

# NASSAU COMMUNITY COLLEGE

# NEW YORK INSTITUTE OF TECHNOLOGY

*Associate in Science  
Engineering Science*

*Bachelor of Science  
Mechanical Engineering  
Aerospace Concentration*

2017

Course	Credit	Course	Credit
<b>First Semester:</b>			
CHE 151 Inorganic Chemistry I	4	CHEM 107 Engineering Chemistry	4
ENG 100 Enhanced Composition I <i>or</i> ENG 101 Composition I <i>or</i> ENG 108 The Craft of Composition	3	FCWR 101 Writing I	3
ENS 101 Graphics	1	MENG 105 Engineering Graphics	1
ENS 103 Elementary Engineering I	1	*	-
MAT 122 Calculus I	4	MATH 170 Calculus I	4
NCC 101 The College Experience (by advisement)	1	-	-
PED Activity Course(s)	1	-	-
<b>Second Semester:</b>			
ECO 208 Principles of Microeconomics	3	Liberal Arts Elective	3
ENS 104 Computational Methods in Engineering	2	MENG 201 Engineering Programming*	3
ENG 102 Composition II <i>or</i> ENG 109 The Art of Analysis	3	FCWR 151 Writing II	3
MAT 123 Calculus II	4	MATH 180 Calculus II	4
PHY 122 Engineering Physics I	4	PHYS 170 General Physics I	4
PED Activity Course	1	-	-
<b>Third Semester:</b>			
ENS 205 Statics	3	MENG 211 Engineering Mechanics I	3
ENS 225 Engineering Circuit Analysis I	4	EENG 211 Electrical Circuits I EENG 275 Electronics Laboratory I	3 1
MAT 225 Multivariable Calculus	4	MATH 260 Calculus III	4
PHY 123 Engineering Physics II	4	FCSC 101 Foundations of Scientific Process	3
General Elective <i>Recommended: Psychology or Sociology</i>	3	Behavioral Science equivalent	3
<b>Fourth Semester:</b>			
ENS 206 Dynamics	3	MENG 212 Engineering Mechanics II	3
ENS 226 Engineering Circuit Analysis II	4	-	-
ENS 230 Engineering Thermodynamics	3	MENG 240 Thermodynamics	3
MATH 234 Elementary Differential Equations	3	MATH 320 Differential Equations	3
Technical Electives <i>Recommended: PHY 222 Electricity and Magnetism</i>	3-4	PHYS 180 General Physics II	4
<b>TOTAL</b>	<b>66-67</b>	<b>TOTAL</b>	<b>59</b>

\*Both ENS 103 and ENS 104 must be satisfactorily completed in order to grant credit for MENG 201

## PLAN OF STUDY

Approved by Dr. Nada Anid, Dean  
School of Engineering and Computing Sciences, NYIT

- *Effective as of 2017*

# NEW YORK INSTITUTE OF TECHNOLOGY

*The following are courses necessary to complete the NYIT BS in Mechanical Engineering, Aerospace Concentration, after transferring from Nassau CC with a completed AS in Engineering Science. Please see preceding page for course-by-course transfer information.*

NYIT Course	Credit
<b>Mechanical Engineering</b>	
MENG 221 Strength of Materials	3
MENG 270 Instrumentation & Measurement	1
MENG 310 Introduction to Materials Science	3
MENG 321 Introduction to Computer Aided Design	3
MENG 324 Vibrations and Systems Dynamics	3
MENG 340 Fluid Mechanics	3
MENG 346 Energy Conversion	4
MENG 349 Heat Transfer	3
MENG 370 Machine Design	3
MENG 373 Engineering Analysis	3
<b>Aerospace Engineering</b>	
AENG 410 Aerodynamics	3
AENG 463 Propulsion	3
AENG 466 Aerospace Laboratory <i>or</i> MENG 343 Thermofluids Laboratory	1
AENG 490 Flight Vehicle Design	4
AENG 492 Senior Aerospace Design	4
<b>Engineering Management</b>	
IENG 240 Engineering Economics	3
IENG 245 Statistical Design I	3
<b>Mathematics and Sciences</b>	
PHYS 225 Introduction to Modern Physics	3
<b>Foundation Courses</b>	
FCIQ 101 Foundations of Inquiry	3
FCSP 105 Foundations of Speech Communication	3
FCWR 304 Communication for Technical Professions	3
<b>Seminars</b>	
ICLT Literature Seminar	3
ICPH Philosophy Seminar	3
ICSS 309 Technology and Global Issues	3
<b>TOTAL</b>	<b>71</b>