

University at Albany College of Engineering and Applied Sciences

SUNY Adirondack Computer Science A.S.					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
CHM 111	General Chemistry I (Suggested Liberal Arts Elective)	X	X	4	ACHM 120/124	General Chemistry I/Lab	X	X	4
CIS 143	Introduction to Programming			3	ICSI 201	Introduction to Computer Science		X	3
CIS 144	Intermediate Programming in a Windows Environment			3	ICSI 010	Computer Science Elective			3
CIS 150	Topics in Computing			3	ICSI 010	Computer Science Elective			3
CIS 243	Data Structures and Objects in C++			4	ICSI 010	Computer Science Elective			4
CIS 244	Computer Systems and Programming			3	ICSI 333	Programming at the Hardware Software Interface			3
EGR 105	Engineering Physics I (Suggested SUNY Gen. Ed. Natural Science with Lab)	X	X	4	APHY 140/145	Physics I: Mechanics/Lab	X	X	4
EGR 106	Engineering Physics II (Suggested Elective)	X	X	4	APHY 150/155	Physics II: Electromagnetism/Lab	X	X	4
ENG 101	Introduction to College Writing	X		3	AENG 010Z	English Elective	X		3
MAT 129	Discrete Mathematics			3	AMAT 010	Mathematics Elective			3
MAT 131	Calculus I	X	X	4	AMAT 112	Calculus I	X	X	4
MAT 132	Calculus II (Suggested SUNY Gen. Ed. Mathematics)	X	X	4	AMAT 113	Calculus II	X	X	4
MAT 220	Linear Algebra (Computer Science or Mathematics Elective)		X	3	AMAT 220	Linear Algebra		X	3
MAT 231	Calculus III (Suggested Liberal Arts Elective)	X	X	4	AMAT 214	Calculus of Several Variables	X	X	4
	SUNY Gen. Ed. American History	X		3		SUNY Gen. Ed. American History	X		3
	SUNY Gen. Ed. The Arts, Foreign Language or Humanities	X		3		SUNY Gen. Ed. The Arts, Foreign Language or Humanities	X		3
	SUNY Gen. Ed. Basic Communication	X		3		SUNY Gen. Ed. Basic Communication	X		3
	SUNY Gen. Ed. Social Science	X		3		SUNY Gen. Ed. Social Science	X		3
	SUNY Gen. Ed. Western Civilization	X		3		SUNY Gen. Ed. Western Civilization	X		3
	Health and Wellness Elective			2		General Elective Credits			2
HRD 110	Freshmen Experience*			1		No Credit Transferred			0
					<b>Additional Required and Elective Courses for the Major at UAlbany</b>				
						Challenges of the 21 <sup>st</sup> Century	X	X	3
					AMAT 311	Ordinary Differential Equations		X	3
					AMAT 370	Probability & Stats for Engineering Sciences		X	3
					ICEN 140	Intro to Engineering Design		X	3
					ICEN 150	Intro to Engineering Analysis		X	3
					ICEN 210	Discrete Structures		X	4
					ICEN 213	Data Structures		X	4
					ICEN 333	Programming - Hardware/Software Interface		X	4
					ICEN 340	Digital Logic Design		X	3
					ICEN 350	Signals and Systems		X	3
					ICEN 353	Microprocessor Applications		X	3
					ICEN 400	Operating Systems		X	3
					ICEN 404	Computer Organization		X	3
					ICEN 415	Electronics		X	3
					ICEN 416	Communications I		X	3
					ICEN 430	Systems Analysis and Design		X	3
					ICEN 440	Design Lab I		X	3
					ICEN 450	Design Lab II		X	6
					ICEN 454	Micro Processor Applications Lab		X	3
						Computer Engineering Electives**		X	12
				<b>Total Credits Eligible for Transfer</b>	<b>66</b>				
								<b>Total Transfer Credits Applied to Program</b>	<b>66</b>
								<b>Total Credits Required after Transfer</b>	<b>75</b>
								<b>Total Credits Required for Degree</b>	<b>141</b>

\*The University at Albany does not currently accept transfer credit for Freshmen Experience courses.

\*\* Students will select four courses from the following: ICEN 360, ICEN 370, ICEN 460, ICEN 470, ICEN 480, ICSI 311, ICSI 402, ICSI 403, ICSI 405, ICSI 410, ICSI 411, or ICSI 418.

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.