

B. S. Physics: Materials and Nanophysics

2020-2021 Major Map for First Time College Student

Course and Title	Sem. Hours	Min. Grade	Course and Title	Sem. Hours	Min. Grade
YEAR ONE – Semester 1			YEAR ONE – Semester 2		
PHYS 100, Undergraduate Seminar	1.0		PHYS 205A/255A, Univ Physics w/Lab	4.0	С
MATH 150, Calculus I	4.0	С	PHYS 206A, Problem Solv for PHYS 205A	1.0	С
CHEM 200/201/202, Intro Chem Princ w/Lab	5.0		MATH 221, Intro to Linear Algebra	3.0	С
ENGL 101, Composition I	3.0	С	MATH 250, Calculus II	4.0	С
UNIV 101, Saluki Success	1.0		ENGL 102, Composition II	3.0	С
UCC Human Health	2.0				
	16.0			15.0	
YEAR TWO – Semester 1			YEAR TWO – Semester 2		
PHYS 205B/255B, Univ Physics w/Lab	4.0	С	PHYS 305/355, Modern Physics w/Lab	4.0	С
PHYS 206B, Problem Solv for PHYS 205B	1.0	Ċ	PHYS 310, Classical Mechanics	3.0	C
PHYS 301, Theoretical Methods in Physics	3.0	С	MATH 305, Intro Differential Equations	3.0	C
MATH 251, Calculus III	3.0	С	CMST 101, Intro Oral Communication	3.0	_
UCC Humanities	3.0		Supportive Skills Course ¹	3.0	
	14.0			16.0	
YEAR THREE – Semester 1			YEAR THREE – Semester 2		
PHYS 320, Electricity & Magnetism I	3.0		PHYS 420, Electricity & Magnetism II	3.0	
Physics Elective ³	4.0	C	PHYS 476M, Materials Sci & NanoPhysics	3.0	
UCC Social Science	3.0			3.0	_
MATH Course ²	3.0		PHYS 430, Quantum Mechanics I UCC Social Science	3.0	С
Supportive Skills Course ¹					
Supportive Skills Course	3.0 16.0		COS Biological Science	3.0 15.0	
	16.0			15.0	
YEAR FOUR – Semester 1			YEAR FOUR – Semester 2		
PHYS 425, Solid State Physics I	3.0		PHYS 450, Advanced Lab Techniques	3.0	
PHYS 440, Applications of Quantum Mechanics	3.0		Physics Elective ³	4.0	
PHYS 445, Thermodynamics & Stat Mechanics	3.0		UCC Multicultural	3.0	
UCC Fine Arts	3.0		COS Biological Science	3.0	
UCC Humanities	3.0				
	15.0			13.0	

Total Hours: 120

Academic policies as well as degree and major-specific requirements can be found at *catalog.siu.edu*. All students are encouraged to meet with the academic advisor on a regular basis to ensure timely progress to degree.

University Core Curriculum (UCC) is satisfied with the transfer of an Associate of Art or Science (AA or AS) degree or the completion of the Illinois Articulation Initiative-General Education Core Curriculum (IAI-GECC) from an Illinois community college.

¹Select from: CS 201, CS 202, CS 280, CS 300, ENGL 290, ENGL 291, ENGL 391, MATH 282, MATH 483 or 1 or 2 semesters of a foreign language

²Select 1 course from: MATH 405, MATH 406, MATH 407, MATH 409, MATH 450, MATH 455 or MATH 475

³Select from: PHYS 390, PHYS 424, PHYS 428, PHYS 431, PHYS 432, PHYS 458, PHYS 470, PHYS 476, PHYS 490, CS 215, CS 220, CS 475, CS 476