## DUTCHESS COMMUNITY COLLEGE

# NEW YORK INSTITUTE OF TECHNOLOGY

Associate in Science Engineering Science

#### Bachelor of Science in Mechanical Engineering

Course	Credit	Course	Credit
<b>F</b> <sup>1</sup>			
First Semester: (15)	2	FOWD 101 W. W. L	2
ENG 101 Composition I	3	FCWR 101 Writing I	3
CHE 121 General Chemistry I		CHEM 107 Engineering Chemistry I MATH 170 Calculus I	4
MAT 221 Calculus I	4	MATH 1/0 Calculus 1	4
ENR 101 Introduction to Engineering	2		-
ENR 100 Engineering Technology Intro Seminar	1	Liberal Arts Elective (1)	1
ENT 131 Technical Drawing	1	MENG 105 Engineering Graphics	1
Second Semester: (17)			
ENG 102 Composition II	3	FCWR 151 Writing II	3
WFE 101 Lifetime Wellness and Fitness			-
PHY 151 Engineering Physics I	4	PHYS 170 General Physics I	4
MAT 222 Calculus II	4	MATH 180 Calculus II	4
ENR 102 Computer Programming for Engineers	3	MENG 201 Engineering Programming	3
Third Semester: (18)			
PHY 152 Engineering Physics II	4	PHYS 180 General Physics II	4
MAT 223 Calculus III	4	MATH 260 Calculus III	4
ENR 208 Engineering Statistics	3	MENG 211 Engineering Mechanics I (Statics)	3
Technical Elective (3-4)		EENG 211 Electrical Circuits I	3
Restricted to ENR201 Intro Electrical Circuits & Net	4	EENG 275 Electronics Laboratory I	1
BHS 103 Social Problems in Today's World	3	ICBS Behavioral Science Seminar	3
Fourth Semester: (18)			
PHY 251 Engineering Physics III	4	PHYS 225 Introduction to Modern Physics and	3
		Liberal Arts Elective (1)	1
MAT 224 Differential Equations	4	MATH 320 Differential Equations and	3
		Liberal Arts Elective (1)	1
American History (Appendix D)	3	FCIQ 101 Foundations of Inquiry*	3
Advanced Technical Electives (6-8)			
Restricted to ENR 207 Engineering Materials Science	4	MENG 310 Introduction to Materials Science	3
Restricted to ENR 209 Engineering Dynamics	3	MENG 212 Engineer Mechanics II (Dynamics)	3
TOTAL	68	TOTAL	62

**2017** 

\*Transfer substitution awarded on the basis of this agreement.

#### PLAN OF STUDY

Approved by Dr. Nada Anid, Dean

School of Engineering and Computing Sciences, NYIT

• Effective as of 2017

### Program of Study at New York Institute of Technology

### Bachelor of Science in Mechanical Engineering

Courses to be completed at NYIT:

Major course	S	Credits
MENG 221	- Strength of Materials	3
<b>MENG 240</b>	Thermodynamics	3
<b>MENG 270</b>	Instrumentation and Measurement	1
MENG 320	Materials Mechanics Laboratory or	
MENG 343	Thermofluids Laboratory	1
MENG 321	Introduction to Computer Aided Design	3
<b>MENG 324</b>	Vibrations and System Dynamics	3
<b>MENG 340</b>	Fluid Mechanics	3
<b>MENG 346</b>	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
Design Electives		8
Mechanical Engineering Electives		3
Core and add	itional requirements	
FCSP 105	Foundations of Speech Communication	3
FCSC 101	Foundations of Scientific Process	3
FCWR 304	Communication for Technical Professions	3
ICLT 3XX	Literature Seminar	3
ICPH 3XX	Philosophy Seminar	3
ICSS 309	Technology and Global Issues	3
IENG 240	Engineering Economics	3
IENG 245	Statistical Design I	<u>3</u>
Total credits at New York Institute of Technology:		