

**Eugenio Maria de Hostos Community College  
and  
The City College**

**JOINT PROGRAM IN MECHANICAL ENGINEERING**

**Hostos**

First Year – Fall	Credits	Spring	Credits
MAT 210 Calculus I	4	MAT 220 Calculus II	4
ENG 110 Composition I	3	ENG 111 Literature and Composition	3
CHE 210 Chemistry I	3	PHY 210 Physics I	4
CHE 212 Chemistry Lab I	1		
*ENGR 10100 Engineering Design I	1	CHE 220 Chemistry II	3
*ME 145 Computer-Aided Drafting	2	CHE 222 Chemistry Lab II	1
<b>Total</b>	<b>14</b>	<b>Total</b>	<b>15</b>
Second Year – Fall	Credits	Spring	Credits
MAT 310 Calculus III	4	MAT 360 Differential Equations	3
PHY 220 Physics II	4	CHE 310 Organic Chemistry	3
		MAT 320 Linear Algebra/Vector	3
*ME 24600 Engineering Mechanics I	3	*ME 24700 Engineering Mechanics II	3
*ENG 202 Technical Writing	3	*ME 32200 Computer Methods in Engineering	3
*ENGR 20400 Electrical Circuits	3	*ME 33000 Mechanics of Materials	3
	<b>17</b>	<b>Total</b>	<b>18</b>

**TOTAL HOSTOS CREDITS 64**  
**Associate Degree in Mechanical Engineering Science (AS)**

**CCNY**

Third Year – Fall

ME 31100 Fund of Mechatronics	3
ME 35600 Fluid Mechanics	3
ME 46100 Engineering Materials	3
ENGR 23000 Thermodynamics	3
Liberal Arts Electives**	<u>6</u>
<b>Total</b>	<b>18</b>

Spring

ME 43000 Thermal Systems Analysis	3
ME 37100 Computer Aided Design	3
ME 41100 Systems Controls	4
ME 43300 Heat Transfer	3
ME 47200 Mechanical Systems Design	<u>3</u>
<b>Total</b>	<b>16</b>

Fourth Year – Fall

ME 43600 Aero-Thermal-Fluids Lab	1
ME 46200 Manufacturing Processes	3
ME 46300 Micro/Nanotechnology	3
ME 47300 Senior Design Project I	3
ME 40100 Reviews of Engr. Fund	1
Liberal Arts Elective**	3
Design Elective (select one course)	<u>3</u>
<b>Total</b>	<b>17</b>

Spring

ME 47400 Senior Design Project II	3
Design Electives (2)	6
ME Elective	3
Liberal Arts Electives**	<u>6</u>
<b>Total</b>	<b>18</b>

**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

**TOTAL CCNY CREDITS 69**

**TOTAL DEGREE CREDITS 133**

**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.
- \*\* General Education/Liberal Arts Requirements:  
Eligible courses that can be used to fulfill the general education requirement must be equivalent to or selected from only those courses listed as meeting the objectives of the following four clusters: i) Professional and Ethical Responsibilities Cluster (Outcome f), ii) Communication Cluster (Outcome g), iii) Global and Societal Context Cluster (Outcome h), and iv) Contemporary Issues Cluster (outcome j). A list of approved courses is posted on the School of Engineering web site at <http://www.cuny.edu/engineering> and can be viewed at the Office of Undergraduate Affairs (T-209) or the Office of Student Programs (T-2M). This list is subject to periodic review and updates.