Electrical Engineering Science

Hostos Community College offers the Associate in Science (A.S.) degree in Electrical Engineering Science as a jointly registered, dual admission program with the existing Bachelor of Engineering in Electrical Engineering (B.E./E.E.) at the City College of New York.

The program has been designed to meet the licensure guidelines of the Accreditation Board for Engineering and Technology (ABET). The program will provide HCC students with the same curriculum as the first two years of the licensure qualifying electrical engineering program required at CCNY. Upon successful completion of the lower division at HCC students will have a seamless transition to the upper division of the baccalaureate program at CCNY. The collegial nature of the program will facilitate the transition to the professional portion of the curriculum.

Electrical Engineering Science students will enroll in the existing science and mathematics courses at Hostos and will enroll in the two engineering courses at CCNY.

Hostos Community College
First Year Fall ................................................................................................................. Credits
MAT 210 ..................................................Calculus I ......................................................... 4.0
ENG 110 .................................................Expository Writing ....................................... 3.0
CHE 210 ..................................................General Chemistry I .................................... 4.0
PSY 101 ....................................................General Psychology ....................................... 3.0
Subtotal ............................................................................................................................ 14.0

Spring................................................................................................................................. Credits
MAT 220..................................................Calculus II ......................................................... 4.0
ENG 111 ...................................................Literature & Composition ............................. 3.0
SOC 101 ....................................................Introduction to Sociology ............................. 3.0
MAT 200 ...................................................Modern Programming ................................... 3.0
Liberal Arts Elective † ....................................................................................................... 1.0
Subtotal ............................................................................................................................ 14.0

Second Year Fall .............................................................................................................. Credits
MAT 310 ..................................................Calculus III ....................................................... 4.0
PHY 210 ...................................................Physics I ........................................................ 4.0
ENGR 10300*** ........................................ Tool/Engineers .......................................... 2.0
ENG 202** ................................................ Technical Writing ....................................... 3.0
VPA 192‡† ................................................. Fundamentals of Public Speaking .............. 3.0
Subtotal ............................................................................................................................ 16.0

Spring................................................................................................................................. Credits
MAT 360..................................................Differential Equations ...................................... 3.0
ENGR 20400*** ........................................ Electric Circuits ........................................... 3.0
MAT 320 ..................................................Linear Algebra with Vector Analysis .......... 3.0
PHY 220 ...................................................Physics II ...................................................... 4.0
Liberal Arts .......................................................... ......................................................... 3.0
Subtotal ............................................................................................................................ 16.0
TOTAL CREDITS............................................................................................................ 60.0
City College of New York (CCNY)

Third Year - Fall ................................................. Credits
EE 21000 ......................................................... Switching Systems ........................................ 3.0
EE 20500 ......................................................... Linear Systems Analysis I ................................... 3.0
EE 22100 .......................................................... Electrical Engineering Lab ................................ 1.0
EE 24100 .......................................................... Electronics I ................................................. 3.0
EE 25900 ......................................................... Programming for Electrical Engineering ............... 4.0
Subtotal .................................................................. 14.0

Spring ................................................................. Credits
EE 30600 .......................................................... Linear Systems Analysis II ................................ 3.0
EE 31100 .......................................................... Probability and Random Processing .................. 3.0
EE 32200 .......................................................... Electrical Engineering Lab II ............................ 1.0
EE 33000 .......................................................... Electromagnetics ............................................. 3.0
EE 34200 .......................................................... Electronics II ................................................... 3.0
Lecture Elective ........................................................ 3.0
Subtotal .................................................................. 16.0

Fourth Year - Fall ................................................... Credits
EE 31200 .......................................................... Communication Theory .................................... 3.0
EE 32300 .......................................................... Electrical Engineering Lab III ........................... 1.0
EE 33300 .......................................................... Introduction to Antennas, Microwaves & Fiber Optics ............................................. 3.0
EE 33900 .......................................................... Semiconductor Materials & Devices ................ 3.0
EE 37100 .......................................................... Linear Feedback System .................................. 3.0
Lecture Elective ........................................................ 3.0
Subtotal .................................................................. 16.0

Spring ................................................................. Credits
EE 44100 .......................................................... Electronic Devices & Semiconductor Materials ........ 3.0
EE 44400 .......................................................... Digital Computer Systems ............................... 3.0
EE 32000 .......................................................... Thermodynamics ............................................. 3.0
Lecture Electives ........................................................ 6.0
Subtotal .................................................................. 15.0

Fifth Year – Fall ....................................................... Credits
EE 42400 .......................................................... Electrical Engineering Lab V ........................... 1.0
Lecture Electives ........................................................ 6.0
Design Electives ........................................................ 3.0
Lab Electives ........................................................... 1.0
Practical Issues .......................................................... 3.0
Subtotal .................................................................. 14.0

Total CCNY CREDITS ................................................. 75.0
TOTAL BB/EE DEGREE CREDITS ......................... 135.00

Bachelor of Engineering in Electrical Engineering - BE(EE)

†Hostos students should take an Independent Study Course in Engineering Design I. For that purpose consult The City College Bulletin for the appropriate course.
††Students who complete VPA 192 at Hostos, must take an additional three (3) credits of liberal arts at CCNY.

*Students needing remedial or compensatory courses will require additional credits for graduation.
Course will be co-listed. Students will be given a permit to attend CCNY until such time as there is sufficient enrollment to offer the course at Hostos.

The College requires successful completion of the CUNY tests in reading, writing and mathematics.

1. New freshmen engineering students are no longer required to take NSS 10000: New Freshman Seminar (0cr.)

2. “C” Passing Grade Requirement: MAT 210; MAT 220; MAT 310; MAT 320; MAT 360; CHE 210; PHY 210; PHY 220 require a minimum passing grade of “C”.

3. CUNY ACT & SKAT Requirements: Students must pass the CUNY/ACT in Reading and Writing and CUNY Mathematics Skills Assessment Test before completing 61 credits.

4. General Education I Liberal Arts Requirements:
   EE students must take five approved courses and Engr. 27600 (Engineering Economics) for a total of 18 credits (six courses) of which at least 6 Credits (two courses) must be at the 20000 level or higher. The six courses must satisfy at least three of the four approved general education clusters.
   Only courses in these four clusters are eligible: Professional and Ethical Responsibilities Cluster (Outcome f), Communication Cluster (outcome g), Global and Societal Context Cluster (Outcome h), and Contemporary Issues Cluster (Outcome j). A list of approved courses is posted on the School of Engineering web site at http://www.ccny.cuny.edu/engineering/genreq.html and can be viewed at the Office of Undergraduate Affairs (ST-209) or the Office of Student Programs (ST-2M). This list is subject to periodic review and updates.

5. Lecture Elective Requirements: Total 6 courses (18 credits) with at least 3 courses (9 credits) from EE courses.

6. Other Graduation Requirements: Apply for graduation during registration for the last semester. Minimum GPA of 2.00. Minimum QPA of zero. 36 credits of 30000-level or higher Electrical Engineering courses.