MEMORANDUM

March 11, 2015

TO: Members of the Board of Trustees

FROM: Nancy L. Zimpher, Chancellor

SUBJECT: Master Plan Amendment for the State University of New York College of Technology at Farmingdale

Action Requested

The proposed resolution authorizes the State University of New York College of Technology at Farmingdale to confer the Master of Science degree, subject to approval by the New York State Board of Regents.

Resolution

I recommend that the Board of Trustees adopt the following resolution:

Resolved that the State University Master Plan be, and hereby is, amended to authorize the State University of New York College of Technology at Farmingdale to offer the Master of Science degree in the discipline of Business and Management; and, be it further

Resolved that the Chancellor be, and hereby is, authorized to transmit this amendment to the Board of Regents and the Governor for incorporation into the State University Master Plan.

Background

Approval of this resolution will authorize the State University of New York College of Technology at Farmingdale (“Farmingdale State College”) to confer the Master of Science (“M.S.”) degree, subject to the approval of the Board of Regents. A Master Plan amendment is required because the award represents the College’s first master’s level degree offering and as such is subject to the
approval of the Board of Regents and the Governor, in accordance with New 
York Education Law (NYS Education Law §237 and 8 NYCRR §52.1).

The Master of Science degree is consistent with the mission of 
Farmingdale State College to provide flexible and affordable programs of study to 
academically qualified students that support their educational aspirations, meet 
the needs of regional employers and promote the economic development of the 
region. Approval of the Master of Science in Technology Management, the 
College’s first proposed M.S. degree program, supports Power of SUNY strategic 
goals by offering a program of study in a high-demand field that allows a diverse 
set of students to advance their careers, contribute to the advancement of the 
enterprises that employ SUNY students, and maximize opportunities for applied 
learning.

The College has been preparing for this academic direction since 2007, 
when as part of the SUNY Mission Review process, a Memorandum of 
Understanding between Farmingdale State College and SUNY outlined that the 
College and System Administration agreed to consider the expansion of the 
College’s mission, to include graduate programs that: 1) were consistent with its 
mission of applied science and technology; 2) met workplace needs; and, 3) 
could be delivered with the quality befitting SUNY graduate programs.

The College worked to build the capacity of its faculty by expanding the 
number of professors with terminal degrees and the potential to carry out 
research and scholarly work, including seven research-active faculty in the 
School of Engineering Technology who have collectively brought in more than 
$13 million in sponsored funding. Criteria for reappointment, continuing 
appointment and promotion were revised to set higher standards for scholarship 
including requirements for peer reviewed publications and external review of 
faculty portfolios. New funding was secured and existing funds were reallocated 
to renovate and refit laboratories with updated equipment to support faculty 
research and to generally enhance students’ educational experience. Resources 
were devoted to professional development opportunities for existing faculty and 
to support undergraduate research.

The proposed M.S. in Technology Management program builds on the 
undergraduate programs of the College which are accredited by the Accreditation 
Board of Engineering Technology (ABET) or the Association of Technology, 
Management, and Applied Engineering (ATMAE). The College’s baccalaureate 
programs in Mechanical Engineering Technology, Electrical Engineering 
Technology, Computer Engineering Technology, Manufacturing Engineering 
Technology, Industrial Technology-Facility Management, Architecture 
Engineering Technology and Construction Management Technology have a well-
established record of producing successful graduates who obtain well-paying 
jobs in their fields of study and all programs were recently granted re-
accreditation by ABET or ATMAE. The M.S. in Technology Management will be
supported by the faculty and facilities currently available in the School of Engineering Technology and the School of Business. In addition, the College has committed to hiring at least two additional faculty members in the next year with backgrounds in technology and/or management.

The proposed M.S. in Technology Management features two tracks: 1) Electrical and Mechanical Technology; and, 2) Construction Management Technology. The program is designed to graduate qualified professionals capable of taking leadership roles in designing, developing, improving, and transforming the industrial systems that are the basis for much of the economic base of the Long Island region. This program offers advanced training in specific and complex technological fields of importance to regional industry as well as management skills and knowledge that will allow graduates to further their career potential, provide management and leadership for technology-based industries, and expand the overall workforce capacity in the region.

This program consists of a 12-credit core in technology management, nine credits of coursework in one of two tracks, three to nine credits of elective courses, and a choice of either a three-credit capstone master’s project or a six-credit master’s thesis. The 12-credit core of the program will stress the fundamentals of management, quality control, reliability, ethics and policy. The two individual tracks described above will build advanced management skills in fields important to the local economy. The elective courses will provide students the opportunity to tailor the program to their specific interests and goals by securing other advanced technical skills. The capstone courses align with SUNY’s commitment to applied learning by providing opportunities for students to conduct applied research in technology and science with a focus on the management of advanced technology that fuels the growth of regional industries.

Graduates of the proposed program will have the skills and knowledge to advance into management and mid-level management positions in industries specializing in, for example, renewable energy products and design, electronic system design, control systems, automation systems, product design and manufacturing, residential construction, training aids for engineering education, quality control, fluid system valves and component manufacturing, dental and medical design and manufacturing, smart technology and clean energy product design, automated control systems, and data communication.

To ensure that the program remains responsive to the needs of the local community, an external advisory board will be used to guide the development and growth of the program. Members will be leaders in local businesses and industries relevant to the program. The College uses advisory boards for all baccalaureate programs to keep degree programs relevant to industry needs and ensure that graduates have the skills and knowledge to succeed in their chosen fields.
The College conducts an annual survey of regional employers and response to the proposed program and interest in hiring prospective graduates has been strong. In addition, both locally focused and state-wide data indicate job growth potential for individuals so trained.

A 2011 report from the New York State Department of Labor ("NYS DOL"), Significant Industries: A Report to the Workforce Development System, indicates that there will be a 6.7 percent annual increase on Long Island in job opportunities in the STEM fields between 2006 and 2016. Moreover, NYS DOL regional labor market analysts have indicated that many employers are looking for people in STEM fields who also have a business and/or management degrees. The NYS DOL 2013 Labor Market Information for Workforce Planning indicated that there was high need on Long Island for Computer and Information Managers, Construction Managers, and Operations Managers.

Finally, the proposed program was rated positively by external reviewers. In particular, they identified “the two-track design of the program as a major strength, noting that it allows students to gain knowledge and skills in technology management as well as content areas, such as Electrical and Mechanical, or Construction Management.” As a result, external reviewers indicated that the program “…will contribute to regional economic development not only by meeting the workforce needs in advanced technology by also by providing leadership and management for such technology.”

In addition to the program’s rigor and alignment with professional and industry needs on Long Island, the external reviewers also noted a shared commitment and genuine support among administration, faculty, and staff, and the larger stakeholder community.

The proposed M.S. in Technology Management is consistent with the mission of Farmingdale State College and meets both local and state needs.