NO.: AAC 13-36
COMMITTEE DATE: June 11, 2013
BOARD DATE: June 18, 2013

APPLICATION OF BENJAMIN FRANKLIN INSTITUTE OF TECHNOLOGY TO AWARD THE ASSOCIATE IN SCIENCE IN CONSTRUCTION MANAGEMENT, THE ASSOCIATE IN SCIENCE IN TECHNOLOGY BUSINESS AND MANAGEMENT, AND THE ASSOCIATE IN SCIENCE IN HEALTH INFORMATION TECHNOLOGY

MOVED: The Board of Higher Education hereby approves the Articles of Amendment of Benjamin Franklin Institute of Technology to award the Associate in Science in Construction Management, the Associate in Science in Technology Business and Management and the Associate in Science in Health Information Technology.

Authority: Massachusetts General Laws, Chapter 69, Section 30 et seq.
Contact: Dr. Shelley Tinkham, Assistant Commissioner for Academic, P-16 and Veterans Policy

## BOARD OF HIGHER EDUCATION

## Benjamin Franklin Institute of Technology Associate in Science in Construction Management Associate in Science in Technology Business and Management Associate in Science in Health Information Technology


#### Abstract

INTENT Benjamin Franklin Institute of Technology (BFIT) a New England Association of Schools and Colleges (NEASC) - accredited, private coeducational institution, located in Boston, MA, requests authorization to offer the Associate in Science in Construction Management, the Associate in Science in Technology Business and Management, and the Associate in Science in Health Information Technology. The mission and purpose of the proposed programs are to provide students an opportunity to develop technical expertise along with managerial and organizational skills in the specified fields.


## Associate in Science in Construction Management

The Associate of Science (AS) in Construction Management provides graduates with a background of technical and organizational skills that apply to construction projects from conception to completion. The AS in Construction Management builds on the existing Associate of Science in Building Technology and Design and business courses offered in the Bachelor in Science of Automotive Management and adds courses specific to successful completion of construction projects.

## Associate in Science in Technology Business and Management

The proposed Associate in Science in Technology Business \& Management provides graduates with essential business skills grounded in knowledge of a technological field, preparing them to work in technology-based businesses. This degree builds on previously approved existing technology degrees, the Associate in Science in Computer Technology, Associate in Science in Electrical Engineering and Associate in Science in Mechanical Engineering as well as on the business courses offered in the Bachelor of Science in Automotive Management. Technology Business and Management majors study technology more broadly though not in the same depth as someone specializing in an area. According to a recent report by the Georgetown Center on Education and the Workforce, the highest paying jobs for individuals who have earned an associate degree are in business and manufacturing, with the highest category within those fields operations management, which requires a blending of business, management and technical skills.

## Associate of Science Health Information Technology:

Benjamin Franklin Institute of Technology received authorization to award a Bachelor of Science in Health Information Technology (BSHIT) in October 2012. The proposed Associate of Science (AS) degree students to receive a degree after two years in the program. This will also facilitate transfer for those students who are interested. The combination of an AS with the option to continue to a BS in HIT at Benjamin Franklin strengthens the overall integrity of both programs, as students will be able to attain workplace-ready skills after two years.

The Associate in Science in Technology Business and Management was approved by the institution's Board of Trustees on January 12, 2012; the Associate in Science in Health Information

Technology on March 26, 2012 and the Associate in Science in Construction Management on January 21, 2013.

## INSTITUTIONAL OVERVIEW

For over one hundred years, Benjamin Franklin Institute of Technology has been educating technologists. The institute is Benjamin Franklin's living legacy in Boston. It evolved directly from his bequest of $£ 1000$ to "the Inhabitants of the Towne of Boston," set forth in a codicil to his will dated 1789. In his codicil, he wrote, "I have considered that among Artisans good Apprentices are most likely to make good Citizens." He specified that for the first hundred years his bequest be used as a revolving loan fund to help young married tradesmen start their own businesses, the fund managers to be the Selectmen of the Town of Boston and the ministers of the oldest Episcopalian, Congregational, and Presbyterian churches in the town. This money eventually came to the Institute through a fund established to hold the trust's money.

With the demise of the apprentice system in the $19^{\text {th }}$ century, the Franklin Fund managers decided that Dr. Franklin's intentions could best be served by some form of public education serving the people of Boston. In December 1904, Andrew Carnegie who was an admirer of Franklin agreed to match the money in the Franklin Fund to build the College on two conditions: that the new school be an industrial school similar to the Cooper Union and New York City's Mechanics' and Tradesmen's School, and that the City of Boston provide the land. The agreement was struck. The institution began as the Franklin Union. It would change its name again to the Franklin Institute of Boston in 1961. In 2001, the College became the Benjamin Franklin Institute of Technology.

In 1957, the institution received approval to grant the Associate in Engineering degree; and by 1971 students could choose from six associate degree programs. In 1983, approval was given to award the Associate in Science in Automotive Technology degree and in 1995, BFIT was authorized to award the Bachelor of Science in Automotive Technology. In 2006, the institution was approved to offer the Honorary Bachelor of Humane Letters and Associate in Science in Opticianry. In 2011, the institution was approved to change the Associate in Engineering degrees to Associate in Science degrees in Architectural Technology, Computer Engineering Technology, Computer Technology, Electrical Technology, Electronic Engineering Technology, Mechanical Engineering Technology, and Medical Electronics Engineering Technology. The BS in Automotive Technology was changed to a BS in Automotive Management in 2011. Approval to grant a Bachelor of Science Health Information Technology was granted in 2012. The institution requested in 2013 that the Associate in Science in Architectural Technology be changed to an Associate of Science in Building Technology and Design and that the Associate of Science in Medical Electronics Engineering be changed to an Associate of Science in Biomedical Engineering Technology.

The Institute currently seeks the authority to offer the Associate in Science in Health Information Technology, Associate in Science in Construction Management and Associate in Science in Technology Business and Management.

## ACADEMIC AND RELATED MATTERS

## Admission Requirements

Students entering Benjamin Franklin Institute of Technology must have a high school diploma or GED. Incoming students are assessed using a variety of tools to develop a profile of the individual's cognitive and non-cognitive strengths and challenges. This profile is used for
placement in initial courses. Students are admitted to the bachelor's program provided they are prepared for college-level English and math. Students who require additional development before beginning college studies are admitted case-by-case or are referred for additional support. The college welcomes transfer students. Transfer credit may be granted for courses completed with a C or better and is based on recommendations from the department chairs of each curricular area. Students at BFIT in other majors would be able to transfer internally.

## Tuition and Fees

Based on AY2012-2013 gross tuition, total cost for each two-year proposed programs is \$33,900.

## Projected Enrollment

AS Construction Management

|  | \# of <br> Students <br> Year 1 | \# of Students <br> Year 2 | \# of Students <br> Year 3 | \# of Students <br> Year 4 |
| :--- | :--- | :--- | :--- | :--- |
| New Full Time | 12 | 16 | 20 | 24 |
| Continuing Full Time | 0 | 8 | 12 | 16 |
| New Part Time | 0 | 0 | 0 | 0 |
| Continuing Part Time | 0 | 0 | 0 | 0 |
| Totals | 12 | 24 | 32 | 40 |

AS Technology Business and Management

|  | \# of <br> Students <br> Year 1 | \# of Students <br> Year 2 | \# of Students <br> Year 3 | \# of Students <br> Year 4* |
| :--- | :--- | :--- | :--- | :--- |
| New Full Time | 12 | 20 | 20 | 20 |
| Continuing Full Time | 0 | 8 | 16 | 16 |
| New Part Time | 1 | 1 | 1 | 1 |
| Continuing Part Time | 0 | 1 | 1 | 1 |
| Totals | 13 | 30 | 38 | 38 |

AS Health Information Technology

|  | \# of Students <br> Year 1 | \# of Students <br> Year 2 | \# of Students <br> Year 3 | \# of Students <br> Year 4* |
| :--- | :--- | :--- | :--- | :--- |
| New Full Time | 6 | 12 | 15 | 16 |
| Continuing Full Time | 0 | 5 | 8 | 10 |
| New Part Time | 0 | 1 | 1 | 1 |


|  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- |
| Continuing Part Time | 0 | 0 | 1 | 2 |
| Totals | 6 (6 FTE) | 17 (17.5 FTE) | 25 (24 FTE) | 29 (27.5 FTE) |

## Curriculum (Attachment A)

## AS Construction Management

The associate degree in Construction Management requires 66 credits. The AS in Construction Management provides graduates with a background of technical and organizational skills that apply to construction projects from conception to completion. The program includes technical courses on building technology and construction management and a general education core.

## AS Technology Business and Management

The AS Technology Business and Management requires 68-69 credits dependent on technological specialty and includes courses in business and management, a technology specialty and a general education core. The core business and technology courses provide a foundation in general business practices and familiarity with the vocabulary of technological fields. The standard track will include foundational instruction in computers and IT, electromechanical systems, and manufacturing and materials. Students would have the option of selecting an alternative specialization to meet career interests or to make good use of technological learning achieved in the pursuit of another degree.

## AS Health Information Technology

The AS in Health Information Technology requires 67 credits. Courses in healthcare issues and terminology and technology courses provide students with the knowledge to manage healthcare information technology systems and to manage, plan, design, and monitor health data, data sets, and databases. The AS in Health Information Technology is derived from the existing BS in Health Information Technology.

## PROGRAM EFFECTIVENESS

The institution developed the following learning outcomes for each proposed program:

## AS in Construction Management

Upon successful completion of the associate degree in CM , the graduate will be able to:

- Apply knowledge in planning, budgeting, and scheduling of labor, materials and equipment;
- Apply quality standards in construction;
- Communicate in speech and in writing;
- Estimate job costs and requirements for construction projects;
- Identify construction project objectives and assist in their execution;
- Identify elements of sustainability in buildings and construction and explain their costs and benefits;
- Oversee project safety;
- Read and revise construction documents, including CAD files;
- Select contractors and set project performance goals;
- Use knowledge of construction and management principles and practices to support continued learning;
- Work ethically and responsibly in the construction industry; and
- Work in teams to solve management and technical problems.


## AS Technology Business and Management

Upon completion of the associate degree program in Technology Business and Management, the graduate will be able to:

- Speak and write clearly and persuasively on business and technical topics.
- Communicate business issues to a technical audience and technical issues to a business audience.
- Contribute to effective teams.
- Apply financial concepts and techniques to the analysis of business proposals.
- Describe and understand technological challenges facing a business.
- Understand and use the terminology of computer science, manufacturing, or other technology fields.
- Apply corporate responsibility and ethics to support sound decisions.
- Describe marketing principles and apply them to promote a product or service.
- Develop a technical idea into a business plan.
- Apply lean principles and quality measures within a process of continuous improvement.


## AS in Health Information Technology

Upon successful completion of the Associate's Degree in Health Information Technology, the graduate will be able to:

- Apply and integrate the basic knowledge attained in networking, computer programming, and database technologies to support health care information solutions.
- Apply knowledge of health care concepts and terminology to assist users of computerized information storage and retrieval systems.
- Apply HIT communication standards, such as the HL7 messaging standard, to support the interoperability of health information systems.
- Effectively communicate technical observations, results, issues, and successes, in both speaking and writing.
- Explain the importance of HIT concepts such as meaningful use, health information exchange, and clinical decision support.
- Observe administrative, legal, and medical constraints and rules in the implementation and use of HIT systems.
- Provide basic level computer programming and scripting to maintain and improve HIT systems.
- Recognize the need for and develop the ability to engage in lifelong learning.
- Support the administration of computer, network and web services and security.
- Understand mathematics at the level of college algebra and pre-calculus and apply this knowledge to solve HIT related problems.
- Understand professional, ethical, and social responsibilities.

Each academic department at the college undergoes a comprehensive academic program review process. At the core of this review is an inquiry into the stated goals and student learning outcomes of the program. The process includes a study of student resources as well as student enrollment, retention, and graduation data. Curriculum is reviewed and analyzed and program facilities are examined to identify both physical and technological needs. The result of the academic program review process is a self-study document that provides a critical analysis of the
effectiveness of the program and creates a blueprint for improvement to the program. A comprehensive five-year plan ensures that each program regularly undergoes this systematic review.

## RESOURCES AND BUDGET (Attachment B)

## Administration and Faculty

The proposed programs will be housed within existing departments of Building Technology and Design and Computer Engineering and will share administrative and instructional resources with that department. Each of the proposed programs builds on existing associate degree programs offered by the institution. There is current capacity in existing courses in the majors and in general education. Additional courses necessary for the new majors will be taught by current full-time and adjunct faculty. The institution has thirty-four full-time faculty and thirty-eight part-time faculty.

## Library and Information Technology

The proposed programs will utilize current resources held by the library in support of the associated degrees. Resources include books, e-books, online databases and periodicals covering areas of business, management; resources in each of the areas related to computer technology, computer, mechanical, electrical and automotive technology; as well as resources to support the general education core of the institution. The library receives support in the operating budget each year to expand as necessary the resources held. The facility includes 27 laboratories, 12 classrooms, student spaces, and offices on a three-acre campus in the South End neighborhood of Boston. The campus centers on the Franklin Union Building, an historic 1908 structure designed specifically for technical education.

## Financial Resources

The budgets for the proposed programs are provided in Attachment B. The costs for the proposed programs are incremental as they build on currently offered degrees and existing capacity.

## INTERNAL REVIEW

Staff reviewed the initial application of Benjamin Franklin Institute of Technology to offer the three proposed associate's degrees and determined that each of the degrees was closely related to existing degrees at the Institute and could therefore quality for an internal review. 610 CMR 208(2)(c) provides Board staff with the ability to conduct an internal review if the degrees sought are closely related to existing degrees offered by the institution. The Associate in Science in Construction Management utilizes existing associate level courses in the Building Technology and Design and Automotive Management programs; the Associate in Science in Technology Business and Management draws on associate level courses from Computer Technology, Mechanical Engineering, and Electrical Engineering as well as associate and bachelor level business courses taught in Automotive Management; and the Associate of Science in Health Information Technology is drawn directly from the approved Bachelor of Science in Health Information Technology and represents the first two-years of this bachelor's degree.

Board staff completed an initial review of the applications and noted no substantive issues with the applications. Clarifying and/or missing information with respect to syllabi and faculty vita were sought and provided by the institution. Board staff carefully reviewed proposed curriculum of each program and determined that the majority of the courses are existing courses. Syllabi for new courses were reviewed and determined to be complete and appropriate. Existing faculty are
appropriately qualified in the areas in which they teach. Each proposed program has sufficient fulltime and adjunct faculty to offer the program.

A site visit to Benjamin Franklin Institute of Technology occurred in April 2012 when the Bachelor of Science in Health Information Technology was under review. Based on that recent visit staff is satisfied that the facilities and library resources are adequate to support the proposed programs.

## PUBLIC HEARING

The required public hearing was held in the Board of Higher Education office on June 10, 2013. Mr . Richard Pien who introduced himself as a representative from the Boston Committee, Ward Five, commented on general issues related to campus security and students' mental health.

## STAFF ANALYSIS AND RECOMMENDATION

After a thorough evaluation of all documentation submitted, staff is satisfied that the proposal of Benjamin Franklin Institute of Technology to award the Associate in Science in Construction Management, the Associate in Science in Technology Business and Management and the Associate in Science in Health Information Technology degrees meet the criteria set forth in 610 CMR 2.08(3) in the Degree-Granting Regulations for Independent Institutions of Higher Education, accredited by the New England Association of Schools and Colleges.
Recommendation is for approval.

## ATTACHMENT A: CURRICULUM OUTLINE

Undergraduate Program Curriculum Outline
AS Construction Management

| Required (Core) Courses in the Major (Total \# courses required = 12) |  |  |
| :--- | :--- | :--- |
| Course Number | Course Title | Credit Hours |
| BT100 | Construction Graphics | 4 |
| BT110 | Introduction to CAD | 3 |
| BT160 | Building Construction and Materials | 4 |
| BT220 | Sustainable Building Technologies | 3 |
| BT250 | Environmental Systems | 4 |
| BT262 | Project Scheduling | 3 |
| BT280 | Statics and Strength of Materials | 4 |
| CM101 | Construction Management I | 3 |
| CM130 | Construction Estimating | 3 |
| CM145 | Heavy Construction | 3 |
| CM201 | Construction Management II | 3 |
| CM250 | Construction Surveying | 3 |
|  |  | 40 |


| General Education Courses (Total \# courses required = 8) |  |  |
| :---: | :---: | :---: |
| Indicate Distribution of General Education Requirements Below Attach or Insert Link to List of General Education Offerings (Course Numbers, Titles, and Credits) |  | \# of Gen Ed Credits |
| Arts and Humanities, including Literature and Foreign Languages |  | 6-9 |
| Mathematics and the Natural and Physical Sciences |  | 14 |
| Social Sciences |  | 3-6 |
| Sub Total General Education Credits |  | 26 |
| Curriculum Summary |  |  |
| Total number of courses required for the degree | 20 |  |
| Total credit hours required for degree 66 |  |  |
| Prerequisite, Concentration or Other Requirements: As in the BTD program students will be encouraged and supported in workplace experiential learning opportunities, though the program will have no formal requirement. |  |  |

## Undergraduate Program Curriculum Outline (Continued)

| General Education Courses (Total \# of courses required = 8) |  |  |
| :--- | :--- | :--- |
| Course Number | Course Title | Credit <br> Hours |
| EN130 | College Composition I | 3 |
| EN140 | College Composition II | 3 |
| MA105 | Technical Mathematics I | 3 |
| MA115 | Plane and Solid Geometry | 4 |
| MA120 | College Algebra and Trigonometry | 3 |
| PH212 | Physics I | 3 |
| PH215 | Physics Lab | 1 |
| SS 000 | Humanities or Social Science electives (two courses) | 6 |
|  | Sub Total General Education Credits | 26 |

Undergraduate Program Curriculum Outline
AS Technology Business and Management

| Required (Core) Courses in the Major (Total \# courses required = 15) |  |  |
| :--- | :--- | :--- |
| Course Number | Course Title | Credit Hours |
| BS110 | Introduction to Business | 3 |
| BS120 | Introduction to Marketing | 3 |
| BS101 | Principles of Accounting | 3 |
| BS210 | Entrepreneurship | 3 |
| BS220 | Introduction to Quality Systems | 3 |
| BS108 | Personnel Management | 3 |
| BS285 | Technology Business Capstone | 1 |
| BS250 | Summer Seminar | 1 |
| CT134 | Introduction to Operating Systems | 3 |
| CT145 | Survey of Programming Languages | 4 |
| EE101 | Introduction to Electromechanical Systems | 3 |
| EE131 | Digital Principles | 4 |
| ME105 | CAD with SolidWorks | 3 |
| ME150 | Introduction to Manufacturing | 3 |
| SS235 | Financial Planning and Principles | 44 |
|  |  | Sub Total Core Credits |

(Note: These courses are included in the General Education component below.)

| PH102 | Physics | 3 |
| :--- | :--- | :--- |
| TS201 | Environmental Science | 3 |
| TS310 | General Chemistry | 4 |
| SS105 | Twentieth Century History | 3 |
| SS109 | Technology and Society | 3 |
| SS115 | Introduction to Psychology | 3 |
| SS135 | Introduction to Anthropology | 3 |
| SS205 | Contemporary Social Issues | 3 |
| SS215 | Race, Class, and Gender | 3 |
| SS233 | Film and Society | 3 |
|  |  |  |
|  |  | Sub Total Elective Credits |


| General Education Courses (Total \# courses required = 14 ) |  |
| :--- | :--- |
| Indicate Distribution of General Education Requirements Below <br> Attach or Insert Link to List of General Education Offerings (Course Numbers, <br> Titles, and Credits) | \# of Gen Ed <br> Credits |


| Arts and Humanities, including Literature and Foreign Languages | 9 |
| :--- | :--- |
| Mathematics and the Natural and Physical Sciences | $9-10$ |
| Social Sciences | 6 |
| Sub Total General Education Credits |  | 24-25

Undergraduate Program Curriculum Outline (Continued)

| General Education Courses (Total \# of courses required = 8) |  |  |
| :--- | :--- | :--- |
| Course Number | Course Title | Credit <br> Hours |
| EN130 | College Composition I | 3 |
| EN140 | College Composition II | 3 |
| EN320 | Technical Communications | 3 |
| SS265 | Exploring Ethical Issues | 3 |
| SSXXX | Elective | 3 |
| MA120 | College Algebra and Trigonometry | 3 |
| MA 270 | Statistics | 3 |
| TSXXX | Science Elective | $3-4$ |
|  | Sub Total General Education Credits | $24-25$ |

Undergraduate Program Curriculum Outline
AS in Health Information Technology

| Required (Core) Courses in the Major (Total \# courses required = 19) |  |  |  |
| :---: | :---: | :---: | :---: |
| Course Number | Course Title |  | Credit Hours |
| CT/EE/MD xxx | Technical Elective |  | 4 |
| CT/EE/MD xxx | Technical Elective |  | 3 |
| EE 101 | Intro to Electromechanical Systems |  | 3 |
| CT 134 | Introduction to Operating systems |  | 3 |
| CT 143 | Introduction to Programming Logic and C++ |  | 4 |
| CT 218 | Database Management Systems |  | 3 |
| CT 261 | Data communication and Networking |  | 4 |
| CT 263 | Applied Networking |  | 4 |
| EN 130 | College Composition I |  | 3 |
| EN 140 | College Composition II |  | 3 |
| HI 110 | Introduction to healthcare Systems |  | 3 |
| HI 120 | Medical terminology |  | 3 |
| HI 130 | Introduction to Health Information Technology |  | 4 |
| HI 210 | Electronic Health Records |  | 4 |
| HI 230 | Information Security in Health IT |  | 4 |
| MA 120 | College Algebra and Trigonometry |  | 3 |
| MA 130 | Pre-calculus |  | 3 |
| TS 240 | Human Anatomy and Physiology |  | 3 |
| TS 242 | Pathophysiology and Pharmacology |  | 3 |
|  | Sub Total Required Credits |  | 64 |
| Elective Courses (Total \# courses required = 1 ) (attach list of choices if needed) |  |  |  |
| SS 304 | Society in Comics, Manga and Graphics Novels |  | 3 |
|  | Sub Total Elective Credits |  | 3 |
| General Education Courses (Total \# courses required = 5) |  |  |  |
| Sub Total General Education Credits |  |  | 21 |
| Curriculum Summary |  |  |  |
| Total number of courses required for the degree |  | 20 |  |
| Total credit hours required for degree |  | 67 |  |
| Prerequisite, Concentration or Other Requirements: |  |  |  |

## ATTACHMENT B: BUDGET PROJECTION

NEW ACADEMIC PROGRAM BUDGET
AS Construction Management

| $\begin{gathered} \text { One Time/ Start } \\ \text { Up Costs } \\ \hline \end{gathered}$ | Cost Categories | Annual Expenses |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Year 1 | Year 2 | Year 3 | Year 4 |
|  | Full Time Faculty ${ }^{1}$ (Salary \& Fringe) | \$0 | \$0 | \$84,365 | \$87,739 |
|  | Part Time/Adjunct Faculty ${ }^{1}$ (Salary \& Fringe) | \$19,592 | \$28,213 | \$9,780 | \$10,172 |
|  | Staff | \$27,885 | \$28,443 | \$29,012 | \$29,592 |
| \$3,000 | General Administrative Costs ${ }^{2}$ | \$37,070 | \$76,365 | $\begin{array}{r} \hline \$ 104,87 \\ 5 \\ \hline \end{array}$ | \$135,026 |
|  | Instructional Materials, Library Acquisitions | \$1,000 | \$1,000 | \$1,000 | \$1,000 |
|  | Facilities/Space/Equipment ${ }^{2}$ | \$5,080 | \$10,465 | \$14,372 | \$18,504 |
|  | Field \& Clinical Resources ${ }^{2}$ | \$4,800 | \$5,200 | \$5,360 | \$5,600 |
|  | Marketing | \$6,000 | \$6,000 | \$6,000 | \$6,000 |
|  | Other ${ }^{2}$ (campus operations) | \$22,925 | \$45,074 | \$56,892 | \$58,599 |
|  | TOTALS | $\begin{array}{r} \hline \$ 124,35 \\ 3 \end{array}$ | $\begin{array}{r} \hline \$ 200,75 \\ 9 \end{array}$ | $\begin{array}{r} \hline \$ 311,65 \\ 5 \end{array}$ | \$352,231 |


| One Time/Start- |  | Annual Income |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Revenue Sources | Year 1 | Year 2 | Year 3 | Year 4 |
|  | Grants |  |  |  |  |
|  | Tuition ${ }^{3}$ | $\begin{array}{r} \hline \$ 170,85 \\ 6 \end{array}$ | $\begin{array}{\|c\|} \hline \$ 341,71 \\ 2 \end{array}$ | $\begin{array}{r} \$ 469,28 \\ 4 \end{array}$ | \$604,204 |
|  | Fees |  |  |  |  |
|  | Departmental |  |  |  |  |
|  | Reallocated Funds |  |  |  |  |
|  | Other (specify) |  |  |  |  |
|  | TOTALS | $\begin{array}{r} \$ 170,85 \\ 6 \end{array}$ | $\begin{array}{\|c\|} \hline \$ 341,71 \\ 2 \end{array}$ | $\begin{array}{r} \$ 469,28 \\ 4 \end{array}$ | \$604,204 |

1 In years one and two, the program will use existing full-time faculty from BDT (cost covered by that program) and adjuncts. An additional full-time faculty member will be hired for year three and beyond.
2 These values are based on inflation adjusted per student costs times estimated program enrollments.
3 Tuition revenue includes a 16 percent discount rate.

NEW ACADEMIC PROGRAM BUDGET -
AS Technology Business and Management

| One Time/ Start |  | Annual Expenses |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cost Categories | Year 1 | Year 2 | Year 3 | Year 4 |
|  | Full Time Faculty ${ }^{1}$ (Salary \& Fringe) | \$32,500 | \$33,150 | \$67,626 | \$68,979 |
|  | Part Time/Adjunct Faculty ${ }^{1}$ (Salary \& Fringe) | \$25,200 | \$25,704 | \$13,109 | \$13,371 |
|  | Staff | \$27,885 | \$28,443 | \$29,012 | \$29,592 |
|  | General Administrative Costs ${ }^{2}$ | \$40,160 | \$95,456 | $\begin{array}{r} \hline \$ 124,53 \\ 9 \end{array}$ | \$128,275 |
|  | Instructional Materials, Library Acquisitions | \$8,500 | \$5,000 | \$4,000 | \$3,000 |
|  | Facilities/Space/Equipment ${ }^{2}$ | \$5,503 | \$13,081 | \$17,066 | \$17,578 |
|  | Field \& Clinical Resources | \$4,800 | \$5,200 | \$5,360 | \$5,600 |
|  | Marketing ${ }^{2}$ | \$10,000 | \$5,000 | \$2,500 | \$2,500 |
|  | Other (campus operations) ${ }^{2}$ | \$24,835 | \$56,342 | \$67,559 | \$69,586 |
|  | TOTALS | $\begin{array}{r} \hline \$ 179,38 \\ 3 \end{array}$ | $\begin{array}{r} \$ 267,37 \\ 6 \end{array}$ | $\begin{array}{r} \hline \$ 330,77 \\ 1 \end{array}$ | \$338,480 |


| One Time/Start- <br> Up Support | Annual Income |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  | Revenue Sources | Year 1 |  |  |  |
| Year 2 | Year 3 | Year 4 |  |  |  |
|  | Grants |  |  |  |  |
|  | Tuition $^{3}$ | $\$ 185,09$ <br> 4 | $\$ 427,14$ <br> 0 | $\$ 557,27$ <br> 5 | $\$ 573,994$ |
|  | Fees |  |  |  |  |
|  | Departmental |  |  |  |  |
|  | Reallocated Funds |  |  |  |  |
|  | Other (specify) |  |  |  |  |
|  |  |  |  |  |  |

1 In years one and two, a portion of the cost of the full time faculty member will be covered by the Electronics Engineering Technology program. Full cost of the full time position will revert to this program in years three and beyond.
2 These values are based on inflation adjusted per student costs times estimated program enrollments.
3 Tuition revenue includes a 16 percent discount rate.

NEW ACADEMIC PROGRAM BUDGET AS Health Information Technology

| One Time/ Start |  | Annual Expenses |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cost Categories | Year 1 | Year 2 | Year 3 | Year 4 |
|  | Full Time Faculty (Salary \& Fringe) ${ }^{1}$ | \$26,000 | \$27,040 | \$28,100 | \$29,200 |
|  | Part Time/Adjunct Faculty (Salary \& Fringe) ${ }^{1}$ | \$1,130 | \$4,610 | \$10,800 | \$11,150 |
|  | Staff ${ }^{2}$ | \$6,654 | \$18,990 | \$24,386 | \$26,382 |
| \$600 | General Administrative Costs ${ }^{2}$ | \$17,937 | \$51,192 | \$65,738 | \$71,120 |
|  | Instructional Materials, Library Acquisitions ${ }^{1}$ | \$2,000 | \$1,500 | \$500 | \$500 |
| \$5,000 | Facilities/Space/Equipment ${ }^{1}$ | \$2,850 | \$3,850 | \$3,000 | \$3,000 |
|  | Field \& Clinical Resources ${ }^{2}$ | \$0 | \$0 | \$0 | \$0 |
| \$2,500 | Marketing ${ }^{1}$ | \$1,250 | \$1,250 | \$1,250 | \$1,250 |
|  | Other (campus operations) ${ }^{2}$ | \$11,093 | \$31,658 | \$40,654 | \$43,981 |
|  | TOTALS | \$68,914 | \$140,090 | \$174,428 | \$186,583 |

Values in this category represent estimated share attributed to the AS for incremental cost of HIT programs.
${ }^{2}$ Values in this category represent an estimate of the college's cost per student times the estimated enrollment in the program.

| One Time/Start- <br> Up Support | Revenue Sources | Annual Income |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
|  | Year 1 | Year 2 | Year 3 | Year 4 |  |
|  | Grants |  |  |  |  |
|  | Tuition | $\$ 85,428$ | $\$ 249,165$ | $\$ 351,963$ | $\$ 415,390$ |
|  | Fees |  |  |  |  |
|  | Departmental |  |  |  |  |
|  | Reallocated Funds |  |  |  |  |
|  | Other (specify) |  |  |  |  |
|  | TOTALS | $\$ 85,428$ | $\$ 249,165$ | $\$ 351,963$ | $\$ 415,390$ |

## Faculty Form

Associate of Science in Construction Management

## Summary of Faculty Who Will Teach in Proposed Program

| Name of faculty member (Name, Degree and Field, Title) | Check if Tenured | Courses Taught Put (C) to indicate core course. Put (OL) next to any course currently taught online. | Number of sections | Division of College of Employment | Full- or Part- time in Program | Full- or parttime in other department or program <br> (Please specify) | Sites where individual will teach program courses |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cornog, Jackie, MA in English Department Chair of Humanities | $\square$ | - EN130 Composition I <br> - EN140 Composition II | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ | Humanities | Part-time | Yes <br> Full-time in Humanities/ Social Science | - Main Campus |
| Griegelovich, Michael, MA in English, Instructor of Humanities | $\square$ | - SSXXX Social Science Elective | 2 | Humanities | Part-time | Yes <br> Full-time in Humanities/ Social Science | - Main Campus |
| Johanson, James, MA in Mathematics, Assistant Professor of Mathematics | $\square$ | - MA105 Technical Math I <br> - MA120 College Algebra \& Trigonometry | 1 | Mathematics and Physics | Part-time | Yes Full-time in Mathematics and Physics | - Main Campus |
| Lariviere, Todd BS Architecture, Adjunct Professor | $\square$ | - BT110 Intro to CAD (C) | 1 | Building Technology | Part-Time | Yes Building Technology and Design | - Main Campus |
| Larsen, Eric, <br> BArch, Licensed Architect <br>  <br> Assistant Professor <br> Building Technology, | $\square$ | - BT220 <br> Sustainable <br> Building <br> Technologies (C) <br> - BT250 <br> Environmental Systems (C) <br> - BT280 Statics \& Strength of Materials (C) <br> - CM101 Construction | $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ | Building Technology | Full-Time | Yes Building Technology and Design | - Main Campus |


|  |  | Management I (C) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lupia, Teresa, MS in Mathematics, Instructor of Mathematics | $\square$ | - MA115 Plane \& Solid Geometry | 1 | Mathematics and Physics | Part-time | Yes <br> Full-time in Mathematics and Physics | - Main Campus |
| Mount, Catherine, MS in <br> Physics, Instructor of Mathematics and Physics | $\square$ | - PH212/215 <br> Physics I and Lab | 1 | Mathematics and Physics | Part-time | Yes <br> Full-time in Mathematics and Physics | - Main Campus |
| Rocino, Michael, BArch, Assistant Professor | $\square$ | - BT100 Construction Graphics (C) <br> - BT160 Building Construction \& Materials (C) | 1 | Building Technology | Full-Time | Yes <br> Building <br> Technology and Design | - Main Campus |
| [New Hire(s)] Master's Construction Management, Adjunct | $\square$ | - BT262 Project <br> Scheduling (C) <br> - CM130 <br> Construction <br> Estimating (C) <br> - CM145 Heavy <br> Construction (C) <br> - CM201 <br> Construction Management II (C) <br> - CM250 <br> Construction <br> Surveying (C) | 1 | Building Technology | Part-Time | No | - Main Campus |

## Faculty Form

Associate of Science in Technology Business and Management

## Summary of Faculty Who Will Teach in Proposed Program

Please list full-time faculty first, alphabetically by last name. Add additional rows as necessary.

| Name of faculty member (Name, Degree and Field, Title) | Check if Tenured | Courses Taught Put (C) to indicate core course. Put (OL) next to any course currently taught online. | Number of sections | Division of College of Employment | Full- or Part- time in Program | Full- or parttime in other department or program (Please specify) | Sites where individual will teach program courses |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Azzi, Rich, MA in Mathematics Associate Professor of Computer Technology | $\square$ | - CT134 Intro to Operating Systems (C) <br> - CT145 Survey of Programming Languages (C) | 1 | Computer Technology | Part-time | Yes Full-time in Computer Technologies | - Main Campus |
| Cornog, Jackie, MA in English Department Chair of Humanities | $\square$ | - EN130 College Composition I <br> - EN140 College Composition II | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ | Humanities | Part-time | Yes <br> Full-time in Humanities/ Social Science | - Main Campus |
| Danner, Alexander MFA in Writing, Literature and Publishing, Adjunct Instructor of Humanities | $\square$ | - EN 320 Technical Communications | 1 | Humanities | Part-time | Part-time in Humanities department | - Main Campus |
| Dropkin, Keith; MBA; Adjunct Instructor |  | - BS101 Accounting <br> (C) | 1 | Business | Part-time | Yes, Finance Office | - Main Campus |
| Duggan, Ellen; MBA, EdD Educational Leadership Adjunct Instructor | $\square$ | - BS108 Personnel Management (C) <br> - BS120 Intro to Marketing (C) | 1 | Business | Part-time | No | - Main Campus |
| Garber, Roy, B. S. Electrical Engineering, Instructor of Mechanical Engineering Technology | $\square$ | - ME 150 Intro to Manufacturing (C) | 1 | Mechanical Engineering Technology | Full-time | Full-time in Mechanical Engineering Technology | - Main Campus |


| Greco, Brittanie, MA in English, Associate Professor of Humanities \& Social Science |  | - SS265 Exploring Ethical Issues | 1 | Humanities | Part-time | Yes <br> Full-time in Humanities/ Social Science | - Main Campus |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grigelovich, Michael, MA in English, Instructor of Humanities | $\square$ | - SSXXX Social Science Elective | 2 | Humanities | Part-time | Yes Full-time in Humanities/ Social Science | - Main Campus |
| Hosseinpour, Mozhgan, Professor of Electronic Engineering Technology | $\square$ | - EE101 Electromechanical Systems | 1 | Electronic Engineering Technology | Part-time | Yes <br> Full-time in EET | - Main Campus |
| Johanson, James, MA in Mathematics, Assistant Professor of Mathematics | $\square$ | - MA120 College Algebra \& Trigonometry | 1 | Mathematics and Physics | Part-time | Yes <br> Full-time in Mathematics and Physics | - Main Campus |
| Lovelace, Jeffrey A.; <br> MBA, Certified Six-sigma <br> Black Belt <br> Adjunct Instructor | $\square$ | - BS220 Intro to Quality Systems (C) | 1 | Business | Part-time | No | - Main Campus |
| Lupia, Teresa, MS in Mathematics, Instructor of Mathematics | $\square$ | - MA270 Statistics <br> (C) | 1 | Mathematics and Physics | Part-time | Yes Full-time in Mathematics and Physics | - Main Campus |
| Palomera-Arias, Eva, Adjunct Professor of Mechanical Engineering Technology | $\square$ | - ME105 CAD with Solidworks (C) | 1 | Mechanical <br> Engineering <br> Technology | Part-time | Part-time in Mechanical Engineering Technology | - Main Campus |
| VerNooy, Russ, MBA, <br> Assistant Professor | $\square$ | - BS110 Intro to Business (C) <br> - EE131 Digital Principles (C) | 1 | Business | Full-time | Part-time in Electronic Engineering Technology | - Main Campus |
| Waters, Rhonda; MBA, PhD Organizational Development; Adjunct Instructor | $\square$ | - SS235 Financial Planning \& Principles (C) | 1 | Business | Part-time | No | - Main Campus |
| Wong, Andrew MBA, JD Adjunct Instructor | $\square$ | - BS250 Summer Seminar (C) BS285 | 1 | Business | Part-time | No, but has taught business courses for the | - Main Campus |


|  |  | Technology <br> Business <br> Capstone (C) |  |  | Automotive <br> Management <br> program for <br> several years. |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Faculty Form

## Associate of Science in Health Information Technology

| Summary of Faculty Who Will Teach in Proposed Program |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Please list full-time faculty first. Note: Faculty are shared between the AS and BS programs |  |  |  |  |  |  |  |
| Name of faculty member (Name, Degree and Field, Title) | Name of faculty member (Name, Degree and Field, Title) | Name of faculty member (Name, Degree and Field, Title) | Name of faculty member (Name, Degree and <br> Field, Title) | Name of faculty member (Name, Degree and Field, Title) | Name of faculty member (Name, Degree and Field, Title) | Name of faculty member (Name, Degree and Field, Title) | Name of faculty member (Name, Degree and Field, Title) |
| Azzi, Richard, M.A. in Mathematics, Associate Professor of Computer Technologies | Azzi, Richard, M.A. in Mathema tics, <br> Associat <br> e <br> Professor of Compute r Technolo gies | Azzi, Richard, M.A. in Mathematics, Associate Professor of Computer Technologies | Azzi, Richard, M.A. in Mathema tics, <br> Associat <br> e <br> Professor of Compute r Technolo gies | Azzi, <br> Richard, M.A. <br> in <br> Mathematics, <br> Associate <br> Professor of <br> Computer <br> Technologies | Azzi, <br> Richard, M.A. in Mathematic <br> s, Associate Professor of Computer Technologie s | Azzi, Richard, M.A. in <br> Mathematics, <br> Associate <br> Professor of <br> Computer <br> Technologies | Azzi, Richard, M.A. in Mathematics, Associate Professor of Computer Technologies |
| Rogers, Larson, Ph.D. in Science Education, Department Chair of Computer Technologies | Rogers, Larson, <br> Ph.D. in <br> Science <br> Educatio <br> n, <br> Departm ent Chair of <br> Compute | Rogers, Larson, <br> Ph.D. in Science <br> Education, <br> Department Chair of Computer Technologies | Rogers, <br> Larson, <br> Ph.D. in <br> Science <br> Educatio <br> n, <br> Departm <br> ent Chair <br> of <br> Compute | Rogers, Larson, Ph.D in Science Education, Department Chair of Computer Technologies | Rogers, Larson, Ph.D. in Science Education, Department Chair of Computer Technologie s | Rogers, Larson, <br> Ph.D. in <br> Science <br> Education, <br> Department <br> Chair of <br> Computer <br> Technologies | Rogers, Larson, Ph.D. in Science Education, Department Chair of Computer Technologies |


|  | r <br> Technolo gies |  | r <br> Technolo gies |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Elysee, Gerald, Ph.D. in IT Management, Assistant Professor and Coordinator of HIT | Elysee, Gerald, Ph.D. in IT <br> Manage ment, Assistant Professor and Coordina tor of HIT | Elysee, Gerald, Ph.D. in IT Management, Assistant Professor and Coordinator of HIT | Elysee, Gerald, Ph.D. in IT <br> Manage ment, Assistant Professor and Coordina tor of HIT | Elysee, <br> Gerald, Ph.D. <br> in IT <br> Management, <br> Assistant <br> Professor <br> and <br> Coordinator <br> of HIT | Elysee, Gerald, Ph.D. in IT Manageme nt, Assistant Professor and Coordinator of HIT | Elysee, Gerald, <br> Ph.D. in IT <br> Management, <br> Assistant <br> Professor and Coordinator of HIT | Elysee, Gerald, Ph.D. in IT Management, Assistant Professor and Coordinator of HIT |
| Danner, Alexander M.F.A. in Writing, Literature and Publishing, Adjunct Instructor of Humanities | Danner, Alexande r <br> M.F.A. in Writing, Literature and Publishin g, Adjunct Instructor of Humaniti es | Danner, Alexander M.F.A. in Writing, Literature and Publishing, Adjunct Instructor of Humanities | Danner, Alexande r <br> M.F.A. in Writing, Literature and Publishin g, Adjunct Instructor of Humaniti es | Danner, Alexander M.F.A. in Writing, Literature and Publishing, Adjunct Instructor of Humanities | Danner, Alexander M.F.A. in Writing, Literature and Publishing, Adjunct Instructor of Humanities | Danner, Alexander M.F.A. in Writing, Literature and Publishing, Adjunct Instructor of Humanities | Danner, Alexander M.F.A. in Writing, Literature and Publishing, Adjunct Instructor of Humanities |
| Bonk, Sharon, M.L.S, Professor, Director of Library Services | Bonk, Sharon, M.L.S, Professor , Director of Library Services | Bonk, Sharon, M.L.S, Professor, Director of Library Services | Bonk, Sharon, M.L.S, Professor , Director of Library Services | Bonk, Sharon, M.L.S, Professor, Director of Library Services | Bonk, Sharon, M.L.S, Professor, Director of Library Services | Bonk, Sharon, M.L.S, <br> Professor, Director of Library Services | Bonk, Sharon, M.L.S, Professor, Director of Library Services |
| Connolly, Megan, BS, CPhT, Adjunct Instructor | Connolly, Megan, BS, CPhT, | Connolly, Megan, BS, CPhT, Adjunct Instructor | Connolly, Megan, BS, CPhT, | Connolly, Megan, BS, CPhT, Adjunct | Connolly, Megan, BS, CPhT, Adjunct | Connolly, Megan, BS, CPhT, Adjunct Instructor | Connolly, Megan, BS, CPhT, Adjunct Instructor |


|  | Adjunct Instructor |  | Adjunct Instructor | Instructor | Instructor |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cornog, Jackie, M.A. in English Department Chair of Humanities | Cornog, Jackie, M.A. in English Departm ent Chair of Humaniti es | Cornog, Jackie, M.A. in English Department Chair of Humanities | Cornog, Jackie, M.A. in English Departm ent Chair of <br> Humaniti es | Cornog, Jackie, M.A. in English Department Chair of Humanities | Cornog, Jackie, M.A. in English Department Chair of Humanities | Cornog, Jackie, M.A. in English Department Chair of Humanities | Cornog, Jackie, M.A. in English Department Chair of Humanities |
| Griegelovich, Michael, M.A. in English, Instructor of Humanities | Griegelov ich, <br> Michael, <br> M.A. in <br> English, Instructor of <br> Humaniti es | Griegelovich, Michael, M.A. in English, Instructor of Humanities | Griegelov ich, <br> Michael, <br> M.A. in <br> English, Instructor of <br> Humaniti es | Griegelovich, Michael, M.A. in English, Instructor of Humanities | Griegelovic h, Michael, M.A. in English, Instructor of Humanities | Griegelovich, Michael, M.A. in English, Instructor of Humanities | Griegelovich, Michael, M.A. in English, Instructor of Humanities |
| Lepp, Marianne, Ph.D. in Mathematics, <br> Associate Professor of Computer Technologies | Lepp, <br> Marianne <br> , Ph.D. in <br> Mathema tics, <br> Associat <br> e <br> Professor <br> of <br> Compute <br> r <br> Technolo gies | Lepp, Marianne, Ph.D. in Mathematics, Associate Professor of Computer Technologies | Lepp, <br> Marianne <br> , Ph.D. in <br> Mathema tics, <br> Associat <br> e <br> Professor <br> of <br> Compute <br> r <br> Technolo gies | Lepp, Marianne, Ph.D. in Mathematics, Associate Professor of Computer Technologies | Lepp, Marianne, Ph.D. in Mathematic s, Associate Professor of Computer Technologie s | Lepp, Marianne, Ph.D. in Mathematics, Associate Professor of Computer Technologies | Lepp, Marianne, Ph.D. in Mathematics, Associate Professor of Computer Technologies |
| Indelicato, Joyce MS, Clinical Exercise Physiology. Adjunct Instructor of Physiology | Indelicato , Joyce MS, Clinical Exercise | Indelicato, Joyce <br> MS, Clinical <br> Exercise <br> Physiology. Adjunct Instructor of | Indelicato , Joyce MS, Clinical Exercise | Indelicato, Joyce MS, Clinical Exercise Physiology. | Indelicato, Joyce MS, Clinical Exercise Physiology. | Indelicato, Joyce MS, Clinical Exercise Physiology. | Indelicato, Joyce MS, Clinical Exercise Physiology. Adjunct Instructor of Physiology |


|  | Physiolo gy. <br> Adjunct Instructor of Physiolo gy | Physiology | Physiolo gy. <br> Adjunct Instructor of Physiolo gy | Adjunct Instructor of Physiology | Adjunct Instructor of Physiology | Adjunct Instructor of Physiology |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Johanson, James, M.A. in Mathematics, Assistant Professor of Mathematics | Johanso <br> n, <br> James, <br> M.A. in <br> Mathema <br> tics, <br> Assistant <br> Professor <br> of <br> Mathema tics | Johanson, James, M.A. in Mathematics, Assistant Professor of Mathematics | Johanso <br> n, <br> James, <br> M.A. in <br> Mathema tics, <br> Assistant <br> Professor <br> of <br> Mathema <br> tics | Johanson, James, M.A. in <br> Mathematics, Assistant Professor of Mathematics | Johanson, James, M.A. in Mathematic s, Assistant Professor of Mathematic s | Johanson, James, M.A. in Mathematics, Assistant Professor of Mathematics | Johanson, James, M.A. in Mathematics, Assistant Professor of Mathematics |
| Luarasi, Tamara, Ph.D., Applied Mathematics and Information Systems, Adjunct Instructor of Computer Technologies | $\square$ | - HI130(C) | 1 | Computer Technologies | Part-time | No | - Main Campus |
| Thrope, David, M.B.A., Marketing/Finance, Adjunct Instructor of Computer Technologies | $\square$ | - CT212 | 1 | Computer Technologies | Part-time | Yes Part-time in Computer Technologies | - Main Campus |

