X 1.35
K3. Salaries without Fringe for Lecturers who are < .5 FTE based on FTE directly related to the program. Add negotiated collective bargaining increases and 4% per year for inflation thereafter.  

K4. K3 X 1.05

L. Support Cost/SSH: The campus’ non instructional expenditure/ssh + systemwide support – organized research (UHM only) as provided by UH Expenditure Report (http://www.Hawai`i.edu/budget/expend.html)

For example, from the 2005-06 UH Expenditure Report, the support expenditure/ssh per campus is:

UHM $382.00 + $60 - $112 for organized research = $330  
UHH $278 + $40 = $318  
UHWO $179.00 + $32 = $211  
Haw CC $111.00 + $33 = $144  
Hon CC $168.00 + $38 = $206  
Kap CC $114.00 + $30 = $144  
Kau CC $346.00 + $68 = $414  
Lee CC $112.00 + $28 = $140  
Maui CC $175.00 + $39 = $214  
Win CC $257.00 + $44 = $301

M. Total Program Cost/SSH: K + L

N. Total Campus Expenditure/SSH: Taken from UH Expenditures Report For example, for 2005-2006: UHM = $799-112 (organized research) = $687, UHH = $528, UHWO = $429, HawCC = $329, HonCC = $375, KapCC = $300, KauCC = $677, LeeCC=$279, Maui CC= $385, WinCC=$442

O. Comparable Program/Division Instructional Cost/SSH: Taken from UH Expenditures Report (http://www.Hawai`i.edu/budget/expend.html) or campus data, as available. Please note in the space provided, the program used for the comparison.
APPENDIX G

(Survey of Employer Satisfaction With ABIT Graduates)
1. How has his or her Bachelor's degree in Applied Business and Information Technology beneficial for his or her position?

- The ABIT degree has increased [student’s] comfort level with software programs such as MS Office Suite and ADOBE products that are applicable to my business on a daily basis. In general she has gained confidence in many areas of IT.
- [Student] was hired as an entry-level student assistant, but has quickly made her way to senior student hire. She has not only been reliable and responsible, but she has also brought along a set of skills that have proved valuable in our office operations.
- She is a very quick learner, is attentive to details, and has excellent communication skills and an easygoing nature. Her professionalism is truly appreciated. She is a great asset to our project.
- [Student’s] performance has been excellent.

2. How has the Bachelor's degree in Applied Business and Information Technology effected or contributed to his or her employee performance?

- The ABIT degree has contributed to [student’s] employee performance by giving her a broader view of the world of business and a greater sense of how to manage a small business.

[The student] has been most helpful in four particular areas in our office:
  - Developing and maintaining information on our website
  - Creating and formatting the quarterly newsletter for the PacFAA (Pacific Financial Aid Association).
  - Assisting students with computer skill challenges in completing their online Financial Literacy sessions
  - Assisting in gathering data for assessment

- Skills that she learned in her ABIT courses proved particularly useful in these areas. We hope to continue [the student’s] employment (beyond a student assistant position), if one becomes open.
- I really am not familiar with the ABIT degree so I asked [the student’s] help on this – I hope this is OK. I can attest that she brings the following to our project.
Accounting and Finance: "I think it has helped me to better understand (and appreciate) the business office because of all the budgeting they have to work with and how they need to balance their looks. Accounting and finance is not easy so I can appreciate the work that they do and understand (sort of) why they do the things they do.

Humanities and Communication: "I believe it has also helped with communicating around campuses to find resources (people and materials) that could contribute to our project. Connecting with people is important - working together rather than against each other can position our project higher up on people's "To Do" pile".

Business: "To know how everything needs to pull together to make things run smoothly. To understand that there is a world outside our project that we still need to work with. Understanding the need for data and documentation and why grants ask for them".

Ethics: Treating other fairly/respectfully.

IT: Understanding how computers work to make sure that the computer can aid us in our tasks rather than hinder us. To work with the team to provide nearly just-in-time computer service

- The business and info technology knowledge that [the student] possesses benefits our Project by her efficient use of computer and communication applications. She has been very dependable and accepts increasing responsibility over time.

3. Would you hire other graduates from Maui Community College's Bachelor's degree in Applied Business and Information Technology program?

- Yes.
- Yes, absolutely.
- While [student] and [student] fill the bill for their positions, the remainder of our staff must have Master's degrees - preferably MSW degrees. If either of them were to leave the project, we would certainly consider another ABIT graduate.
- I would hire another graduate when there is an opening.