September 15, 2014

Dr. Elizabeth L. Bringsjord
Interim Provost and Vice Chancellor
State University of New York
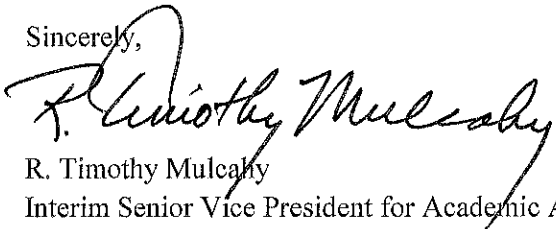System Administration
State University Plaza
Albany, NY 12246

Dear Dr. Bringsjord,

I am pleased to submit for your consideration the attached program announcement for a Bachelor of Science degree in Computer Engineering. This program is being developed in accordance with the accreditation standards of ABET and it is the University's intention to seek accreditation from this organization. We are targeting an effective date of Fall 2015 for admission to the program.

Should there be a need for additional information or clarification to facilitate processing, please contact Suzanne Freed, Assistant Vice Provost for Undergraduate Education at sfreed@albany.edu.

Thank you for your consideration and assistance.

Sincerely,

R. Timothy Mulcahy
Interim Senior Vice President for Academic Affairs and Provost

Enclosure
c. Dr. Jeanette Altarriba, Vice Provost and Dean for Undergraduate Education
   Dr. Sue Faerman, Dean, College of Computing and Information
   Dr. Ann Marie Murray, Assoc Provost for Program Development and Service Professor
   Ms. Suzanne Freed, Asst Vice Provost for Undergraduate Education

SUNY — The State University of New York

Before submitting a proposal for a new program leading to an undergraduate degree, a SUNY campus must submit a cover letter signed by the Chief Executive or Chief Academic Officer and a completed Program Announcement (PA) to the SUNY Provost at program.review@.suny.edu. The PA procedure is described at the end of this form.

Section 1. General Information	
Item	**Response** *(type in the requested information)*
a) **Institutional Information**	List each campus (and its 6-digit SED Institution Code) where the entire program will be offered: **University at Albany 210500**
b) **Program Locations**	List the name and address of each off-campus location (e.g., extension site or extension center) where courses (but not the entire program) will offered, **or check here [X] if not applicable**. If applicable, send documentation to show that SUNY policy on off-campus locations has been followed.
	Will 50% or more of the program be offered at a distance? [ ] Yes [X] No

c) **Proposed Program Information**		
	Program Title:	**Computer Engineering**
	Award(s) (e.g., A.A.S., B.A.):	**BS**
	Number of Required Credits:	Minimum [**120**] If tracks or options, largest minimum [ ]
	Proposed Program Codes:	HEGIS Code [**0999**] 6-digit CIP 2010 Code [**14.0901**]

c) (cont.)	
	If the program will be accredited, list the accrediting agency and expected date of accreditation: **Application to ABET (formerly the Accreditation Board for Engineering and Technology) Summer 2017**
	If applicable, list the New York State certificate title(s) and type(s) to which the program leads:
	If applicable, list the New York State professional licensure title(s) to which the program leads: **Professional Engineer**

d) **Contact Person for Proposal**	Name and title: Suzanne K Freed Asst Vice Provost for Undergraduate Education Telephone: 518-242-6046 E-mail: sfreed@albany.edu
e) **Chief Executive or Chief Academic Officer Approval**	Name and title: R. Timothy Mulcahy, Ph.D. Interim Senior Vice President for Academic Affairs and Provost Email for receiving comments: provost@albany.edu Date:
	If the intended program will be offered jointly with one or more other institutions, provide the following information for each institution:
	Partner institution's name, CEO's name and title:

In 300 or fewer words, describe the proposed program, including its purpose, content, structure, and duration.

Computer engineering is a discipline that integrates computer hardware design with software design. Working with computing devices and systems, computer engineers use the principles of basic science and mathematics to analyze and design solutions to solve computing problems. Computer engineers work for organizations that build or use computer-based systems; this describes most industries and governments. They are equally successful in large multinational corporations and small firms. Computer engineers solve problems and build technologies that address current and future societal issues.

The Bachelor of Science Degree in Computer Engineering is a four year, student-centered, industry-informed B.S. degree that leads to employment or research in the field of computer engineering. Topics include computer organization and architecture, digital logic design, computer programming, single and multivariate differential and integral calculus, probability and statistics, ordinary differential equations, physics, electronics, signals, and circuits. Students will solve, analyze, design, and build complex software and hardware components in collaborative teams to solve challenging industry informed relevant problems. Graduates will possess strong problem-solving, communication and leadership skills.

Expected Enrollment	When Program Begins	In Year 5
Full-time students	36	99
Part-time students		

Section 3. Curriculum

Provide a list of all courses in the curriculum, including (Liberal Arts and Sciences, SUNY General Education Requirement, Transfer Path courses) to show the entire structure and content of the program. Expand or duplicate the table as needed for tracks, concentrations and specializations.

Lower Division:				Upper Division:			
Course Title	Credits	GE	LAS	Course Title	Credits	GE	LAS
AMAT 112 Calculus I	4	X	X	AMAT 311 Ordinary Differential Equations	3		X
AMAT 113 Calculus II	4		X	AMAT 367 Discrete Probability	3		X
AMAT 214 Calculus of Several Variables	4		X	ICEN 415/APHY 415 Electronics	3		X
AMAT 220 Linear Algebra	3		X	ICEN 353/APHY 353Microprocessors	3		X
ACHM 120 + ACHM 124 Chemistry 1 w/lab	4	X	X	ICEN 333/ICSI 333 Programming at the hardware/software interface	4		
APHY 140 + APHY 145 Physics I w/lab	4	X	X	ICEN 340 Digital Logic Design	3		
APHY 150 + APHY 155 Physics II w/lab	4	X	X	ICEN 350 Signals and Systems	3		
ICEN 140 Intro to Engineering Design	3			ICEN 454/APHY 454 Microprocessor Apps	3		X

ICEN 150 Intro to Engineering Analysis	3			ICEN 400/ICSI 400 Operating Systems	3		X
ICEN 201/ICSI 201 Intro to Computer Science	4			ICEN 404/ICSI 404 Computer Organization	3		
ICEN 210/ICSI 210 Discrete Structures	4		X	ICEN 416/ICSI 416 Computer Network Communications I	3		
ICEN 213/ICSI 213Data Structures	3			ICEN 440 Design Lab I	6		
				ICEN 450 Design Lab II	6		
Humanities	3	X	X	Computer Engineering Electives (4)	12		
Arts/Western Civilization	3	X	X				
Social Science/US History	3	X	X				
Foreign Language	4	X	X				
UUNI 110 Writing and Critical Inquiry	3	X	X				
Elective	2						
Totals **Major – 102 credits** **Degree – 120 credits**	**62**	**9/32**	**47**			**58**	**18**

Computer Engineering Electives to be chosen from the following upper division courses:

ICEN 360 Emerging Technologies
ICEN 370 Digital Signal Processing
ICEN 430 Computer Systems Engineering
ICEN 460 Mobile Design Engineering
ICEN 470 Human Computer Interaction
ICEN 480 VLSI Design and Fabrication

ICSI 311Principles of Programming Languages
ICSI 402 Systems Programming
ICSI 403 Algorithms and Data Structures
ICSI 405 Object Oriented Programming
ICSI 410 Introduction to Databases
ICSI 411 Database Performance Principles
      &Transaction Management
ICSI 418 Software Engineering

Procedure for Program Announcements (PA)

1. SCOPE. A SUNY campus must send a PA to the SUNY Provost at program.review@suny.edu before submitting a proposal for a new program leading to an undergraduate degree. Unless requested by the SUNY Provost, a PA is not required for a program leading to an undergraduate certificate, for a new program being created by combining existing registered programs (e.g., multi-award programs and/or multi-institution programs), or for a new program being created from a track, specialization, or concentration in a registered program.

2. SUNY PROVOST'S REVIEW. The SUNY Provost's Office reviews each PA for accuracy and completeness as well as for substantive issues, such as alignment with campus mission and SUNY policy, and requests changes when needed.

3. PUBLICATION FOR COMMENTS. Once a PA is acceptable to the SUNY Provost, it is announced on the SUNY Program Review listserv in a weekly *Program Review Update,* which starts a 30-day intra-SUNY comment period. The listserv includes all campus presidents, chief academic officers, and others upon request. The PA enables other SUNY campuses – particularly those with experience with related programs – to provide information to the proposing campus that can be used to construct a sound program proposal.

4. COMMENTS FROM OTHER CAMPUSES. The President of each interested campus must send comments within 30 days of a PA's publication in the *Program Review Update* to the President of the proposing campus, with a copy to the Provost at program.review@suny.edu. Comments may include advice and suggestions about possible articulation opportunities, enrollment trends in related programs, and opportunities for cooperation, as well as concerns or objections.

5. FOLLOWING THE COMMENT PERIOD. Once the 30-day comment period for a PA ends, and any concerns and/or objections have been resolved, the campus may prepare a full proposal for the SUNY Provost and, when required, begin the external evaluation process.

6. EXPIRATION. A PA expires one year after its publication in the *Program Review Update.*   If the proposing campus does not submit a program proposal to the SUNY Provost before a PA expires, the campus must submit another PA to start the process again.