HOSTOS COMMUNITY COLLEGE MAJORS

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 ofEngineering 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 - Fall Credits

MAT 210	Calculus I	4.0
ENG 110	Expository Writing	3.0
CHE 210	Chemistry I	4.0
ENGR 10100*	Engineering Design I	1.0
ME 145*	Computer-Aided Drafting	2.0
Subtotal		**14.0**

First Year - Spring Credits

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 – Fall Credits

MAT 310	Calculus III	4.0
PHY 220	Physics II	4.0
ME 24600*	Engineering Mechanics I	3.0
ENG 202*	Technical Writing	3.0
ENGR 20400	Electrical Circuits	3.0
Subtotal		**17.0**

Second 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
ME 33000*	Mechanics of Materials	3.0
Subtotal		**18.0**
TOTAL HOSTOS CREDITS ..		**64.0**

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
ME 40100.....Reviews of Engineering Fund 1.0
Liberal Arts Elective** 3.0
Design Elective (select one course) 3.0
Subtotal 17.0

CCNY – Fourth Year – Spring Credits

ME 47400.....Senior Design Project II 3.0
Design Electives (select two courses).....6.0
ME Elective 3.0
Liberal Arts Electives** 6.0
Subtotal 18.0

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
Total CCNY Credits 69.0
Total Degree Credits..... .....133.0
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.