## NASSAU COMMUNITY COLLEGE

## NEW YORK INSTITUTE OF TECHNOLOGY

Associate in Science Engineering Science		Bachelor of Science Mechanical Engineering 2021	
Course	Credit	Course	Credit
First Semester:			
CHE 151 Inorganic Chemistry I	4	CHEM 107 Engineering Chemistry	4
ENG 100 Enhanced Composition I or	3	FCWR 101 Writing I	3
ENG 101 Composition I <i>or</i> ENG 108 The Craft of Composition			
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	ETCS 105	2
PED Activity Course(s)	1	-	-
Second Semester:			
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	-	-
Third Semester:			
ENS 205 Statics	3	MENG 211 Engineering Mechanics I	3
ENS 225 Engineering Circuit Analysis I	4	EENG 211 Electrical Circuits I	3
•		EENG 275 Electronics Laboratory I	1
MAT 225 Multivariable Calculus	4	MATH 260 Calculus III	4
PHY 123 Engineering Physics II	4	STEM elective	3
General Elective Recommended: Psychology or Sociology	3	Behavioral Science equivalent	3
Fourth Semester:			
ENS 206 Dynamics	3	MENG 212 Engineering Mechanics II	3
ENS 226 Engineering Circuit Analysis II	4	ME technical elective	3
ENS 230 Engineering Thermodynamics	3	MENG 240 Thermodynamics	3
MATH 234 Elementary Differential Equations	3	MATH 320 Differential Equations	3
Technical Electives  *Recommended: PHY 222 Electricity and Magnetism*	3-4	PHYS 180 General Physics II	4
TOTAL	66-67	TOTAL	64

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

## **NEW YORK INSTITUTE OF TECHNOLOGY**

The following are courses necessary to complete the NYIT BS in Mechanical Engineering 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	
Mechanical Engineering		
MENG 221 Strength of Materials	3	
MENG 270 Instrumentation & Measurement	1	
MENG 310 Introduction to Materials Science	3	
MENG 320 Materials Mechanics Laboratory <b>OR</b> MENG 343 Thermofluids Laboratory	1	
MENG 321 Introduction to Computer Aided Design	3	
MENG 324 Vibrations and System Dynamics	3	
MENG 340 Fluid Mechanics	3	
MENG 346 Energy Conversion	4	
MENG 349 Heat Transfer	3	
MENG 370 Machine Design	3	
MENG 438 Engineering Analysis	3	
MENG 470 Senior Mechanical Engineering Design	4	
M.E. Design Electives (Choose two courses)		
AENG 490 Flight Vehicle Design	(4)	
MENG 443 Energy System Analysis & Design	(4)	
MENG 446 Heating, Ventilation & Air Conditioning	(4)	
MENG 486 Advanced Machine Design	(4)	
MENO 400 Advanced Machine Design	8 credits total	
Engineering Management	8 Credits total	
IENG 240 Engineering Economics	3	
IENG 245 Statistical Design I	3	
IENO 243 Statistical Design I	3	
Mathematics and Sciences		
PHYS 225 Introduction to Modern Physics	3	
·		
Foundation Courses		
FCIQ 101 Foundations of Inquiry	3	
FCSP 105 Foundations of Speech Communication	3	
FCWR 304 Communication for Technical Professions	3	
Seminars		
ICLT Literature Seminar	3	
ICPH Philosophy Seminar	3	
ICSS 309 Technology and Global Issues	3	
TOTAL	69	

Bakak ( ). Beleath	
	11/1/2021
Dr. Babak Dastgheib-Beheshti, Dean	 Date

College of Engineering & Computing Sciences, NYIT