COORDINATED ENGINEERING & ENGINEERING HONORS PROGRAM

BROOKLYN COLLEGE, CUNY

NEW YORK UNIVERSITY- TANDON SCHOOL OF ENGINEERING

ARTICULATION IN:

- *CHEMICAL & BIOMOLECULAR ENGINEERING*
- *CIVIL ENGINEERING*
- *COMPUTER ENGINEERING*
- *ELECTRICAL ENGINEERING*
- *MECHANICAL ENGINEERING*

As of Fall 2017

For information: Prof. Viraht Sahni, Brooklyn College vsahni@brooklyn.cuny.edu

Prof. Peter Voltz, NYU-TANDON voltz@nyu.edu

August 2017

BROOKLYN COLLEGE NYU-TANDON

ARTICULATION IN ***CHEMICAL & BIO MOLECULAR ENGINEERING*** Leading to NYU SoE BS CBE

BC Courses	**Credits**	**Equivalent NYU-TANDON Courses**	**Units**
MATH 1201 Calculus I	4	MA-UY 1024 Calculus I	4
MATH 1206 Calculus II	4	MA-UY 1124 Calculus II	4
MATH 2201 Multivariable Calculus	4	MA-UY 2114 Calculus III	4
MATH 2101 Linear Algebra	3	MA-UY 2034 Linear Algebra & Differential Equations	4
MATH 2206 Elementary Differential Equations	4		
PHYS 1150 Calculus Based General Physics I (w/Lab)	5	PH-UY 1013 Mechanics	3
PHYS 2150 Calculus Based General Physics II (w/Lab)	5	PH-UY 2023 Electricity, Magnetism & Fluids	3
		PH-UY 2121 General Physics Lab I	1
		PH-UY 2033 Waves, Optics, Thermodynamics	3
		PH-UY 2131 General Physics Lab II	1
PHYS 3200 Engineering Mechanics	4	Engineering Elective I	3
PHYS 3300 Electrical Circuit Analysis	4	EG-UY 1003 Intro to Engineering & Design	3
CHEM 1100 General Chemistry I (w/Lab)	5	CM-UY 1004 General Chemistry	4
CHEM 2100 General Chemistry II	*		
CHEM 3510 Organic Chemistry I	5	CM-UY 2213 Organic Chemistry I	3
CHEM 3520 Organic Chemistry II	5	CM-UY 2223 Organic Chemistry II	3
CHEM 4610 Physical Chemistry	5	CM-UY 2614 Physical Chemistry I	4
BIOL 1001 General Biology I	*		
BIOL 1002 General Biology II	4.5	BMS-UY 1004 Intro to Cell & Molecular Biology	4
CISC 1115 Intro to Programming using JAVA	4	CS-UY 1133 Eng. Problem Solving & Programming	3
ENGL 1010 English Composition I	3	EXPOS-UA 1 Writing the Essay	4
ENGL 1012 English Composition II	3	EXPOS-UA 2 The Advanced College Essay	4
	71.5		62

(*Required course)

Credits Transferred to NYU = 62

BROOKLYN COLLEGE/ NYU-TANDON

ARTICULATION IN ***CIVIL ENGINEERING*** Leading to NYU SoE BS CE

BC Courses			Credits	Equivalent NYU-TANDON Courses		Units
MATH	1201	Calculus I	4	MA-UY 1024	Calculus I	4
MATH	1206	Calculus II	4	MA-UY 1124	Calculus II	4
MATH	2201	Multivariable Calculus	4		Free Elective	3
MATH	2101	Linear Algebra	3 }	MA-UY 2034	Linear Algebra &	4
MATH	2206	Elementary Differential	4 }		Differential Equations	
PHYS	1150	Calculus Based General Physics I (w/Lab)	5	PH-UY 1013	Mechanics	3
PHYS	2150	Calculus Based General Physics II (w/Lab)	5	PH-UY 2023	Electricity, Magnetism, & Fluids	3
				PH-UY 2121	General Physics Lab I	1
				PH-UY 2033	Waves, Optics, Thermodynamics	3
				PH-UY 2131	General Physics Lab II	1
PHYS	3100	Modern Physics	3		Science Elective	3
PHYS	3200	Engineering Mechanics	4	CE-UY 2213	Statics	3
PHYS	3300	Electrical Circuit Analysis	4	EG-UY 1003	Introduction to Engineering & Design	3
CHEM	1100	General Chemistry (w/Lab)	5	CM-UY 1004	General Chemistry	4
CISC	1110	Intro to Computing Using JAVA	4	CS-UY 1133	Engineering Problem Solving	3
ENGL	1010	English Composition I	3	EXPOS-UA	Writing the Essay	4
ENGL	1012	English Composition II	3	EXPOS-UA	The Advanced College Essay	4
		American History/English Literature	9		HU/SS Electives 1. 2. 3	12
			64			62

Credits Transferred to NYU=62

BROOKLYN COLLEGE/ NYU-TANDON

ARTICULATION IN ***COMPUTER ENGINEERING*** Leading to NYU SoE BS CompE

BC Courses		Credits	Equivalent NYU- TANDON Courses		Units
MATH 1201	Calculus I	4	MA-UY 1024	Calculus I	4
MATH 1206	Calculus II	4	MA-UY 1124	Calculus II	4
MATH 2201	Multivariable Calculus	4	MA-UY 2114	Calculus III	4
MATH 2101	Linear Algebra	3	MA-UY 2034	Linear Algebra	4
MATH 2206	Elementary Differential Equations	4		& Differential Equations	
PHYS 1150	Calculus Based General Physics I (w/Lab)	5	PH-UY 1013	Mechanics	3
PHYS 2150	Calculus Based General Physics II (w/Lab)	5	PH-UY 2023	Electricity, Magnetism, & Fluids	3
			PH-UY 2121	General Physics Lab I	1
			PH-UY 2033	Waves, Optics, Thermodynamics	3
			PH-UY 2131	General Physics Lab II	1
PHYS 3200	Engineering Mechanics	4	EG-UY 1003	Introduction to Engineering & Design	3
PHYS 3300	Electrical Circuit Analysis	4	EE-UY 2004	Circuits I & II	4
PHYS 3900	Electrical Measurements Lab	2			
CISC 1115	Intro to Programming using JAVA	4	CS-UY 1114	Intro to Programming (Python)	4
CISC 3115	Intro to Modern Programming Techniques	4	EE-CS	Restrictive Elective	4
CISC 3130	Data Structures	4	CS-UY 1134	Data Structures in Python	4
CISC 3142	Programming Paradigms in C++	3	CS-UY 2124	Object Oriented Programming	4
CHEM1100	General Chemistry I (w/Lab)	4.	CM-UY 1004	General Chemistry	4
ENGL 1010	English Composition I	3	EXPOS-UA 1	Writing the Essay	4
ENGL 1012	English Composition II	3	EXPOS-UA 2	The Advanced College Essay	4
		65			65

Credits Transferred to NYU=62

BROOKLYN COLLEGE/NYU-TANDON

ARTICULATION **IN *ELECTRICAL ENGINEERING*** Leading to NYU SoE BS EE

BC Courses			Credits	Equivalent NYU-TANDON Courses		Units
MATH	1201	Calculus I	4	MA-UY 1024	Calculus I	4
MATH	1206	Calculus II	4	MA-UY 1124	Calculus II	4
MATH	2201	Multivariable Calculus	4	MA-UY 2114	Calculus III	4
MATH	2101	Linear Algebra	3	MA-UY 2034	Linear Algebra & Differential Equations	4
MATH	2206	Elementary Differential	4			
PHYS	1150	Calculus Based General Physics I (w/Lab)	5	PH-UY 1013	Mechanics	3
PHYS	2150	Calculus Based General Physics II (w/Lab)	5	PH-UY 2023	Electricity, Magnetism, & Fluids	3
				PH-UY 2121	General Physics Lab I	1
				PH-UY 2033	Waves, Optics, Thermodynamics	3
				PH-UY 2131	General Physics Lab II	1
PHYS	3100	Modern Physics	3	EE/EL	Elective	3
PHYS	3200	Engineering Mechanics	4	EG-UY 1003	Introduction to Engineering & Design	3
PHYS	3300	Electrical Circuit Analysis	4	EE-UY 2004	Circuits (Combined I & II)	4
PHYS	3900	Electrical Measurements Lab	2	EE-UY 3114	Electronics I	4
CHEM	1100	General Chemistry I (w/Lab)	5	CM-UY 1004	General Chemistry	4
CISC	1115	Intro to Programming using JAVA	4	CS-UY 1114	Intro to Programming (Python)	4
CISC	3115	Intro to Modern Programming Techniques	4*			
CISC	3130	Data Structures	4*			
CISC	3142	Programming Paradigms in C++	3	CS-UY 2164	Intro to Programming in C++	4
ENGL	1010	English Composition I	3	EXPOS-UA1	Writing the Essay	4
ENGL	1012	English Composition II	3	EXPOS-UA2	The Advanced College Essay	4
		American History	3		HUSS Elective 1	4
			75			65

(* Required Course)

Credits transferred to NYU=64

BROOKLYN COLLEGE/NYU-TANDON

ARTICULATION IN ***MECHANICAL ENGINEERING*** Leading to NYU SoE BS ME

BC Courses		Credits	Equivalent NYU-TANDON Courses	Units
MATH 1201	Calculus I	4	MA-UY 1024 Calculus I	4
MATH 1206	Calculus II	4	MA-UY 1124 Calculus II	4
MATH 2201	Multivariable Calculus	4	MA-UY 2114 Calculus III	4
MATH 2101	Linear Algebra	3	MA-UY 2034 Linear Algebra & Differential Equations	4
MATH 2206	Elementary Differential Equations	4		
PHYS 1150	Calculus Based General Physics I (w/Lab)	5	PH-UY 1013 Mechanics	3
PHYS 2150	Calculus Based General Physics II (w/Lab)	5	PH-UY 2023 Electricity, Magnetism, & Fluids	3
			PH-UY 2121 General Physics Lab I	1
			PH-UY 2033 Waves, Optics, Thermodynamics	3
			PH-UY 2131 General Physics Lab II	1
PHYS 3100	Modern Physics	3	Free Elective	3
PHYS 3200	Engineering Mechanics	4	ME-UY 2213 Statics	3
PHYS 3300	Electrical Circuit Analysis	4	EG-UY 1003 Introduction to Eng. & Design	3
CHEM 1100	General Chemistry	5	CM-UY 1004 General Chemistry	4
CISC 1110	Intro to Computing Using C++	4	CS-UY 1133 Engineering Problem Solving & Programming	3
ENGL 1010	English Composition I	3	EXPOS-UA 1 Writing the Essay	4
ENGL 1012	English Composition	3	EXPOS-UA 2 The Advanced College Essay	4
	American History/English Literature	9	HUSS Electives 1, 2, 3	12
		64		63

Credits Transferred to NYU=63

	SoE Chemical and Biomolecular Engineering Brooklyn College Articulation leading to NYU SoE BS CBE					
SoE Course	**Tandon School of Engineering**		**BC Course**	**BC**		**To be taken**
Number	**Course Title**	**Units**	**Number**	**Course Title**	**Credits**	**at SoE**
MA-UY 1024	Calculus I	4	MATH 1201	Calculus I	4	
CM-UY 1004	General Chemistry	4	CHEM 1100	General Chemisty I	5	
EXPOS-UA 1	Writing the Essay	4	ENGL 1010	English Composition I	3	
EG-UY 1003	Introduction to Engineering & Design	3	PHYS 3300	Electrical Circuit Analysis	4	
EG-UY 1001	Engineering & Technology Forum	1				
		16			**16**	
MA-UY 1124	Calculus II	4	MATH 1206	Calculus II	4	
BMS-UY 1004	Intro to Cell. & Molec Bio	4	BIOL 1002	General Biology II	4.5	
CBE-UY 1002	Intro to CBE	2				2
EXPOS-UA 2	The Advanced College Essay	4	ENGL 1012	English Composition II	3	
CS-UY 1133	Eng Prob Solving and Programming	3	CISC 1115	Introduction to Programming Using Java	4	
		17			**15.5**	
MA-UY 2034	Linear Algebra and Differential Equations	4	MATH 2101	Linear Algebra	3	
			MATH 2206	Elementary Differential Equations	4	
PH-UY 1013	Mechanics	3	PHYS 1150	Calculus Based General Physics I (w/lab)	5	
CM-UY 2213	Organic Chem I	3	CHEM 3510	Organic Chemistry I	5	
CBE-UY 2124	Analysis of Chem and Bio Processes	4				4
		14			**17**	
MA-UY 2114	Calculus III	4	MATH 2201	Multivariable Calculus	4	
CM-UY 2614	Physical Chem I	4	CHEM 4610	Physical Chemistry	5	
CM-UY 2223	Organic Chem II	3	CHEM 3520	Organic Chemistry II	5	
PH-UY 2023	Electricity, Magnetism, Fluids	3	PHYS 2150	Calculus Based General Physics II (with lab)	5	
PH-UY 2121	General Physics Lab I	1		(Lab included in course)		
		15			**19**	
CBE-UY 3153	Chem and Bio Eng Thermo	3				3
CBE-UY 3313	Transport I	3				3

PH-UY 2033	Waves, Optics, Thermo	3		(Content covered in the 10 credits		
PH-UY 2131	General Physics Lab II	1		of General Physics I, II, and labs)		
CM-UY 3314	Biochemistry I	4				4
	HU/SS Elective 1	4				4
		18			**0**	
CBE-UY 3233	Chem and Bio Seperations	3				3
CBE-UY 3223	Kinetics and Reactor Desing	3				3
CBE-UY 3323	Transport II	3				3
	HUSS Elective 2	4				4
	Engineering Elective 1	3	PHYS 3200	Engineering Mechanics	4	
		16			**4**	
CBE-UY 4113	Eng Lab I	3				3
CBE-UY 4143	Process Dynamics and Control	3				3
CBE-UY 4163	Chem and Bio Eng Proc Design I	3				3
	Free Elective (3 or 4 cr)	4				4
	HUSS Elective 3	4				4
		17			**0**	
CBE-UY 4213	Eng Lab II	3				3
CBE-UY 4173	Polymeric Materials	3				3
CBE-UY 4263	Chem and Bio Eng Proc Design II	3				3
	Engineering Elective 2	3				3
	HUSS Elective 4	4				4
		16			**0**	
		129			**71.5**	**66**
	128 total credits required for BS CBE degree			**Credits Transferred to NYU**	**62**	

SoE Civil Engineering Brooklyn College Articulation leading to NYU SoE BS CE

CE

SoE Course Number	Tandon School of Engineering Course Title	Units	BC Course Number	BC Course Title	Credits	To be taken at SoE
MA-UY 1024	Calculus I	4	MATH 1201	Calculus I	4	
CM-UY 1004	General Chemistry	4	CHEM 1100	General Chemistry I	5	
EXPOS-UA 1	Writing the Essay	4	ENGL 1010	English Composition I	3	
EG-UY 1003	Introduction to Engineering & Design	3	PHYS 3300	Electrical Circuit Analysis	4	
EG-UY 1001	Engineering & Technology Forum	1				
		16			**16**	
MA-UY 1124	Calculus II	4	MATH 1206	Calculus II	4	
PH-UY 1013	Mechanics	3	PHYS 1150	Calculus Based General Physics I w/lab)	5	
EXPOS-UA 2	The Advanced College Essay	4	ENGL 1012	English Composition II	3	
CS-UY 1133	Engineering Problem Solving	3	CISC 1115	Introduction to Programming Using Java	4	
CE-UY 1002	Intro to CE	2				2
		16			**16**	
MA-UY 2034	Linear Algebra & Differential Equations	4	MATH 2101	Linear Algebra	3	
			MATH 2206	Elementary Differential Equations	4	
PH-UY 2023	Electricity, Magnetism and Fluids	3	PHYS 2150	Calculus Based General Physics II (w/lab)	5	
PH-UY 2121	General Physics Lab I	1		(Lab included in course)		
CE-UY 2343	Transportation Engineering	3				3
CE-UY 2113	Statics	3	PHYS 3200	Engineering Mechanics	4	
	HU/SS Elective 1	4			3	
		18			**19**	
PH-UY 2033	Waves, Optics and Thermodynamics	3		(Content covered in the 10 credits		
PH-UY 2131	General Physics Lab II	1		of General Physics I, II, and labs)		
CE-UY 2123	Mechanics of Materials	3				3
CE-UY 2213	Fluid Mechanics & Hydraulics	3				3
	CE/Construction/TR Elective	3				3
	HU/SS Elective 2	4			3	
		17			**3**	
MA-UY 2224	Data Analysis	4				4
CS-UY 3133	Structural Analysis	3				3
CE-UY 3122	Structural Dynamics	2				2
CE-UY 3223	Environmental Engineering I	3				3
	Science Elective	3	PHYS 3100	Modern Physics	3	
		15			**3**	

CE-UY 3153	Geotechnical Engineering	3				3
CE-UY 3173	Structural Design	3				3
CE-UY 3243	Water Resource Engineering I	3				3
	CE/Construction/TR Elective	3				3
	HU/SS Elective 3	4			3	
		16			**3**	
CE-UY 4153	Structural Design Project	3				3
CE-UY 4092	Leadership, Business Principles Policy, and Ethics in CE	2				2
CE-UY 4812	Civil Engineering Design I	2				2
	CE/Construction/TR Elective	3				3
	CE/Construction/TR Elective	3				3
	Free Elective	3	MATH 2201	Multivariable Calculus	4	
		16			**4**	
CE-UY 4822	Civil Engineering Design II	2				2
CE-UY 3162	Materials Engineering	2				2
CE-UY 3161	Materials Engineering Lab	1				1
	CE/Construction/TR Elective	3				3
	CE/Construction/TR Elective	3				3
	HU/SS Elective 4	4				4
		15			**0**	
		129			**64**	**66**

Credits Transferred to NYU **62**

129 total credits required for BS CE degree. Tandon will waive one credit from the degree requirement.

SoE Computer Engineering Brooklyn College Articulation leading to NYU SoE BS CompE

SoE Course Number	Tandon School of Engineering Course Title	Units	BC Course Number	BC Course Title	Credits	To be taken at SoE	Tandon Course Notes
MA-UY 1024	Calculus I	4	MATH 1201	Calculus I	4		
CS-UY 1114	Intro to Programming (Python)	4	CISC 1115	Introduction to Programming Using Java	4		
EG-UY 1003	Intro to Eng and Design	3	PHYS 3200	Engineering Mechanics	4		
EG-UY 1001	Engineering & Technology Forum	1					
EXPOS-UA 1	Writing the Essay	4	ENGL 1010	English Composition I	3		
		16			**15**		
MA-UY 1124	Calculus II	4	MATH 1206	Calculus II	4		
PH-UY 1013	Mechanics	3	PHYS 1150	Calculus Based General Physics I (w/lab)	5		
CS-UY 1134	Data Structures in Python	4	CISC 3130	Data Structures	4		
EE/CS-UY 1012	Introduction to Computer Engineering	2				2	
EXPOS-UA 2	The Advanced College Essay	4	ENGL 1012	English Composition II	3		
		17			**16**		
MA-UY 2034	Linear Algebra and Differential Equations	4	MATH 2101	Linear Algebra	3		
			MATH 2206	Elementary Differential Equations	4		
PH-UY 2023	Electricity, Magnetism and Fluids	3	PHYS 2150	Calculus Based General Physics II (w/lab)	5		
PH-UY 2121	General Physics Lab I	1		(Lab included in course)			
CS-UY 2124	Object Oriented Programming	4	CISC 3142	Programming Paradigms in C++	3		
EE-UY 2004	Circuits (combined I and II)	4	PHYS 3300	Electrical Circuit Analysis	4		
			PHYS 3900	Electrical Measurements Lab	2		
		16			**21**		
PH-UY 2033	Waves, Optics and Thermodynamics	3		(Content covered in the 10 credits			
PH-UY 2131	General Physics Lab II	1		of General Physics I, II, and labs)			
MA-UY 2314	Discrete Mathematics	4				4	
CS-UY 2204	Digital Logic and State Machine Design	4				4	
EE-UY 3114	Electronics I	4				4	
		16			**0**		
MA-UY 2114	Calculus III	4	MATH 2201	Multivariable Calculus	4		
CM-UY 1004	General Chemistry	4	CHEM 110	General Chemistry I	5		
CS-UY 2214	Computer Architecture and Organiz	4				4	
	EE Elective	3				3	
EE-UY 4001	ECE Professional Development	1				1	
		16			**9**		

MA-UY 2224	Data Analysis	4				4
	EE/CS Restricted Elective (3 or 4 cr)	3				3
	EE/CS Restricted Elective (3 or 4 cr)	3				3
	HUSS Elective 1	4				4
		14			**0**	
EE/CS-UY 4XX3	Design Project I	3				3
	EE/CS Restricted Elective (3 or 4 cr)	4	CISC 3115	Introduction to Modern Programming Techniques	4	
	HUSS Elective 2	4				4
	HUSS Elective 3	4				4
	Free Elective	3				3
		18			**4**	
EE/CS-UY 4XX3	Design Project II	3				3
EE/CS	EE/CS Restricted Elective (3 or 4 cr)	3				3
EE/CS/EL	Elective	3				3
EE/CS/EL	Elective	3				3
HUSS	HUSS Elective 4	4				4
		16			**0**	
		129			**65**	**66**

128 total credits required for BS CompE degree

Credits Transferred to NYU **62**

+SoE Electrical Engineering Brooklyn College Articulation leading to NYU SoE BS EE

SoE Course Number	Tandon School of Engineering Course Title	Units	BC Course Number	BC Course Title	Credits	To be taken at SoE	Tandon Course Notes
MA-UY 1024	Calculus I	4	MATH 1201	Calculus I	4		
CS-UY 1114	Intro to Programming (Python)	4	CISC 1115	Introduction to Programming Using Java	4		
EXPOS-UA 1	Writing the Essay	4	ENGL 1010	English Composition I	3		
EG-UY 1003	Introduction to Engineering & Design	3	PHYS 3200	Engineering Mechanics	4		
EG-UY 1001	Engineering & Technology Forum	1					
		16			**15**		
MA-UY 1124	Calculus II	4	MATH 1206	Calculus II	4		
PH-UY 1013	Mechanics	3	PHYS 1150	Calculus Based General Physics I (w/lab)	5		
EXPOS-UA 2	The Advanced College Essay	4	ENGL 1012	English Composition II	3		
CM-UY 1004	General Chemistry	4	CHEM 1100	General Chemistry I (w/lab)	5		
EE-UY 1002	Intro to EE	2				2	
		17			**17**		
MA-UY 2034	Linear Algebra and Differential Equations	4	MATH 2101	Linear Algebra	3		
			MATH 2206	Elementary Differential Equations	4		
PH-UY 2023	Electricity, Magnetism, and Fluids	3	PHYS 2150	Calculus Based General Physics II (w/lab)	5		
PH-UY 2121	General Physics Lab I	1		(Lab included in course)			
EE-UY 2004	Circuits (combined I and II)	4	PHYS 3300	Electrical Circuit Analysis	4		
CS-UY 2204	Digital Logic	4				4	
		16			**16**		
MA-UY 2114	Calculus III	4	MATH 2201	Multivariable Calculus	4		
PH-UY 2033	Waves, Optics, and Thermodynamics	3		(Content covered in the 10 credits			
PH-UY 2131	General Physics Lab II	1		of General Physics I, II, and labs)			
EE-UY 3114	Electronics I	4	PHYS 3900	Electrical Measurements Lab	2		
*CS-UY 2164	Introduction to Programming in C	3	*CISC 3142	Programming Paradigms in C++	3		
		15			**9**		
MA-UY 3113	Advance Linear Alg & Complex Variables	3				3	
EE-UY 2233	Intro to Probability	3				3	
EE-UY 3054	Signals and Systems	4				4	
EE	Elective	3				3	
	HUSS Elective 1	4			3		
		17			**3**		
EE-UY 3604	Electromagnetic Waves	4				4	
EE	Restricted Elective	4				4	

EE	Restricted Elective	4				4
	HUSS Elective 2	4				4
		16			**0**	
EE-UY 4XX3	Design Project I	3				3
EE-UY 4001	ECE Professional Development	1				1
EE	Restricted Elective	4				4
EE/EL	Elective	3	PHYS 3100	Modern Physics	3	
	HUSS Elective 3	4				4
		15			**3**	
EE-UY 4XX3	Design Project II	3				3
EE/EL	Elective	3				3
EE/CS/EL	Elective	3				3
	Free Elective (3 or 4 cr)	4				4
	HUSS Elective 4	4				4
		17			**0**	
		129			**63**	**64**
	128 total credits required for BS EE degree			**Credits transferred to NYU**	**64**	

SoE Mechanical Engineering Brooklyn College Articulation leading to NYU SoE BS ME

SoE Course Number	Tandon School of Engineering Course Title	Units	BC Course Number	BC Course Title	Credits	To be taken at SoE
EG-UY 1001	Engineering and Tech Forum	1				
EG-UY 1003	Intro to Eng and Design	3	PHYS 3300	Electrical Circuit Analysis	4	
MA-UY 1024	Calculus I	4	MATH 1201	Calculus I	4	
CM-UY 1004	General Chemistry	4	CHEM 1100	General Chemistry	5	
EXPOS-UA 1	Writing the Essay	4	ENGL 1010	English Composition I	3	
		16			**16**	
MA-UY 1124	Calculus II	4	MATH 1206	Calculus II	4	
PH-UY1013	Mechanics	3	PHYS 1150	Calculus Based General Physics	3	
ME-UY1012	Intro to Mechanical Eng	2		(with Lab, 5 credits I total)		2
CS-UY 1133	Eng Problem Solving and Prog	3	CISC 1115	Introduction to Programming Using Java	4	
EXPOS-UA 2	The Advanced College Essay	4	ENGL 1012	English Composition II	3	
		16			**14**	
MA-UY 2034	Linear Algebra and Differential Equations	4	MATH 2101	Linear Algebra	3	
			MATH 2206	Elementary Differential Equations	4	
				(7 total credits from 2101 and 2206)		
PH-UY 2023	Electricity, Magnetism, and Fluids	3	PHYS 2150	Calculus Based General Physics II (w/lab)	3	
PH-UY 2121	General Physics Lab I	1		(Lab included in course, 5 credits total)	1	
MT-UY 2811	Materials Science Lab	1				1
MT-UY 2813	Intro to Materials Science	3				3
ME-UY 2112	Computer Aided Design	2				2
	HUSS Elective 1	4		HUSS Elective	3	
		18			**14**	
MA-UY 2114	Calculus III	4	MATH 2201	Multivariable Calculus	4	
MA-UY 2224	Data Analysis	4				4
ME-UY 2211	Statics Lab	1				1
ME-UY 2213	Statics	3	PHYS 3200	Engineering Mechanics (4 credits total)	3	
PH-UY 2131	General Physics Lab II	1		(Content covered in the 10 credits	1	
PH-UY 2033	Waves, Optics, Thermodynamics	3		of General Physics I, II, and labs)	3	
		16			**11**	
ME-UY 3333	Thermo	3				3
ME-UY 3211	Mechanics of Materials Lab	1				1
M3-UY 3213	Mechanics of Materials	3				3
ME-UY 3511	Measurement Systems Lab	1				1
ME-UY 3513	Measurement Systems	3				3

ME-UY 3223	Dynamics	3				3
	HUSS Elective 2	4			3	
		18			**3**	
ME-UY 3233	Machine Design	3				3
ME-UY 3311	Fluid Mechanics Lab	1				1
ME-UY 3313	Fluid Mechanics	3				3
ME-UY 3411	Automatic Control Lab	1				1
ME-UY 3413	Automatic Control	3				3
ME	Elective	3				3
		14			**0**	
ME-UY 4112	Senior Design I	2				2
ME-UY 4214	Finite Element Design, Modeling, Analysis	4				4
ME-UY 4311	Heat Transfer Lab	1				1
ME-UY 4313	Heat Transfer	3				3
ME	Elective	3				3
	HUSS Elective 3	4			3	
		17			**3**	
ME-UY 4113	Senior Design II	3				3
ME	Elective	3				3
	Free Elective	3				3
	Free Elective	3	PHYS 3100	Modern Physics	3	
	HUSS Elective 4	4				4
		16			**3**	
		131			**64**	**67**

Credits Transferred to NYU **63**

131 total credits required for BS ME degree. Tandon will waive one credit from the degree requirement.