TRANSFER GUIDE

AES Engineering Science transferring into BS Biomedical Engineering

Kaskaskia College Courses			
AES Engineering Science – 64-71 hours			
ENGL 101-3	English Composition	ENGR 203-3	Statics
ENGL 102-3	English Composition	ENGR 204-3	Dynamics
COMM 103/204-3	Speech Comm/Interpers Comm	ENGR 205*-3	Mechanics of Materials
MATH 166-5	Calculus & Analytical Geometry I	ENGR 210*-4	Electrical Circuit Analysis
Elective-3	Social Science	MATH 267-4	Calculus & Analytical Geometry II
PHLE 120/201-3	Ethics/Pro Ethics for Engineers	MATH 268-4	Calculus & Analytical Geometry III
Elective-3	Social Science	MATH 269-3	Differential Equations
Elective-3	Humanities	PHYS 201-5	University Physics I
CHEM 111-5	Chemistry I: Inorganic Chemistry	PHYS 202-5	University Physics II
ENGR 103-3	Engineering Graphics & CAD		**Recommended Course*
ENGR 201-3	Computer Programng Engineers		**64 hours w/out recommended courses*
Southern Illinois University Carbondale Courses Capstone Option			
BS Biomedical Engineering (BME) – 73 hours			
BIOL 211-4	Intro Cell Biology & Genetics	BME 338,338L-4	Biomedical Instruments w/Lab
Elective-3	Fine Arts	BME 351-3	Probability & Statistics
PHSL 201-3	Human Physiology	BME 355L-1	BME Signals & Systems Lab
Elective-3	Multicultural	BME 438-3	Medical Instrumentation: App & Design
BME 101-3	Intro to Biomedical Engineering	BME 495A-3	BME Senior Design I
BME 296,296L-4	Intro Microcontr Robotics w/Lab	BME 495B-3	BME Senior Design II
BME 336-3	Biomechanics	ECE 355-3	Signals & Systems
BME 337-3	Bioelectricity	Tech Electives-27	Select from list of approved courses
Total Hours to Bachelor Degree: 137-144 Hours			

Salary Range: $41,950-$91,410

Possible Careers:
Bioinstrumentation Engineer
Rehabilitation Engineer
Biomedical Researcher
Clinical Patient Evaluator

Questions? Contact Us!

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Baccalaureate Degree Requirements

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

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

Residence Requirements. Student must complete the residency requirement by taking a total of 42 semester hrs at SIU Carbondale.

Grade Point Average Requirements. Student must have a C average for all work taken at SIU Carbondale. Some academic programs may require a higher graduating major GPA.

Compact Agreement

SIU Carbondale has recognized Illinois regionally accredited community college transferable baccalaureate-oriented Associate of Arts or Associate of Science degrees under the Compact Agreement since 1970. SIUC 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) requirements. 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.

Saluki Transfer Pathways

Saluki Transfer Pathways is the university's dual admission program that allows baccalaureate-oriented students at eligible community colleges intending to transfer to SIU Carbondale to benefit from early admission and pre-advisement for a baccalaureate program at SIUC. Saluki Transfer Pathways allows students to be conditionally admitted to SIU Carbondale up to two years in advance of their intended transfer term so they have access to transfer credit evaluation and the university's degree audit system. This allows students to address major specific requirements that may not be automatically fulfilled with the completion of an associate degree. Students apply to Saluki Transfer Pathways by completing the Application for Undergraduate Admission and indicating an interest in the program. To participate, students must have at least two semesters remaining at their community college. Direct questions about the Saluki Transfer Pathways program to transfer@siu.edu.

DegreeWorks

DegreeWorks is an easy-to-use, online degree audit tool specifically designed for students. Once admitted to SIU Carbondale, you can use it monitor your progress toward your degree in Salukinet.

Saluki Transfer Estimator Portal (STEP)

The Saluki Transfer Estimator Portal (STEP) is a web-based tool that integrates institutional course equivalency and degree audit data to provide an unofficial credit estimation and a more seamless transfer process. STEP gives transfer students a clear roadmap for timely degree completion by providing key information about how transfer credits apply to your intended program at SIU.

PROGRAM ARTICULATION DEGREE PLAN					
Kaskaskia College	***2024-2025***		***Southern Illinois University Carbondale***		
AES Associate in Engineering Science - 64-71 Hours			BS Biomedical Engineering (BME) - 126 hrs		
			UCC Capstone - 30 hrs		
		Hrs			**Hrs**
			UNIV 101	Saluki Success	NA
COMM 103 -or- 204	Fundamentals of Speech Comm -or- Interpersonal Comm	3	CMST 101 -or- 262 (101 fulfills UCC Speech Requirement)	Intro to Oral Comm -or- Interpersonal Comm	T
ENGL 101	English Composition	3	ENGL 101	English Composition I	T
ENGL 102	English Composition	3	ENGL 102	English Composition II	NA
MATH 166	Calculus & Analytical Geometry I	5	MATH 150	Calculus I	T
	Social Science	3	SOCIAL SCIENCE	*See SIUC Transfer Equivalency Guide*	T
	Social Science	3	SOCIAL SCIENCE	*See SIUC Transfer Equivalency Guide*	T
PHLE 120 -or- 201	Ethics -or- Professional Ethics for Engineers	3	PHIL 104 -or- GENL 2XX	Ethics -or- General Elective Credit	T
	Humanities	3	HUMANITIES	*See SIUC Transfer Equivalency Guide*	T
CHEM 111	Chemistry I: Inorganic Chemistry	5	CHEM 200 -and- 201	Intro to Chemical Principles w/Lab	T
			BIOL 211	Intro to Cell Biology & Genetics	4
			FINE ARTS		3
			PHSL 201	Human Physiology	3
			MULTICULTURAL		3
		31			**13**
Program Requirements			**Program Requirements**		
ENGR 103	Engineering Graphics & CAD	3	ME 102 (elective)	Computer-Aided Engineering Drawing	T
ENGR 201	Computer Programming for Engineers	3	CS 202 (technical elective)	Intro to Computer Science	T
ENGR 203	Statics	3	ENGR 250 (technical elective)	Statics	T
ENGR 204	Dynamics	3	ENGR 261 (technical elective)	Dynamics	T
MATH 267	Calculus & Analytical Geometry II	4	MATH 250	Calculus II	T
MATH 268	Calculus & Analytical Geometry III	4	MATH 251	Calculus III	T
MATH 269	Differential Equations	3	MATH 305	Intro to Differential Equations	T
PHYS 201	University Physics I	5	PHYS 205A -and- 255A	University Physics w/Lab	T
PHYS 202	University Physics II	5	PHYS 205B -and- 255B	University Physics w/Lab	T
		33			
***Recommended Courses**					
ENGR 205*	Mechanics of Materials	3	ENGR 350C (elective)	Mechanics of Materials	T
ENGR 210*	Electrical Circuit Analysis	4	ECE 235 -and- 235L	Electric Circuits I w/Lab	T
		40			
			BME 101	Intro to Biomedical Engineering	3
			BME 296 -and- 296L	Intro to Microcontrollers & Robotics w/Lab	4
			BME 336	Biomechanics	3
			BME 337	Bioelectricity	3
			BME 338 -and- 338L	Biomedical Instruments w/Lab	4
			BME 351	Probability & Statistics	3
			BME 355L	BME Signals & Systems Lab	1
			BME 438	Medical Instrumentation: Application & Design	3
			BME 495A	BME Senior Design I	3
			BME 495B	BME Senior Design II	3
			ECE 355	Signals & Systems	3
			Technical Electives	At least 9 hours from: BME 341-485. Remaining credit hours can be from 300/400-level courses offered by	27
					60
Total semester hrs completed w/AES degree:		**64-71**	**Total semester hrs completed w/BS degree:**		**73**
			Total hrs to BS degree:		**137-144**
Degree Plan updated on 6/25/24 by SG					