

# Bachelor of Science Degree - Catalog 125

## 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 US <sup>1</sup>	(3-0) 3	HIST 106 History of the US <sup>2</sup>	(3-0) 3
MATH 171 Analytic Geom and Calculus	(4-0) 4	MATH 172 Calculus	(4-0) 4
<a href="#">PHYS 101 Topics in Cont Physics</a>	(1-0) 1	<a href="#">PHYS 208 Electricity and Optics</a>	(3-3) 4
<a href="#">PHYS 218 Mechanics</a>	(3-3) 4	*KINE 199 Required Physical Activity	(0-2) 1
*KINE 198 Health and Fitness Activity	(0-2) 1		
	16		16

## Sophomore Year

First Semester	(Th-Pr) Cr	Second Semester	(Th-Pr) Cr
MATH 221 Sev Variable Calculus	(4-0) 4	MATH 311 Topics in Applied Math	(3-0) 3
MATH 308 Differential Equations	(3-0) 3	<a href="#">PHYS 225 Electronic Circuits</a>	(3-3) 4
<a href="#">PHYS 221 Optics and Thermal Physics</a>	(3-0) 3	<a href="#">PHYS 309 Modern Physics</a>	(3-0) 3
POLS 206 American Nat'l Govt	(3-0) 3	POLS 207 State & Local Gov	(3-0) 3
Humanities elective <sup>3</sup>	3	English literature elective	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
<a href="#">PHYS 302 Adv. Mechanics</a>	(4-0) 4	<a href="#">PHYS 305 Adv Elec. And Magn. II</a>	(3-0) 3
<a href="#">PHYS 304 Adv. Elect and Magn I</a>	(3-0) 3	<a href="#">PHYS 327 Exptl. Physics</a>	(2-3) 3
Communications Elective <sup>4</sup>	3	<a href="#">PHYS 412 Quantum Mechanics I</a>	(3-0) 3
Social and Behavioral Sciences Elective <sup>3</sup>	3	Electives <sup>4</sup>	5
	16		17

## Senior Year

First Semester	(Th-Pr) Cr	Second Semester	(Th-Pr) Cr
<a href="#">PHYS 408 Thermo and Stat Mechanics</a>	(4-0) 4	<a href="#">PHYS 425 Physics Lab</a>	(0-6) 2
<a href="#">PHYS 414 Quantum Mechanics II</a>	(3-0) 3	<a href="#">PHYS 485 Problems</a>	2
<a href="#">PHYS 426 Physics Lab</a>	(0-6) 2	Physics Elective <sup>5</sup>	3
Physics Elective <sup>5</sup>	3	Visual and Performing Arts Elective <sup>3</sup>	3
Electives <sup>6</sup>	3	Electives <sup>6</sup>	6
	15		16

- NOTES:
- In place of HIST 105 a student may take any American or Texas history course from the following list: HIST 226, 363, 367, 368, 369, 370, 371, 443, 447, 450, 457, 459, 461 or 462.
  - In place of HIST 106 a student may take any American or Texas history course from the following list: HIST 226, 360, 363, 372, 373, 374, 416, 444, 451, 455, 457, 460, 461 or 463. Note that of the 6 required hours of history, 3 hours, at most, may be in Texas history.
  - 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.
  - Any 400-level physics elective.
  - 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 found on page 18 with courses used to meet other areas of the Core, they must fulfill this requirement with 6 of their elective hours.