

Missouri State University - College of Natural and Applied Sciences
Department of Physics, Astronomy and Materials Science

Engineering Physics/Computer

Bachelor of Science

Updated April 2009

Engineering (comprehensive)

This is a model four year graduation plan. Your path to graduation may vary slightly based on factors such as college credit you earned while in high school, your choice of general education electives, and placement in English and Mathematics.

This degree program can be completed in eight semesters.

First Semester (Fall)		Second Semester (Spring)	
General Chemistry I - CHM 160	4	Calculus II - MTH 280	5
Calculus I - MTH 261	5	Foundations of Physics I - PHY 203	5
Intro to Univ Life - IDS 110	1	Intro to C++ Programming - CSC125 (or CSC 121)	3
Intro to Computing - CSC 111	3	Writing I - ENG 110	3
Public Speaking - COM 115	3		
Total Hours	16	Total Hours	16
Third Semester (Fall)		Fourth Semester (Spring)	
Multivariate Calculus - MTH 302	3	Differential Equations - MTH 303	3
Foundations of Physics II - PHY 204	5	Intro Circuit Analysis - PHY 252	3
Intro Stru & Logic of Digital Computers - PHY 220	4	Beginning Tech Writing - ENG 321	3
Fitness for Living - PED 100	2	American Democracy and Citizenship - PLS 101	3
Self-Understanding/Social-Behavioral	3	Culture and Society/Humanities	3
Total Hours	17	Total Hours	15
Fifth Semester (Fall)		Sixth Semester (Spring)	
Physics or Computer Science Elective	4	Signals and Systems - PHY 354	3
Electronic Circuit Design - PHY 352	3	US History - HST 121 or 122	3
Twentieth Century Physics I - PHY 375	3	Expts in 20th Century Phys - PHY 385	2
Math for Sci & Eng I - PHY 391	3	Math for Sci & Eng II - PHY 392	3
Instrumental/Computer Interfacing - PHY 324	4	Undergraduate Research I - PHY 386	3
Total Hours	17	Total Hours	14
Seventh Semester (Fall)		Eighth Semester (Spring)	
Digital Signal Processing - PHY 524	4	Instrumentation Circuit Design - PHY 485	3
Gen Edu - Social Sciences (Culture & Soc)	3	Phys Semiconductor Devices - PHY 558	3
Intro Sol St Phy - PHY 475 (or MAT 580)	3	Undergraduate Research II - PHY 486	1
Elementary Field Theory - PHY 353	3	Thermal Physics - PHY 343	3
Self-Understanding/Creativity and Vision	3	Self-Understanding/Humanities	3
		General Elective	2
Total Hours	16	Total Hours	15

GPA Requirements include: 2.00 in major

Other Requirements include: 40 hours must be in upper level courses (300 level or above)