



**TO:** The Honorable the Members of the Board of Regents  
**FROM:** Douglas E. Lentivech   
**SUBJECT:** Master Plan Amendment: Pace University – New York City Campus, Bachelor of Science (B.S.) Degree Program in Software Engineering

**DATE:** May 31, 2018

**AUTHORIZATION(S):** 

### **SUMMARY**

#### **Issue for Decision (Consent Agenda)**

Should the Board of Regents approve a master plan amendment for Pace University to establish a Software Engineering program leading to the Bachelor of Science (B.S.) degree at its New York City campus?

#### **Reason(s) for Consideration**

Required by State statute.

#### **Proposed Handling**

This question will come before the full Board at its June 2018 meeting where it will be voted on and action taken.

#### **Procedural History**

A Master Plan Amendment is necessary as this is the institution's first program in the discipline of engineering at the bachelor's level at the New York City campus.

#### **Background Information**

Pace University requested to register a B.S. program in Software Engineering at its New York City campus. The University has an existing B.S. program in Computer Engineering at its Pleasantville campus. The purpose of the proposed Software Engineering program is to teach and empower students with the theoretical knowledge

and practical skills to engineer and maintain high quality software solutions from the conceptualization of the idea to the design, implementation, deployment, and maintenance of software artifacts. The purpose and goals of the program are consistent with the mission of Pace University: providing to its undergraduates a powerful combination of knowledge in the professions, real-world experience, and a rigorous liberal arts curriculum, giving students the skills and habits of mind to realize their full potential.

The program is 121-123 credits, including 67 credits in the Liberal Arts and Science; 51 credits in the major; and 3-5 credits in general electives. Core courses consist of the following: Introduction to Software Engineering, Software Design & Architecture, Quality Assurance, Requirements Engineering, Formal Software Development, Software Verification & Validation, and a capstone course in Software Development Studio. The curriculum was designed to meet ABET accreditation standards and Pace will seek accreditation at the earliest possible date.

The program follows Pace University's standard undergraduate admission process. Students must complete a formal application for admission; have a high school average of at least 80 percent as indicated by their transcript, with at least three years of mathematics; two letters of recommendation and a personal essay (recommended). A quantitative SAT score of at least 550 is recommended (though not required), which is higher than that required for general admission to the University.

The estimated first year enrollment for the program is approximately 10 students with incremental growth in the following years (Year 2 – 20, Year 3 – 30, Year 4 – 40, Year 5 – 50). It is anticipated that the student body will be as diverse as Pace University's computing programs. At present the demographic breakdown in computing programs includes 30 percent female students; 26 percent White; 11.5 percent African American; 9 percent Asian; and 9 percent Hispanic. Forty percent (40%) of the students are international students (Data Source: OPAIR, Census Date: 10/21/2017).

The current facilities (classroom, lab, and office space) at the University are adequate to meet the needs of additional enrollment. All classrooms have internet and audio-visual technology and are designed to allow for flexible setup. Computer lab equipment is state of the art and a specialized Software Engineering lab has been added in anticipation of the new program. Four existing faculty members will teach in the proposed program. The University plans to add one new faculty member for each of the first two years.

**Canvass Results:** A canvass of the institutions of the New York City region as well as of all institutions in the state offering engineering programs was conducted to determine potential impact on current programs and resources. No objections were received.

**Department Review:** The Department has determined that the proposed program meets the standards for registration set forth in the Regulations of the Commissioner of Education.

### **Recommendation**

VOTED: That the Board of Regents approve an amendment to the master plan of Pace University to authorize the University to offer the B.S. in Software Engineering program at its New York City campus. This amendment will be effective until June 12, 2019, unless the Department registers the program prior to that date, in which case the master plan amendment shall be without term.

### **Timetable for Implementation**

If the Board of Regents approves the master plan amendment, the Department will register the B.S. program in Software Engineering.