

Eugenio María de Hostos Community College of the City University of New York
Academic Advisement, Division of Academic Affairs

Academic Advisement Major Code # 42

For an Associate in Applied Science (A.S.) Degree in Mechanical Engineering

Mechanical Engineering

- *Hostos Community College (HCC) offers the Associate in Science (A.S.) degree in Mechanical Engineering as a jointly registered, dual admission program with the existing Bachelor of Engineering in Mechanical Engineering (B.E./M.E.) at the City College of New York (CCNY).*
- *This program is designed to provide HCC students with the same curriculum as the first two years of the licensure qualifying Mechanical 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.*

Hostos Community College

First Year – FallCredits

MAT 210.....	Calculus I.....	4.0
ENG 110.....	Expository Writing.....	3.0
CHE 210.....	Chemistry I.....	4.0
ME 145*.....	Computer-Aided Drafting.....	2.0

Subtotal.....13.0

First Year – SpringCredits

MAT 220.....	Calculus II.....	4.0
ENG 111.....	Literature & Composition.....	3.0
PHY 210.....	Physics I.....	4.0
CHE 220.....	Chemistry II.....	4.0

Subtotal.....15.0

Second Year – FallCredits

MAT 310.....	Calculus III.....	4.0
PHY 220.....	Physics II.....	4.0
ME 24600*.....	Engineering Mechanics I.....	3.0
ENG 21007*.....	Technical Writing.....	3.0
ENGR 20400.....	Electrical Circuits.....	3.0

Subtotal.....17.0

Second Year – SpringCredits

MAT 360.....	Differential Equations.....	3.0
CHE 310.....	Organic Chemistry.....	3.0
MAT 320.....	Linear Algebra / Vector.....	3.0
ME 24700*.....	Engineering Mechanics II.....	3.0
ME 32200*.....	Computer Methods in Engineering.....	3.0
ME 33000*.....	Mechanics of Materials.....	3.0

Subtotal.....18.0

TOTAL HOSTOS CREDITS63.0

Associate Degree in Mechanical Engineering Science (A.S.)

CITY COLLEGE OF NEW YORK (CCNY)**CCNY - Third Year – Fall.....Credits**

ME 31100	Fund of Mechatronics	3.0
ME 35600	Fluid Mechanics	3.0
ME 46100	Engineering Materials	3.0
ENGR 23000.....	Thermodynamics.....	3.0
Liberal Arts Electives**		6.0

Subtotal.....18.0**CCNY – Third Year – Spring.....Credits**

ME 43000	Thermal Systems Analysis.....	3.0
ME 37100	Computer Aided Design.....	3.0
ME 41100	Systems Controls.....	4.0
ME 43300	Heat Transfer.....	3.0
ME 47200	Mechanical Systems Design	3.0

Subtotal.....16.0**CCNY – Fourth Year – Fall.....Credits**

ME 43600	Aero-Thermal-Fluids Lab	1.0
ME 46200	Manufacturing Processes	3.0
ME 46300	Micro/Nanotechnology	3.0
ME 47300	Senior Design Project I	3.0
Design Electives (1 course)		3.0
Liberal Arts Elective**		3.0
Design Elective (select one course)		3.0

Subtotal.....19.0**CCNY – Fourth Year – Spring.....Credits**

MAT 360.....	Differential Equations	3.0
CHE 310	Organic Chemistry	3.0
MAT 320.....	Linear Algebra / Vector	3.0
ME 24700*	Engineering Mechanics II	3.0
ME 32200*.....	Computer Methods in Engineering	3.0

Subtotal.....15.0**Design Electives (2 courses)**

ME 44100	Advanced Stress Analysis
ME 46600	Dynamics Aerospace Vehicles
ME 46800	Aircraft and Rocket Propulsion
ME 46900	Spacecraft Systems and Design
ME 47100	Energy Systems Design
ME 51100	Advanced Mechatronics
ME 51400	Rotorcraft Aerodynamics
ME 51500	Orbital Mechanics
ME 53700	Turbomachinery Design
ME 53900	Vehicular Power Systems
ME 54200	Introduction to the Theory and Practice of Vibration
ME 54600	Robotics and Automation
ME 54700	Environmental Control
ME 54800	Aerostructures
ME 55500	Structural Dynamics and Aeroelasticity
ME 55600	Advanced Fluid Mechanics

ME 57100	Mechanism Design
ME 57200	Aerodynamic Design
BME 50100.....	Cell and Tissue Mechanics
BME 50200.....	Cell and Tissue Transport
BME 50300.....	Cell and Tissue Biomaterial Interactions

ME Electives (1 course)

ME 46700	Special Topics: Aerospace Engineering
ME 47000	Special Projects: Aerospace Engineering
ME 52600	Finite Element Method
ME 53600	Energy Conversion
ME 5900X-5910X	Special Projects (1-3 cr.)
ME 59500	Teaching/Research Exp.
ME 5980X-5990X	Special Topics in ME (3-6 cr.)
ME 59901	Product Development, Management, and Marketing
PHY 32100.....	Modern Physics for Engineers

Any course from Design Electives

Bachelor of Engineering in Mechanical Engineering – B.E. (M.E.)

**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.*

***Liberal Arts courses to be recommended by CCNY.*

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 360; CHE 210; CHE 220; CHE 310; 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:**
ME students must take six approved courses (18 credits) of which at least two (6 credits) 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 [/www.ccny.cuny.edu/enuineermnE/genrea.html](http://www.ccny.cuny.edu/enuineermnE/genrea.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. **Other Graduation Requirements:** Apply for graduation during registration for the last semester. Minimum GPA of 2.00. Minimum QPA of zero. Residency Requirement: 36 credits of 30000-level or Higher Mechanical Engineering courses.
6. **New Transfer Students** with credit for English 11000 should take Engr 10100 instead of FIQWS 10026; students with credit for Engr 10100 should take English

11000 instead of FIQWS 10026. Students with credit for Math 20200, but not Engr 10100, should take English 11000 and an additional 1-credit ME Elective course; they should not take Engr 10100 or FIQWS 10026.

7. **Program Changes:** Substitution of other courses for required courses must be approved by the Chair of the Mechanical Engineering Department (ST-233), and the Associate Dean of the Office of Undergraduate Affairs (ST-209) for final approval.