

PROGRAM ARTICULATION AGREEMENT

BETWEEN

WESTMINSTER COLLEGE  
FULTON, MO

AND

SOUTHERN ILLINOIS UNIVERSITY CARBONDALE  
CARBONDALE, IL

In an effort to provide a continued, articulated higher education baccalaureate degree program that will build on community college and university learning experiences, and also eliminate duplication of instruction, this agreement is entered into this 8<sup>th</sup> day of February, 2022 (Effective Date) by and between Westminster College and the Board of Trustees of Southern Illinois University on behalf of Southern Illinois University Carbondale.

I. TERM AND TERMINATION

- A. Term. This Agreement shall commence as of the Effective Date (or if no Effective Date is indicated, upon the date the Agreement is fully executed by the Parties) and shall remain in effect for a period of five (5) years thereafter. The Parties may renew or extend this Agreement only by written instrument signed by the authorized representatives of each Party.
- B. Termination. This Agreement may be terminated by either Party, with or without cause, upon 60 days advance written notice. The Parties agree that no additional students shall be accepted into the program after a Party's receipt of any written notice of termination. No qualified student then-enrolled in the program shall be deprived the opportunity to complete the program requirements solely due to termination.

II. TRANSFER REQUIREMENTS

- A. All graduates of Westminster College with a Bachelor in Arts (B.A.) degree in Biochemistry-Biology and meeting SIU Carbondale admission requirements will be considered for admission into SIU Carbondale's Bachelor in Science (B.S.) degree in Biomedical Engineering (BME) Pre-Medical Specialization in the College of Engineering based upon the Department's enrollment criteria and space availability.

B. A Westminster College graduate receiving a Bachelor in Arts (B.A.) degree in Biochemistry-Biology and following the degree plan attached to this agreement, will be considered for admission to SIU Carbondale's Biomedical Engineering (BME) Pre-Medical Specialization program if the following are met:

1. The student has earned a minimum of 124 semester hours transferable to SIU Carbondale
2. The student has earned an overall grade point average (GPA) of 2.0 or above (4.0 scale) for his or her collegiate work as calculated by SIU Carbondale's grading regulations.
3. Confirmation by the SIU Carbondale College of Engineering that the student has satisfactorily completed the following courses as part of the Bachelor in Arts degree in Biochemistry-Biology at Westminster College:

- BIO 114, 115-4, *Biological Processes*
- BIO 124, 125-4, *Biodiversity*
- BIO 301-4, *Genetics w/Lab*
- BIO 302-4, *Anatomy*
- BIO 325-3, *Molecular & Cell Bio w/Lab*
- BIO 404-4, *Biochemistry w/Lab*
- BIO 420-4, *Physiology*
- CHM 114, 115-4, *General Chemistry I*
- CHM 124, 125-4, *General Chemistry II*
- CHM 304-3, *Inorganic Chemistry*
- CHM 314, 315-4, *Organic Chemistry I w/Lab*
- CHM 324, 325-4, *Organic Chemistry II w/Lab*
- CHM 334, 335 -or- 424, 425 -or- 410-3 to 4, *Analy Chem I w/Lab - or- Phys Chem I w/Lab -or- Adv Topics in Chemistry*
- CSC 104-3, *Programming*
- EGR 101-3, *Introduction to Engineering*
- EGR 230 -or- MAT 312-3, *Statics -or- Differential Equations*
- ENG 103-3, *Academic Writing*
- ENG 270-3, *Expository Writing*
- LST 101-1, *Leadership*
- MAT 124-5, *Calculus I*
- MAT 214-4, *Calculus II*
- MAT 224-4, *Calculus III*
- PE Activity - 1 hour
- PHL 242-3, *Biomedical Ethics*
- PHY 201-4, *Physics I w/Lab*

- PHY 212-4, *Physics II w/Lab*
- PHY 328-4, *Analog Circuits*
- PSY 112 -or- 113-3, *Psy as a Natural Sci -or- Psy as a Social Sci*
- SPE 101-3, *Intro to Speech*
- WSM 101-3, *Freshman Seminar*
- EXPLORATION CLUSTERS - 6 hours
- FINE ARTS ELECTIVE - 3 hours
- FOREIGN LANGUAGE (PART I) - 3 hours
- FOREIGN LANGUAGE (PART II) - 3 hours
- GLOBAL PERSPECTIVES ELECTIVES - 3 hours
- INSTITUTIONS & SOCIETY - 3 hours

C. Westminster College students transferring to the Biomedical Engineering (BME) Pre-Medical Specialization baccalaureate degree program at SIU Carbondale who have not completed all of his or her Bachelor in Arts degree requirements in Biochemistry-Biology at Westminster College will have their related coursework evaluated on a course-by-course basis by the appropriate SIU Carbondale department.

D. Students will be required to complete a minimum of 42 senior institution hours at the 300-400 course level. Each student must complete the residence requirement by taking a total of 42 semester hours at Southern Illinois University Carbondale. Those students enrolled in an approved program delivered by SIU Carbondale Extended Campus will have completed the residency requirement for the University upon completion of all courses required by the program. All students will be required to complete at least 120 hours with an overall GPA of 2.0 on a 4.0 scale to receive a Bachelor of Science degree in Biomedical Engineering (BME) Pre-Medical Specialization. Coursework may include University Core Curriculum as well as Biomedical Engineering major courses.

III. WESTMINSTER COLLEGE DUTIES: WESTMINSTER COLLEGE SHALL BE RESPONSIBLE FOR THE FOLLOWING OBLIGATIONS AND CONDITIONS:

- A. Subject to federal and state guidelines, Westminster College will be considered the home institution for the purpose of processing Financial Aid until such time that the student either graduates or severs ties with Westminster College.
- B. Designate in writing a person or persons as point of contact between Westminster College and SIU Carbondale on all matters relating to the courses delivered.

- C. Reserve the right to approve and edit all news releases, advertising and other public announcements and information pieces relating to the performance of this Agreement.
- D. Permit students to enroll concurrently at SIU Carbondale and Westminster College to complete a degree.

#### IV. PROGRAM ARTICULATION COMMUNICATION

- A. An SIU Carbondale College of Engineering Biomedical Engineering (BME) Pre-Medical Specialization representative will communicate periodically with Westminster College personnel in Biochemistry-Biology for general advisement and degree planning purposes.
- B. Upon successful completion of all degree requirements, and following all policies and regulations stated in the program and SIU Carbondale guidelines, Westminster College students will be eligible to receive the Bachelor of Science (B.S.) degree in Biomedical Engineering (BME) Pre-Medical Specialization, College of Engineering, Southern Illinois University Carbondale.
- C. Should changes occur in course or program content, the institution making the change agrees to notify the other institution in writing so that this agreement can be re-evaluated. Notice of changes shall be given at least 45 days prior to the beginning of the semester when the change is implemented.
- A. The Parties acknowledge and agree that the terms of this Agreement may result in the disclosure of personally identifiable information from education records protected from disclosure and re-disclosure by the Family Educational Rights and Privacy Act of 1974 ("FERPA"). Accordingly, the Parties agree that all disclosures or redisclosures of such personally identifiable information shall be in accordance with FERPA. As used in this section, the terms "personally identifiable information" and "education records" shall have the meanings ascribed to them in 34 C.F.R. § 99.3.
- B. Indemnification:
  - 1. To the extent permitted by law and not inconsistent with the doctrine of sovereign immunity, SIU Carbondale shall indemnify and hold harmless Westminster College, its agents and employees, from any claims, demands, or causes of action arising out of the negligent acts or omissions of SIU Carbondale, its agents or employees, in the performance of SIU Carbondale's obligations under this Agreement.

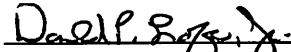
2. To the extent permitted by law, Westminster College shall indemnify and hold harmless SIU Carbondale, its agents and employees, from any claims, demands, or causes of action arising out of negligent acts or omissions of the College, its agents or employees, in the performance of the College's obligations under this Agreement.
- C. Reasonable efforts will be made to resolve problems with student(s) through discussions with the student's program instructor, advisor, and SIU Carbondale's faculty members; however SIU Carbondale reserves the right to remove any student from enrollment at SIU Carbondale upon SIU Carbondale's determination that the student is unable or unwilling to fulfill the requirements of SIU Carbondale's educational program and mission, including but not limited to the rules and regulations of Southern Illinois University Carbondale, the policies of the Board of Trustees of SIU Carbondale, and the SIU Carbondale Student Conduct Code. SIU Carbondale shall also have the right to withdraw any student from its education degree program in accordance with its academic requirements, including but not limited to unsatisfactory academic performance and/or social misconduct.
- D. Neither party will discriminate against any applicant or student in the nomination, selection, or training because of religion, race, sex, sexual orientation, creed, handicap, national origin, or age.
- E. Notices should be mailed to the following addresses by first class mail in order to fulfill any notice or revision of requirements under this Agreement:

For SIU Carbondale: Spyros Tragoudas, Ph.D., Director  
School of Electrical, Computer & Biomedical Engineering  
SIU Carbondale  
Engineering B Rm. 202 – MC 6603  
Carbondale, IL 62901-6603  
Phone: 618-536-2364  
Email: [spyros@siu.edu](mailto:spyros@siu.edu)

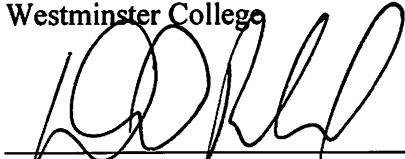
For Westminster College: Peng Yu, Ph.D., Associate Professor of Mathematics  
Coordinator of the Dual Degree Engineering program  
Department of Mathematics  
Westminster College  
501 Westminster Ave.  
Fulton, MO 65251  
Phone: 573-592-5320  
Email: [peng.yu@westminster-mo.edu](mailto:peng.yu@westminster-mo.edu)

IN WITNESS WHEREOF, the parties have executed this Agreement by their duly authorized, respective officers, and by doing so, hereby affirm that the Agreement is enforceable on behalf of and against each party as of the date written herein.

WESTMINSTER COLLEGE


  
\_\_\_\_\_  
Donald P. Lofe, Jr., President  
Westminster College

2/8/2020  
\_\_\_\_\_  
Date

  
\_\_\_\_\_  
David Roebuck, Vice President of Academic Affairs  
Westminster College

1-19-2022  
\_\_\_\_\_  
Date

BOARD OF TRUSTEES OF SOUTHERN ILLINOIS UNIVERSITY

  
\_\_\_\_\_  
Meera Komarraju, Provost and Vice Chancellor  
for Academic Affairs for Austin A. Lane, Chancellor  
Southern Illinois University Carbondale

Jan. 7, 2022  
\_\_\_\_\_  
Date

SIU Approved as to Legal Form

Douglas J Mc  
Carty Digitally signed by Douglas J  
Mc Carty  
Date: 2022.01.04 17:01:52  
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PROGRAM ARTICULATION DEGREE PLAN					
<b>Westminster College</b>		<b>2021-2022</b>		<b>Southern Illinois University Carbondale</b>	
BA Biochemistry-Biology - 124-125 hrs				BS Biomedical Engineering (BME) Pre-Medical Specialization - 126 hrs	
		<b>Hrs</b>			<b>Hrs</b>
			UNIV 101	Saluki Success	N/A
SPE 101	Intro to Speech	3	CMST 101	Intro to Oral Communication	T
ENG 103	Academic Writing	3	ENGL 101	English Composition I	T
ENG 270	Expository Writing	3	ENGL 102	English Composition II	T
MAT 124	Calculus I	5	MATH 150	Calculus I	T
			SOCIAL SCIENCE		N/A
			SOCIAL SCIENCE		N/A
			HUMANITIES		N/A
			HUMANITIES		N/A
BIO 114 -and- 115	Biological Processes	4	BIOL 211	Introductory Cell Biology & Genetics	T
BIO 124 -and- 125	Biodiversity	4	BIOL 212	Introductory Evolution & Ecology	T
CHM 114 -and- 115	General Chemistry I	4	CHEM 200 -and- 201	Intro to Chemical Principles w/Lab	T
CHM 124 -and- 125	General Chemistry II	4	CHEM 210 -and- 211	General & Inorganic Chemistry w/Lab	T
Fine Arts Elective		3	FINE ARTS	See <i>SIUC Transfer Equivalency Guide</i>	T
			MULTICULTURAL		N/A
		<b>33</b>			<b>0</b>
			<b>BA degree satisfies the University Core Curriculum requirements</b>		
<b>Program Requirements</b>			<b>Program Requirements</b>		
CHM 304	Inorganic Chemistry	3	<b>Any unarticulated courses will be used to satisfy general elective credit</b>		
CHM 334 -and- 335 OR 424 -and- 425 -OR- 410	Analy Chem I w/Lab -or- Phys Chem I w/Lab -or- Adv Topics in Chemistry	3-4			
CSC 104	Programming	3			
EGR 101	Intro to Engineering	3			
Exploration Clusters		6			
Foreign Language (part I)		3			
Foreign Language (part II)		3			
Global Perspectives Electives		3			
Institutions & Society		3			
LST 101	Leadership	1			
PE Activity		1			
PSY 112 -or- 113	Psy as a Natural Sci -or- Psy as a Social Sci	3			
WSM 101	Freshman Seminar	3			
BIO 301	Genetics w/Lab	4			
BIO 302	Anatomy	4			
BIO 325	Molecular & Cell Bio w/Lab	3			
BIO 404	Biochemistry w/Lab	4			
BIO 420	Physiology	4			
CHM 314 -and- 315	Organic Chemistry I w/Lab	4			
CHM 324 -and- 325	Organic Chemistry II w/Lab	4			
EGR 230 -or- MAT 312	Statics -or- Differential Equations	3			
MAT 214	Calculus II	4			
MAT 224	Calculus III	4			
PHL 242	Biomedical Ethics	3			
PHY 201	Physics I w/Lab	4			
PHY 212	Physics II w/Lab	4			
PHY 328	Analog Circuits	4			
		<b>91-92</b>			
			BME 101	Intro to Biomedical Engineering	3
			ECE 222	Intro to Digital Computation	3
			ECE 296 -and- 296L	Intro Software Tools & Robotics w/Lab	4
			BME 337	Bioelectricity	3
			BME 338 -and- 338L	Biomedical Measurements w/Lab	4
			ECE 355 -and- 355L	Signals & Systems w/Lab	4
			BME 435	Computational Methods in Biomedical Engineering	3
			BME 495A	Biomedical Engineering Senior Design I	3
			BME 495B	Biomedical Engineering Senior Design II	3
			Technical Electives		10
			General Technical Electives		6
					<b>46</b>
<b>Total semester hrs completed w/BA degree</b>		<b>124-125</b>	<b>Total semester hrs completed w/BS degree</b>		<b>46</b>
			<b>Total semester hrs to BS degree:</b>		<b>170-171</b>





## TRANSFER GUIDE

### BA Biochemistry-Biology transferring into BS Biomedical Engineering Pre-Medical

Westminster College Courses			
BA Biochemistry-Biology – 124-125 hours			
BIO 114, 115-4	Biological Processes	LST 101-1	Leadership
BIO 124, 125-4	Biodiversity	MAT 124-5	Calculus I
BIO 301-4	Genetics w/Lab	MAT 214-4	Calculus II
BIO 302-4	Anatomy	MAT 224-4	Calculus III
BIO 325-3	Molecular & Cell Bio w/Lab	PE Activity-1	
BIO 404-4	Biochemistry w/Lab	PHL 242-3	Biomedical Ethics
BIO 420-4	Physiology	PHY 201-4	Physics I w/Lab
CHM 114, 115-4	General Chemistry I	PHY 212-4	Physics II w/Lab
CHM 124, 125-4	General Chemistry II	PHY 328-4	Analog Circuits
CHM 304-3	Inorganic Chemistry	PSY 112/113-3	Psy as Natural Sci/Psy as Social Sci
CHM 314, 315-4	Organic Chemistry I w/Lab	SPE 101-3	Intro to Speech
CHM 324, 325-4	Organic Chemistry II w/Lab	WSM 101-3	Freshman Seminar
CHM Course(s)-3-4	CHM 334, 335/424, 425/410	Electives-6	Exploration Clusters
CSC 104-3	Programming	Elective-3	Fine Arts
EGR 101-3	Intro to Engineering	Elective-3	Foreign Language Part I
EGR 230/MAT 312-3	Statics/Differential Equations	Elective-3	Foreign Language Part II
ENG 103-3	Academic Writing	Electives-3	Global Perspectives
ENG 270-3	Expository Writing	Elective-3	Institutions & Society
Southern Illinois University Carbondale Courses			
BS Biomedical Engineering (BME) Pre-Medical Specialization– 46 hours			
BME 101-3	Intro to Biomedical Engineering	BME 435-3	Comp Methods in BME
ECE 222-3	Intro to Digital Computation	BME 495A-3	Biomedical Engineering Senior Des I
ECE 296, 296L-4	Intro SW Tools & Robots w/Lab	BME 495B-3	Biomedical Engineering Senior Des II
BME 337-3	Bioelectricity	Electives-10	Technical Electives
BME 338, 338L-4	Biomedical Measurements w/Lab	Electives-6	General Technical Electives
ECE 355, 355L-4	Signals & Systems w/Lab		
Total Hours to Bachelor Degree: 170-171 Hours			

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

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

### Questions? Contact Us!

**Westminster College**  
Peng Yu, Coordinator  
Dual Degree Engineering Program  
P: 573-592-5320/E: [peng.yu@westminster-mo.edu](mailto:peng.yu@westminster-mo.edu)

**Southern Illinois University Carbondale**  
Spyros Tragoudas, Director  
School of Electrical, Computer & Biomedical Engineering  
P: 618-536-2364/E: [spyros@siu.edu](mailto:spyros@siu.edu)



## 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](mailto: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.