



TRANSFER GUIDE

AS Mathematics transferring into BS Physics: Materials & Nanophysics

Kaskaskia College Courses				
AS Mathematics – 65 hours				
GUID 109-1	First Year College Experience	Elective-3	Fine Arts	
ENGL 101-3	English Composition	HLTH 102-3	Human Health and Wellness	
ENGL 102-3	English Composition	CITA 110-1	Intro to Word Processing	
SPCH 103-3	Fundamentals of Speech	MATH 166-5 ³	Calculus & Analytical Geometry I	
MATH 136-4	General Statistics	MATH 210-3 ²	Computer Programming for Engr	
PSYH 101-3	Psychology	MATH 236-31	Linear Algebra	
Elective-3	Social/Behavioral Science	MATH 267-41	Calculus & Analytical Geometry II	
PHLE 120-3	Ethics	MATH 268-4 ²	Calculus & Analytical Geometry III	
PHYS 201-51	University Physics I	MATH 269-31	Differential Equations	
Elective-3	Biology Elective	PHYS 202-5 ²	University Physics II	
¹ Only offered Spring, ² Only offered Fall, ³ Offered Spring and Fall				
Southern Illinois University Carbondale Courses				
BS Physics: Materials & Nanophysics – 55 hours				
Elective-3	Additional Life Science course	PHYS 425-3	Solid State Physics I	
CHEM 200/	Intro to Chemical Principles/	PHYS 430-3	Quantum Mechanics I	
201/202-5	Lab/Workshop	PHYS 440-3	Quantum Mechanics II	
PHYS 100-1	Undergraduate Seminar	PHYS 445-3	Thermodynamics/Statistical Mechanics	
PHYS 301-3	Theoretical Methods in Physics	PHYS 450-3	Advanced Laboratory Techniques	
PHYS 305/355-4	Modern Physics/Lab	PHYS 476M-3	Intro Materials Science & NanoPhysics	
PHYS 310-3	Classical Mechanics	Math Elective-3	Choose 3 hrs from approved courses	
PHYS 320-3	Electricity & Magnetism I	Nano Phys Elect-8	Choose 8 hrs from approved courses	
PHYS 420-3	Electricity & Magnetism II	General Elective-1	As necessary to fulfill 120 hrs to BS	
Total Hours to Bachelor Degree: 120 Hours				

Salary Range:	\$30,000-\$75,000
Possible Careers:	Materials Processing Engineer Optical Physicist/Engineer Laser Physicist/Engineer
Possible	
Graduate Studies:	Physics/Applied Physics Mechanical Engineering Civil Engineering

Questions? Contact Us!

Kaskaskia College

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Disclaimer: You are encouraged to use this transfer guide when planning your progress towards degree completion. Following a transfer guide does not guarantee admission into the listed program. Information is assumed current; however, any curriculum changes reflected in the Undergraduate Catalog override the information on this guide. Contact your Academic Advisor for assistance in interpreting this guide.



Baccalaureate Degree Requirements

Each candidate for a bachelor's degree must complete the requirements listed:

Hour Requirements. Each student must complete at least 120 semester hours of credit. Each student must have at least 42 hours in courses that number 300 or above from a four-year institution.

Residence Requirements. Each student must complete the residence requirement by taking the last year, which is defined as 30 uninterrupted semester hours, or a total of 90 semester hours at SIU Carbondale.

Grade Point Average Requirements. Each student must have a *C* average for <u>all work</u> taken at SIU Carbondale. Some academic programs may require a higher graduating major GPA.

Dual Admission Program

The Dual Admission Program (DAP) allows baccalaureate-oriented students at eligible community colleges to benefit from pre-advisement for a chosen major at SIU Carbondale. The DAP addresses specific departmental requirements that a student may not automatically fulfill by completing their associate degree at their community college. Students apply to the DAP by completing the Application for Undergraduate Admission and indicating interest in the DAP. Students must have at least two semesters remaining at their community college to participate, <u>must select a participating SIU major</u>, and <u>must attend an eligible community college</u>. Students who apply for the DAP are provided a transfer plan that will guide them to the most direct route to their bachelor's degree, along with personalized contact with an SIU representative. Dual Admission Program students receive access to enroll in an online Dual Admission Program course, which connects students early to the University, its resources, and other transfer students.

Compact Agreement

SIU has recognized the Illinois regionally accredited community college transferable baccalaureate oriented Associate of Arts or Associate of Science degrees under the Compact Agreement since 1970. SIU will continue to recognize the baccalaureate oriented associate degree (A.A. or A.S. degree) under the Illinois Articulation Initiative as satisfying SIU University Core Curriculum (UCC). The Associate of Applied Science (A.A.S.), Associate in Engineering Science (A.E.S.), the Associate in General Studies (A.G.S.), and the Associate in Fine Arts (A.F.A.) are not covered under the Compact Agreement and do not carry the same benefits as the A.A. and A.S. degrees.

Degree Works

Degree Works is an easy-to-use, comprehensive, online degree audit tool specifically designed for students. The audit reflects program requirements from the Undergraduate Catalog measured against registration and transfer work to guide the degree audit function as it applies to the individual student. Once admitted to SIU Carbondale, you can run a Degree Works degree audit against your academic record by searching "Degree Works" in <u>SalukiNet</u>.