

Bachelor of Science Degree - Catalog 130

Freshman Year

First Semester	(Th-Pr)	Cr	Second Semester	(Th-Pr)	Cr
ENGL 104 Comp. and Rhetoric	(3-0)	3	CHEM 107 Gen. Chem. for Engr. Students	(3-3)	4
HIST 105 History of the U.S. ¹	(3-0)	3	HIST 106 History of the U.S. ¹	(3-0)	3
MATH 171 Analytic Geom. and Calculus	(4-0)	4	MATH 172 Calculus	(4-0)	4
PHYS 101 Topics in Cont. Physics	(1-0)	1	PHYS 208 Electricity and Optics	(3-3)	4
PHYS 218 Mechanics	(3-3)	4			15
		15			

Sophomore Year

First Semester	(Th-Pr)	Cr	Second Semester	(Th-Pr)	Cr
MATH 221 Several Variable Calculus	(4-0)	4	MATH 311 Topics in Applied Math I	(3-0)	3
MATH 308 Differential Equations	(3-0)	3	PHYS 225 Electronic Circuits	(3-3)	4
PHYS 221 Optics and Thermal Physics	(3-0)	3	PHYS 309 Modern Physics	(3-0)	3
POLS 206 American Nat'l. Govt.	(3-0)	3	POLS 207 State & Local Govt.	(3-0)	3
Humanities elective ¹		3	Communication elective ²		3
		16			16

Junior Year

First Semester	(Th-Pr)	Cr	Second Semester	(Th-Pr)	Cr
MATH 412 Theory of Partial Diff. Eqs.	(3-0)	3	MATH 407 Complex Variables	(3-0)	3
PHYS 302 Adv. Mechanics	(4-0)	4	PHYS 305 Adv. Elec. and Magn. II	(3-0)	3
PHYS 304 Adv. Elect. and Magn. I	(3-0)	3	PHYS 327 Exptl. Physics	(2-3)	3
Social and behavioral sciences elective ¹		3	PHYS 412 Quantum Mechanics I	(3-0)	3
KINE 198 Health and Fitness Activity	(0-2)	1	Electives ³		3
		14			15

Senior Year

First Semester	(Th-Pr)	Cr	Second Semester	(Th-Pr)	Cr
PHYS 408 Thermo. and Stat. Mechanics	(4-0)	4	PHYS 401 Computational Physics⁴	(3-0)	3
PHYS 414 Quantum Mechanics II	(3-0)	3	PHYS 425 Physics Lab	(0-6)	2
PHYS 420 Concepts, Conn., & Comm.⁶	(1-0)	1	PHYS 485 Problems		2
PHYS 426 Physics Lab	(0-6)	2	PHYS 491 Research⁶		1
Visual and performing arts elective ¹		3	Physics elective⁵		3
Elective ³		2	Electives ³		2
		15	KINE 199 Required Physical Activity	(0-2)	1
					14

- NOTES:
- Any course in this category from the approved University Core Curriculum list of courses.
 - To be selected from ENGL 203, 210, 235, 236, 241 and 301.
 - Electives should be chosen in consultation with the student's academic advisor. If a student has not fulfilled the 6 hours international and cultural diversity requirement of the University Core Curriculum with courses used to meet other areas of the Core, they must fulfill this requirement with 6 of their elective hours.
 - To register for PHYS 401 a student must be able to program in a high level language, such as FORTRAN or C. This prerequisite can be satisfied by taking CPSC 206 or the equivalent.
 - Any 400-level physics elective, except the writing intensive courses, 420 and 491.
 - Approved W course designation.