BOARD OF HIGHER EDUCATION

REQUEST FOR COMMITTEE AND BOARD ACTION

COMMITTEE: Assessment and Accountability	**NO**.: AAC 08-06
	COMMITTEE DATE: November 8, 2007
	BOARD DATE: November 16, 2007

MOVED: The Board of Higher Education hereby approves the Articles of Amendment of **Endicott College** to award the **Master of Science in Information Technology** and to amend the purpose clause to read as follows:

"To establish and maintain an institution of higher education for the training of students in Liberal and Professional Arts and Sciences and to grant the degrees of Associate in Arts and Associate in Science, and Bachelor of Fine Arts degree in the areas of Fine Arts and Visual Communications and to grant the Bachelor of Science degree in the areas of Interior Design, Visual Communications, Hospitality and Tourism Administration, Psychology, Entrepreneurial Studies, Nursing, Physical Education, Communications, Business Administration, Criminal Justice, Computer Science, Environmental Studies, Human Services Accounting, Athletic Training, Biology/Biotechnology, Sport Management, the Bachelor of Arts in Liberal Studies, English, Global Studies, History, Spanish, the Master of Education, Master of Business Administration, and Master of Science in Information Technology."

Authority: Massachusetts General Laws Chapter 69, Section 30 et seq.

Contact: Aundrea Kelley, Associate Vice Chancellor for Academic Policy

BOARD OF HIGHER EDUCATION

November 2007

Endicott College

Master of Science in Information Technology

INTENT

Endicott College, a private, four-year coeducational institution, located in Beverly, Massachusetts, requests authorization to offer the Master of Science in Information Technology. The proposed program will offer a one-year Master's option for working adults, graduates of the Bachelor in Computer Science at Endicott College, and other similar programs, and will build graduate-level programming on an established foundation of existing staff and resources available for the undergraduate degree.

Endicott's preliminary survey of market needs and program availability in the region North of Boston found 1) a continuing market need for computer technology-driven graduate programs for students with non-technological undergraduate majors such as business, communications, graphic design, hospitality, and sports management and others; and 2) a lack of graduate level programs in the North Shore area that address a myriad of issues in computer systems technology.

The proposed program is designed to prepare computer professionals, who seek to learn advanced aspects of computer technology. The program intends to emphasize educating students to understand information technology and its applications in education, business or government. The program is based on the belief that learning leads to change and that technologists must maintain the ability to learn continuously to be successful in their profession. The College intends to prepare program graduates for employment in multiple industries.

INSTITUTIONAL OVERVIEW

Endicott College was founded in 1939 by Dr. Eleanor Tupper and her husband, Dr. George O'Bierkoe, as a two-year college for women. Its primary focus was to equip women with the skills necessary to enhance their position in the work place, while educating them for greater independence. In 1944 the College received authorization to grant the Associate of Arts and the Associate of Science degrees in Liberal Arts and Vocational Sciences. Eight years later the New England Association of Schools and Colleges (NEASC) accredited the College.

In 1988 the Massachusetts Board of Regents approved the institution's request to change the College's name from "Endicott College, a Two-Year College for Women," to "Endicott College." Under the same charter amendment, the College was granted authority to offer its first baccalaureate degrees in the fields of interior design and retailing/fashion merchandising.

The College was approved to award the Bachelor of Science in Psychology, Hotel/Restaurant, Travel /Tourism Administration, Visual Communication, and to offer the Honorary Doctor of Humane Letters in 1990. In April 1992 the institution was granted authority to offer the Bachelor of Science in Entrepreneurial Studies. Endicott received authority in 1993 to offer the Bachelor of Science in Nursing. The following year, Endicott's request to offer a Bachelor of Fine Arts was approved. In 1996 the College received authorization to offer the degrees of Bachelor of Science in Business Administration, Bachelor of Science in Communication, Bachelor of Arts in Liberal Studies, Bachelor of Science in Physical Education, and its first master's degree, the Master of Education. In 2000 the Board approved the request of Endicott College to offer the Bachelor of Science in Information and Computer Technology and the Master of Business Administration.

Since fall 1994, Endicott has more than doubled its full-time undergraduate enrollment from 702 to 1,750, and the resident population has more than tripled, from 424 to 1,550. The College's Van Loan School of Graduate and Professional Studies enrolled approximately 1,700 students in 2006. Endicott also operates a campus in Mexico City, a graduate program in Bermuda, and collaborative programs with the Center for International Studies in Madrid, Spain, and with the Glion School of Higher Education in Bulle, Switzerland.

ACADEMIC AND RELATED MATTERS

Admission Requirements: Students applying to the proposed program are required to have a bachelor degree with a minimum GPA of 3.0. Prospective students are required to submit an application and fee, statement of professional goals, official transcripts of all academic work, two letters of recommendation, and an official GRE score.

Projected Enrollments: Students will be admitted to the proposed program in cohort groups totaling up to 20 students. Most students are expected to complete the program within 18-24 months. Courses will be offered in the evenings, on weekends, and during weeklong sessions in the summer.

Enrollment Projections	2008	2009	2010
Cohort Groups	1	2	2
Total Students	10	20	20

Current Tuition and Fee Charges: Endicott student charges are $441/credit or $1,323 per 3-credit course.

Curriculum (Attachment A): The proposed Master of Science in Information Technology is a 36-credit program designed for computer professionals who seek to continue learning about the key technical topics, current status and future directions of systems technology, as well as its social impact.

The proposed program will employ a collaborative, team approach to teaching and learning, including a cohort style model for students that is intended to enhance peer

learning and collaboration and to emphasize and reinforce team building and teamwork as critical functions of individuals and organizations. The program is designed to reflect the development of information technology systems in organizations and culminates in a field-study project focused on resolving a real world problem. Students will be required to pass an oral examination at the completion of this project to demonstrate their comprehensive understanding of the coursework.

RESOURCES

Faculty and Staff: The College will hire a program coordinator to market and coordinate the program and new full-time faculty and adjuncts to teach in the proposed program.

Library and Information Technologies: Endicott College has a collection of over 116,000 volumes. Endicott is a member of the North of Boston Library Exchange and the Northeast Massachusetts Regional Library System and has subscriptions to EBSCOhost, ERIC E*subscribe, and the Emerald Management Library, combined with access to several databases.

Facilities: The proposed program will be housed in the College's newly renovated Van Loan School of Graduate and Professional Studies.

Fiscal (Attachment B): The College submitted a three-year budget projection that included allocations for additional faculty, software and computer equipment.

EVALUATION

The proposed Master of Science in Information Technology was evaluated by William R. Campbell, Associate Professor, Department of Computer Science, University of Massachusetts Boston, in June 2007. Strengths of the program included the design of the curriculum, providing students with a mix of information technology, societal impact and professional applications. Dr. Campbell recommended approval of the proposed program, contingent on the College's hiring additional full-time faculty to provide local oversight to the program, and implementing a computer laboratory in the Van Loan School of Graduate and Professional Studies.

In response Endicott wrote that it has hired one additional full-time faculty member to provide oversight to the program and is committed to hiring one additional full-time faculty as well as adjunct faculty. The College will add resources required to develop a computer lab in the Graduate School. Computer workstations are already in place, and the College will purchase a "server" to allow for the interaction with software packages—i.e., database management, operating systems, and programming environments. Additional resources will also be needed for acquisition of software appropriate for the program. It is estimated that additional server hardware cost would be in the range of $2,000-$3,000. Additional software licensing fees are expected to be in the $5,000 range. The College has agreed to provide all needed technology and support systems.

The College also re-titled the proposed program from the originally submitted name of Master of Science in Computer Science Technology in response to Dr. Campbell's suggestion that the Master of Science in Information Technology more accurately described the program.

PUBLIC HEARING

The required public hearing was held on October 18, 2007, at 10:30 a.m. at the Board of Higher Education. No comments were offered in opposition to the proposed program.

STAFF ANALYSIS AND RECOMMENDATION

The staff has thoroughly evaluated all of the materials submitted by Endicott College and finds that the proposal meets the requirements for NEASC-accredited institutions outlined in 610 CMR 2.08. Recommendation is for approval of the College's petition to offer the Master of Science in Information Technology and to amend the purpose clause to read as follows:

"To establish and maintain an institution of higher education for the training of students in Liberal and Professional Arts and Sciences and to grant the degrees of Associate in Arts and Associate in Science, and Bachelor of Fine Arts degree in the areas of Fine Arts and Visual Communications and to grant the Bachelor of Science degree in the areas of Interior Design, Visual Communications, Hospitality and Tourism Administration, Psychology, Entrepreneurial Studies, Nursing, Physical Education, Communications, Business Administration, Criminal Justice, Computer Science, Environmental Studies, Human Services Accounting, Athletic Training, Biology/Biotechnology, Sport Management, the Bachelor of Arts in Liberal Studies, English, Global Studies, History, Spanish, the Master of Education, Master of Business Administration, and Master of Science in Information Technology."

The College filed the amended purpose clause in order to ensure that degrees added under provisions for NEASC-accredited institutions are recorded in the institution's charter.

Attachment A: CURRICULUM

Pre-Requisites: While an undergraduate degree in Computer Science, Computer Information Systems or IT is not required, a student with a bachelor degree in an unrelated field may be required to take a maximum of seven courses, as listed below, based upon evaluation of their prior course work. These seven additional courses are:

Introduction to Programming (C)	[3 cr.]
Emerging Technologies/Forecasting	[3 cr.]
Database Programming	[3 cr.]
Network Operations Management	[3 cr.]
Operating Systems	[3 cr.]
Calculus and Analytical Geometry	[6 cr.]

Total Pre-requisites   **21 credits**

THE PROGRAM OF STUDY

CST500	Information Systems Strategy	[3 cr.]
CST505	Mathematical Concepts in Computer Science and Telecomm I	[3 cr.]
CST506	Mathematical Concepts in Computer Science and Telecomm II	[3 cr.]
CST510	Systems Architecture and Analysis	[3 cr.]
CST520	Fundamentals of Data and Telecomm Networks	[3 cr.]
CST530	Wireless and Wide-Area Networks	[3 cr.]
CST540	Database Management	[3 cr.]
CST550	Software Engineering	[3 cr.]
CST560	Computer Security and Cyber Forensics	[3 cr.]
CST570	Ethics and Politics in Computer Science	[3 cr.]
CST580	Project and Professional Management	[3 cr.]
CST582	Consulting Project Seminar	[3 cr.]

Total degree requirements   **36 credits**

Attachment B: Budget
Master of Science in Information Technology
Projected Three-Year Budget

Enrollment Projections	2008	2009	2010
Cohort Groups	1	2	2
Total Students	10	20 (10 students x 5 courses), (10 students x 7 courses)	20
# of 3 Credit Courses	7	12	12
# of Credits	210	360	360
Revenue			
*Tuition	$92,610	$158,760	$158,760
Fees (Graduation)	-0-	$ 2,000	$ 2,000
Other Fees	$ 200	$ 500	$ 500
Total Revenue	$92,810	$161,260	$161,260
Costs			
Faculty - Full-time	$55,000	$57,750	$61,000
Faculty – Part-time (7 courses x $3,100)	$21,700		
(12 courses X $3,100)		$37,200	
(12 courses X $3,100)			$37,200
Lab Technician – P.T.	$15,000	$20,000	$21,000
**Software & Equipment	$ 10,000	$ 10,000	$ 10,000
Total Costs	$101,700	$124,950	$129,200
Net	-$ 8,890	$ 36,310	$ 29,560

*Tuition rate is $441/per credit (07-08 rate).
**This fee supplements Endicott College's technology investment fund.