Term 1	Course Title/Description	Pre-requisite	Cr Hrs	Milestone/Notes
17-117	Precalculus	Minimum ACT math score of 22 OR minimum high school GPA 3.5	5	
29-102	Fund of Oral Communication		3	
77-101	University Seminar		1	
	Digital Literacy		3	
24-114/115	General Chemistry I & Lab		4	
		Total Hours	**16**	
Term 2	**Course Title/Description**	**Pre-requisite**	**Cr Hrs**	**Milestone/Notes**
44-141	Computer Programming I		3	
10-111	Composition I		3	
04-106/107	Principles of Biology & Lab		4	
17-120	Calculus I	Precalculus Algebra OR Precalculus AND Trigonometry	4	**1**
	Global Experience		3	
		Total Hours	**17**	
Term 3	**Course Title/Description**	**Pre-requisite**	**Cr Hrs**	**Milestone/Notes**
17-121	Calculus II	Calculus I	5	
44-241	Computer Programming II	Computer Programming I	3	
25-120/121	Classical Physics I & Lab	Calculus I	5	FALL only
	Fine Art		3	
17-114	General Statistics	ACT Math >22, HS GPA > 3.0	3	Elective ONLY required for BIG DATA
		Total Hours	**16-19**	
Term 4	**Course Title/Description**	**Pre-requisite**	**Cr Hrs**	**Milestone/Notes**
17-321	Calculus III	Calculus II	4	
34-102	Intro to American Government		3	
25-230/231	Classical Physics II & Lab	Classical Physics I & Lab AND Calculus II	5	**2** SPRING only
44-242	Data Structures	Computer Programming II AND Calculus I	3	**2**
		Total Hours	**15**	
Term 5	**Course Title/Description**	**Pre-requisite**	**Cr Hrs**	**Milestone/Notes**
44-249	Building Blocks of Theoretical Computer Science	Computer Programming II AND Calculus I	3	EITHER/OR with BIG DATA
25-350	Intro to Quantum Mechanics	Classical Physics II & Lab	3	FALL ODD YEARS only
17-311	Linear Algebra	Calculus I	3	Computer Science Elective FALL only

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4 = a milestone courses taken in final year to complete degree requirements.

	Course Title/Description	Pre-requisite	Cr Hrs	Milestone/Notes
25-330 OR 25-430	Electricity and Magnetism Optics	Electricity and Magnetism: Classical Physics II AND Calculus III Optics: Calculus II	3 3	Physics Electives Electricity and Magnetism & Optics: FALL EVEN YEARS only
10-112	Composition II	Composition I	3	
	American Experiences		3	
17-316	Linear Statistical Models	General Statistics OR Probability and Statistics	3	Elective ONLY required for BIG DATA FALL only
Total Hours			**12-21**	

Term 6	Course Title/Description	Pre-requisite	Cr Hrs	Milestone/Notes
44-345	Computer Organization	Data Structures	3	SPRING only
25-352 OR 25-450	Modern Physics Computational Physics	Modern: Classical Physics II & Lab Classical Physics II & Lab AND Computer Programming I	3	Modern: SPRING ODD YEARS only Computational: SPRING EVEN YEARS only
44-349	Survey of Algorithms	Data Structures AND Building Blocks AND Calculus I	3	Computer Science Elective SPRING only
24-332/333 OR 25-360	Electronics & Lab Quantum Mechanics	Electronics: Classical Physics II Quantum: Introduction to Quantum OR Physical Chemistry I & Lab AND Calculus III	4 3	Physics Electives Electronics: SPRING ODD YEARS only Quantum: SPRING EVEN YEARS only
17-361	Differential Equations	Calculus II	3	SPRING only
	Social & Behavioral Science		3	
Total Hours			**12-19**	
Term 7	Course Title/Description	Pre-requisite	Cr Hrs	Milestone/Notes
44-517	Big Data	Data Structures AND Probability and Statistics OR Linear Statistical Models	3	EITHER/OR with BUILDING BLOCKS OF THEORETICAL COMPUTER SCIENCE FALL only
25-350	Intro to Quantum Mechanics	Classical Physics II & Lab	3	FALL ODD YEARS only
44-550 OR 17-311	Operating Systems Linear Algebra	Operating Systems: Computer Organization Linear Algebra: Calculus I	3	Computer Science Elective FALL only
25-330 OR 25-430	Electricity and Magnetism Optics	Electricity and Magnetism: Classical Physics II AND Calculus III Optics: Calculus II	3 3	Physics Electives Electricity and Magnetism: FALL EVEN YEARS only Optics: FALL EVEN YEARS only

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29-102	Fund. Of Oral Communication		3	
10-220	Intro to Literature		3	
	Elective		3	
	Total Hours		**12-21**	

Term 8	Course Title/Description	Pre-requisite	Cr Hrs	Milestone/Notes
	Humanities		3	
	Social & Behavioral Science		3	
25-352 OR 25-450	Modern Physics Computational Physics	Modern: Classical Physics II & Lab Classical Physics II & Lab AND Computer Programming I	3	Modern: SPRING ODD YEARS only Computational: SPRING EVEN YEARS only
44-349	Survey of Algorithms	Data Structures AND Building Blocks AND Calculus I	3	Computer Science Elective SPRING only
24-332/333 OR 25-360	Electronics & Lab Quantum Mechanics	Electronics: Classical Physics II Quantum: Introduction to Quantum OR Physical Chemistry I & Lab AND Calculus III	4 3	Physics Electives Electronics: SPRING ODD YEARS only Quantum: SPRING EVEN YEARS only
25-489 OR 25-499	Physics Practicum OR Special Investigations in Physics	Permission of Instructor	2	
	Elective		2	
	Total Hours		**13-20**	

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