

Mohawk Valley Community College Engineering Science					University at Albany Computer Engineering B.S. (Combined Major/Minor)				
Course #	Course Title	SUNY Gen Ed	Major or Pathway	Credits Granted	Course #	Equivalent Course Title	SUNY Gen Ed	Major or Pathway	Credits Accepted
CF100	College Foundations Seminar (1)			1	QNCRE00	No Credit Given at UAlbany			0
CH141	General Chemistry 1	X	X	4	ACHM 120/124	General Chemistry I/Lab	X	X	4
CI140	Computer Programming for Engineers and Scientists			3	ICSIE00	Computer Science Elective – credit not given in major/minor			3
EN101	English 1: Composition	X		3	ANEG 100Z	Introduction to Analytical Writing	X		3
ES151	Introduction to Engineering		X	2	ICEN/IESE 110	Introduction to Engineering		X	
MA151	Calculus 1	X	X	4	AMAT 112	Calculus I	X	X	4
	Physical Education			.5		General Elective Credit			.5
	Core GE Social Science Elective (A)	X		3		SUNY Gen Ed Social Science Elective	X		3
EN102	English 2: Ideas & Values in Literature	X		3	AEENG 121	Reading Literature	X		3
ES175	Engineering Science Design			3	IECEE00	Electrical and Computer Engineering Elective – credit not given in major/minor			3
MA152	Calculus 2	X	X	4	AMAT 113	Calculus 2	X	X	4
PH261	Engineering Physics 1	X	X	4	APHY 140/145	Physics I: Mechanics/Lab	X	X	4
	Physical Education			.5		General Elective Credit			.5
ES271	Engineering Statics			3	IESE 201	Statics			3
ES291	Electrical Circuits 1		X	4	ICEN 290	Introduction to Circuits		X	4
MA253	Calculus 3	X	X	4	AMAT 214	Calculus of Several Variables	X	X	4
PH262	Engineering Physics 2	X	X	4	APHY 150/155	Physics II: Electromagnetism/Lab	X	X	4
	Social Science Elective (A)			3		SUNY Gen Ed Social Science Elective	X		3
	Physical Education			.5		General Elective Credit			.5
MA260	Differential Equations	X	X	3	AMAT 311	Ordinary Differential Equations	X	X	3
ES261	Mechanics of Materials			3	IESE 202	Strengths of Materials			3
ES272	Engineering Dynamics			3	IESEE20	200-Level Environmental and Sustainable Engineering Elective			3
MA280	Linear Algebra (Suggested Restricted Elective) (2)	X	X	3	AMAT 220	Linear Algebra	X	X	3
	Physical Education			.5		General Elective Credit			.5
					Total Credits Eligible for Transfer				
					65				
					Additional Required and Elective Courses for the Major at UAlbany				
						Challenges of the 21 st Century	X	X	3
					ICEN 111 or ICEN 150	Introduction to Electrical and Computer Engineering or Introduction to Engineering Analysis		X	3
					ICEN 200	Programming for Engineers		X	4
					ICEN/ICSI 210	Discrete Structures		X	4
					ICEN/ICSI 213	Data Structures		X	4
					ICEN/ICSI 333	Programming at the Hardware Software Interface		X	4
					ICEN 340	Digital Logic Design		X	3
					ICEN 360	Signals and Systems		X	3
					ICEN 370	Digital Signal Processing		X	3
					ICEN 380	Introduction to Digital Circuits		X	3
					ICEN/ICSI 400	Operating Systems		X	3
					ICEN/ICSI 404	Computer Organization		X	3
					ICEN/ICSI 416	Computer Communication Networks		X	3
					ICEN 430	Systems Analysis and Design		X	3
					ICEN 440	Design Lab I		X	3
					ICEN 450	Design Lab II		X	6
					AMAT 370	Probability and Statistics for Engineering and the Sciences		X	3
						Computer Engineering Elective (3)		X	6
Total credits required for degree completion at MVCC					Total Credits required at UAlbany				
66					64				
					Total Credits Applied to Program				
					65				
					Total Credits Required for Degree				
					129				

(A) Core GE Social Science Elective (choose two, one if which must be a bolded course): AN 101, BM 101, PS 101, PY 101, SO 101, HI 101
(1) The University at Albany does not accept transfer credit for College Foundations Seminar courses.
(2) This course is suggested because it meets a requirement for the major at UAlbany upon transfer.
(3) Students will select from: ICEN 360, ICEN 410, ICEN 417, ICEN 460, ICEN 461, ICEN 464, ICEN 470, or ICEN 480.

A transfer student admitted to the University at Albany who has completed his/her A.A. or A.S. degree will be given credit for meeting SUNY's General Education requirements.