

Mohawk Valley Community College Engineering Science					SUNY Polytechnic Institute Mechanical Engineering				
Course #	Course Title	SUNY Gen Ed		Credits Granted	Course #	Equivalent Course Title	SUNY Gen Ed		Credits Accepted
CF 100	College Foundation Seminar			1	FYS 101	First Year Seminar			1
CH141	General Chemistry 1	X		4	CHE 130	Introductory Chemistry I	X		4
CI140	Computer Programming for Engineers and Scientists			3	CS 108	Computing Fundamentals			3
EN101	English 1: Composition	X		3	ENG 101	English Composition	X		3
ES151	Introduction to Engineering			2	ESC 110	Introduction to Engineering			2
MA151	Calculus 1	X		4	MAT 151	Calculus I	X		4
	Physical Education			.5	REC 000	Recreation Elective			.5
	Core GE Social Science Elective (See "A" below)	X		3	SOS 001	General Education-Social Science Elective	X		3
EN102	English 2: Ideas & Values in Literature	X		3	ENG 110	Intro to Literature	X		3
ES175	Engineering Science Design			3	ESC 120	Design Tools & Processes			3
MA152	Calculus 2	X		4	MAT 152	Calculus II	X		4
PH261	Engineering Physics 1	X		4	PHY 201	Calculus Based Physics I	X		4
	Physical Education			.5	REC 000	Recreation Elective			.5
ES271	Engineering Statics			3	ESC 210	Statics			3
ES291	Electrical Circuits 1			4	ECE 260	Electrical Circuits			4
MA253	Calculus 3	X		4	MAT 253	Calculus III	X		4
PH262	Engineering Physics 2	X		4	PHY 202	Calculus Based Physics II	X		4
	Social Science Elective (See "A" below)	X		3	SOS 001	General Education-Social Science Elective	X		3
	Physical Education			.5	REC 000	Recreation Elective			.5
MA260	Differential Equations	X		3	MAT 260	Differential Equations	X		3
ES261	Mechanics of Materials			3	ESC 230	Mechanics of Materials			3
ES272	Engineering Dynamics			3	ESC 240	Dynamics			3
ES 281	Restricted Elective (See "B" below) Thermodynamics			3	ME 330	Thermodynamics I			3
	Physical Education			.5	REC 000	Recreation Elective			.5
					MAT 450 OR MAT 370 OR MAT 280	Partial Differential Equations OR Applied Probability OR Linear Algebra			4
					ESC 220	Material Science			3
					ESC 370	Design of Engineering Experiments			3
					ME 340	Engineering Thermodynamics II			3
					MAT 460	Numerical Differential Equations			4
						Gen Ed. Elective			4
					ME 320	Fluid Mechanics			3
					COM 3XX	Upper Division Writing Course			4
					ME 220	Kinematics and Mechanisms			3
					ME 446	Modeling and Control of Dynamic Systems			3
					ME 410	Heat Transfer			3
					ME 310	Design and Manufacturability			3
						Mechanical Engineering Elective			3
						Mechanical Engineering Elective			3
						Gen Ed. Elective			4
					ME 390	Machine Design			3
						Mechanical Engineering Elective			3
						Mechanical Engineering Elective			3
					ME 480	Capstone Design I			3
					ME 482	Capstone Design II			3
				Total Credits Eligible for Transfer	66				
								Total Transfer Credits Applied to Program	66
								Total Credits Required after Transfer	62
								Total Credits Required for Degree	128

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**

B.) Restricted Elective (choose one): **SUNY Poly recommends taking ES 281**

Completion of this bachelors program will require more than four semesters at full time status.