

BS Mechatronics

Suffolk Comm College

*AS Engineering Science
Course Number and Title*

Major Courses

DRF 114 AutoCad
ENS 118 Engineering Mechanics
ENS 119 Engineering Mechanics-Dynamics
CHE 133 College Chemistry 1
ENS 233 Electrical Circuit Analysis
ENS117: Engineering Computations

Math and Science

MAT 141 Calc with Analytic Geometry 1
PHY 130/132 Physics 1 + Lab
PHY 230/232 Physics 2 + Lab
PHY 245/246 Physics 3 + Lab
MAT 142 Calc with Analytic Geometry 2
MAT 203 Calc with Analytic Geometry 3
MAT 204 Differential Equations

English and Social Sciences

ENG 101 Freshmen Composition
ENG 102 Intro to Literature

History Elective

Social Science Elective

*American Lit**

Vaughn College

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CDE-117 Eng. Graphics CAD/Solid Edge
MEE-115 Engineering Mechanics 1
MEE-215 Engineering Mechanics 2
CHE-230 Chemistry
ELE-117 DC/AC Circuits
CSC 316 C++/Java Prog

MAT-125 Calculus 1 for Engineers
PHY-125 Engineering Physics 1
PHY-225 Engineering Physics 2
PHY 335 Modern Physics
MAT-225 Calculus 2 for Engineers
MAT 330 Calc 3
MAT325 Engineering Mathematics

ENG-110 English 1
ENG-120 English 2
POL-254 American Government
HIS-141 Global Civilization
ENG-220 American Literature
FYW 101 Freshman Year Initiative

Credits

Total Credits 58

* Additional Course to be taken at Suffolk or Vaughn College prior to graduation.

Suggested sequence for Suffolk students after transferring to Vaughn College

SEMESTER V		SEMESTER VI	
MCE101 Intro to Robotics	1	MEE 340 Computational Methods in Eng	3
ENG240 Technical Writing	3	ELE220 Electronic Circuits	3
MAT 410 Linear Algebra	3	MCE310 Fund of Mechatronic Engineering	2
MAT356 Probability and Statistics	3	MEE440 Heat Transfer	3
CDE385 Intro to CATIA 1	2	EGR380 Engineering Project Management	3
MEE210 Thermodynamics	3	MEE365 Ele of Machine design and Vibration Anal	3
MEE220 Strength of Materials 1	4	ENG 290 Public Speaking	3
CD 101 Career Development Seminar	0		
EGR230 Mech Testing and Eval Lab	1		
Semester total	20	Semester total	20
SEMESTER VII		SEMESTER VIII	
ELE230 Digital Systems Design	3	EGR375 Thermo Fluid Lab	1
MCE410 Mechatronics 1	2	ELE326 Microprocessors	3
ELE350 Control Systems 1	3	MCE420 Mechatronics 2	2
MEE 235 Mat Science and Failure Analysis	3	MEE355 Reliability Methods in Structural Analysis	3
MEE345 Fluid Mechanics	3	EGR460 Engineering Economics	3
Technical Elective	3	MEE 370 Finite Element Analysis	3
MCE 401 Pre Capstone Project	1	MCE409 Senior Project	3
Semester total	18	Semester total	18