

# CSB/SJU PHYSICS & ENGINEERING OPTIONS

YEAR	Semester	PHYSICS & APPLIED PHYSICS	
1	Fall	Foundations of Physics I Calculus I	(PHYS 191 = 4 credits) (MATH 119 = 4 credits)
	Spring	Foundations of Physics 2 Calculus 2	(PHYS 200 = 4 credits) (MATH 120 = 4 credits)
2	Fall	Foundations of Physics 3 Intermediate Lab Linear Algebra	(PHYS 211 = 4 credits) (PHYS 332 = 1 credit) (MATH 239 = 4 credits)
	Spring	Modern Physics Intermediate Lab Differential Equations	(PHYS 320 = 4 credits) (PHYS 332 = 1 credit) (MATH 337 = 4 credits)

PRE-ENGINEERING
Transfer to Engineering school for Bachelor of Science degree in Engineering

3	Fall	Mechanics Advanced Lab Multivariable Calculus	(PHYS 339 = 4 credits) (PHYS 370 = 1 credit) (MATH 305 = 4 credits)
	Spring	Electricity & Magnetism Advanced Lab Fourier Analysis or Complex Variables	(PHYS 341 = 4 credits) (PHYS 370 = 1 credit) (MATH 341 or 348 = 4 credits)

DUAL-DEGREE
Transfer to Engineering school for B.S. in Engineering + B.A. in Physics from CSB/SJU

		PHYSICS - 68 Credits	APPLIED PHYSICS - 70 Credits
4	Fall	Quantum Mechanics (PHYS 346 = 4 credits) Senior Research (PHYS 372 = 1 credit)	Senior Research (PHYS 372 = 1 credit)
	Spring	Thermodynamics (PHYS 343 = 2 credits) Statistical Mechanics (PHYS 344 = 2 credits) Senior Thesis (PHYS 373 = 1 credit)	Thermodynamics (PHYS 343 = 2 credits) Senior Thesis (PHYS 373 = 1 credit)
Any Year	Any Semester	Electives (PHYS 3xx = 6 credits)	Electives (PHYS 3xx = 6 credits) Electronics (PHYS 217 & 338 = 4 credits) General Chemistry (CHEM 123 = 4 credits)

ENGINEERING
After B.A. in Physics or Applied Physics from CSB/SJU, Graduate school or jobs in Engineering

2-CREDIT ELECTIVE COURSES:
Nuclear Physics, Applied Nuclear Physics, Elementary Particle Physics Optics, Experimental Optics, Advanced Electronics, Topics in Applied Physics Relativity, Astrophysics, Space Physics, Topics in Modern Physics Fortran and C++ for Scientists