

<b>QUEENSBOROUGH COMMUNITY COLLEGE</b>		<b>NEW YORK INSTITUTE OF TECHNOLOGY</b>	
		<b>2017</b>	
<i>Associate in Science Engineering Science</i>		<i>Bachelor of Science in Mechanical Engineering</i>	
Course	Credit	Course	Credit
<b>Common Core</b>			
Required Core: I.A ENGL 101 English Composition I ENGL 102 English Composition II	6	FCWR 101 Writing I FCWR 151 Writing II	3 3
Required Core: I.B <i>Math &amp; Quant Reasoning</i> MA 441 Analytic Geometry and Calculus I	4	MATH 170 Calculus I	4
Required Core: I.C <i>Life &amp; Physical Science</i> CH 151 General Chemistry I	4.5	CHEM 107 Engineering Chemistry I	4
Flexible Core: II.A <i>World Cultures &amp; Global Issues</i> Restricted to HIST History	3	FCIQ 101 Foundations of Inquiry*	3
Flexible Core: II.B <i>US Experience in Its Diversity</i> Restricted to SP 211 Speech Communication	3	FCSP 105 Foundations of Speech Communication	3
Flexible Core: II.C <i>Creative Expression</i> Restricted to ARTH, MU, SP 471, SP 472 or TH 111	3	Liberal Arts Elective	3
Flexible Core II.D <i>Individual &amp; Society</i> Restricted to PHIL, ANTH, or SOCY	3	Equivalent Elective	3
Flexible Core II.E <i>Scientific World</i> PH 411 Calculus Physics I	3.5	PHYS 170 General Physics I	4
Flexible Core II: E PH 412 Calculus Physics II	3	PHYS 225 Introduction to Modern Physics	3
<b>Requirements for the Major</b>			
MA-442 Analytic Geometry and Calculus II	4	MATH 180 Calculus II	4
MA-443 Analytic Geometry and Calculus III	4	MATH 260 Calculus III	4
MA-451 Differential Equations	4	MATH 320 Differential Equations	3
PH 413 Calculus Physics III	3.5	PHYS 180 General Physics II	4
EE-101 Engineering Design I	1	Credit to balance PHYS 170, PHYS 180	-
EE-204 Electric Circuits	3	EENG 211 Electrical Circuits I	3
EE-103 Computer-Aided Analysis for Elec Engineers	2	MENG 105 Engineering Graphics	1
Computer Programming: ET-505 or CS-101	4	MENG 201 Engineering Programming	3
<b>Mechanical Engineer Advised Electives Recommended:</b>			
MT-293 Parametric Computer-Aided Design Drafting	3	Mechanical Engineering Elective	3
PH-416 Thermodynamics	4	MENG 240 Thermodynamics	3
<b>TOTAL</b>	<b>65.5</b>	<b>TOTAL</b>	<b>61</b>

\*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, Mechanical Engineering

Courses to be completed at NYIT:

<u>Major courses:</u>		<u>Credits</u>
MENG 211	Engineering Mechanics I (Statics)	3
MENG 212	Engineering Mechanics II (Dynamics)	3
MENG 221	Strength of Materials	3
MENG 270	Instrumentation and Measurement	1
MENG 310	Introduction to Materials Science	3
MENG 320	Materials Mechanics Laboratory <i>or</i>	
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
 <u>Design Electives</u> ( <i>Two of the following courses</i> ):		
AENG 490	Flight Vehicle Design (4)	
MENG 443	Energy System Analysis and Design (4)	
MENG 446	Heating, Ventilation and Air Conditioning (4)	
MENG 486	Advanced Machine Design (4)	8
 <u>Electrical Engineering and Engineering Management:</u>		
EENG 275	Electronics Laboratory	1
IENG 240	Engineering Economics	3
IENG 245	Statistical Design I	3
 <u>Core and additional requirements:</u>		
FCSC 101	Foundations of Scientific Process	3
FCWR 304	Communication for Technical Professions	3
ICLT 3XX	Literature Seminar	3
ICBS or ICPH 3XX	Behavioral Science or Philosophy Seminar	3
	(Requirement determined by <i>Individual &amp; Society</i> course completed at QBCC)	
ICSS 309	Technology and Global Issues	<u>3</u>
Total credits at New York Institute of Technology:		<u>70</u>