



WICHITA STATE UNIVERSITY AND COWLEY COLLEGE Associates of Science Degree, Bachelor's Degree in Biomedical Engineering February 3, 2021

The purpose of the 2+2 Agreement is to provide students a four-year coordinated program through the pre-engineering curriculum where students will receive an Associates of Science Degree (AS) in the first two years and a Bachelor's Degree in Biomedical Engineering in the next two additional years. This agreement will provide the following:

This agreement includes the following requirements:

- Earned an Associates of Science (A.S.) Degree according to attached degree plan in Pre-Engineering
- Achieved a minimum cumulative GPA of 2.0
- Applied for admission to WSU

Cowley College students who meet the academic requirements will:

- Be guaranteed admission to WSU with completion of application requirements and receipt of transcripts
- Enter with junior status toward a baccalaureate degree
- Be guaranteed to transfer 64 credit hours

This partnership reflects the following:

- Expanded student program opportunities, course articulation understanding, and transfer coordination, considered mutually beneficial in this coordinated partnership
- Graduates will be prepared to enter the workforce and contribute to economic development in the State of Kansas
- All courses will meet the minimum requirements appropriate to the program curricula at the degree-granting institution
- Both Cowley College and Wichita State University College of Engineering programs will promote the goal of program improvement
- Students can inquire about financial aid and grants by contacting the WSU Financial Aid office (316) 978-3430 and the College of Engineering Student Success Center at (316) 978-3420.
- Students transferring to WSU from Cowley will have not completed an A.S. must meet the requirements for admission to WSU and will have their transcripts evaluated on an individual basis.

In order to assure a successful transfer and completion of the associates degree by students, the following transfer requirements are in place. Students who plan to complete upper-division work including 15 credit hours of upper-division work in order to qualify for graduation from Wichita State University. Course work or prerequisites may have higher grade requirements as described in the WSU undergraduate catalog.

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Terms of Agreement

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Wichita State University

Dr. Richard M.
Provost and Pro
Wichita State University

President
Cowley College

Dr. Dennis Livesey
Dean, College of
Wichita State University

Dr. Michael
Cowley College

Dr. Michael
Chair
Wichita State University

Cowley College

Biomedical Engineering Pathway (2+2)

Cowley Community College & Wichita State University

Courses taken at Cowley Community College for completion of Associate in Science Degree

Freshman – 1st Semester (6 Credits Hours)			
Wichita State University Equivalent	Hours	Cowley Community College	Hours
ENGL 101 College English I (3)	3-G	ENGL 2211 College English I	3
MATH 242 Calculus I (5)	5-M	MTH 4431 Calculus I	5
CHEM 211 General Chemistry I (5)	5-M	CHEM 4220 Chemistry I	5
General Education (Fine Arts, Humanities or Social & Behavioral Science) (3)	3-G	Approved General Education (Fine Arts, Humanities or Social & Behavioral Science) as found on the WSU Transfer Guide	3
Freshman – 2nd Semester (6 Credits Hours)			
ENGL 102 College English II (3)	3-G	ENGL 2212 College English II	3
MATH 243 Calculus II (5)	5-M	MT 4440 Calculus II	5
General Education (Social & Behavioral Sciences) (3)	3-G	Approved General Education (Social & Behavioral Science) as found on the WSU Transfer Guide	3
CHEM 212 General Chemistry II (5)	5-M	CHEM 4221 Chemistry II	5
Sophomore – 1st Semester (Taken at Cowley) 17 Credit Hours			
COMM 111 Public Speaking (3)	3-G	COM 2711 Public Speaking	3
PHYS 313 Physics for Scientists I (4) PHYS 315 University Physics Lab	4-M 1-OE*	PHS 4560 Engineering Physics I	5
BIOL 210 General Biology I (4)	4-M 1-OE*	BIO 4125 General Biology I	5
IME 254 Engr Probability/Statistics I	3	MTH 4445 Eng. Probability & Statistics	3
HPS 2000 Elective (non-transferable to B.S. degree)	0	Health & Physical Education Elective	1
Sophomore – 2nd Semester (Taken at Cowley) 16 Credit Hours			
PHYS 314 Physics for Scientists II	4-M	PHS 4561 Engineering Physics II	5
PHYS 316 University Physics Lab II	1-OE*		
General Education (Fine Arts) (3)	3-G	Approved General Education (Fine Arts) as found on the WSU Transfer Guide	3
IME 255 Engineering Economy	3-G	PHS 4555 Engineering Economy	3
BIOL 223 Anatomy & Physiology	5-M	BIO 4126 Human Anatomy & Physiology	5
Total:	64		65

G: General Ed.; M: Math/Science; OE: Open Elective

* this transfers in as 1 credit hour of degree credit

A total of 65 credit hours taken at Cowley Community College for completion of an Associate in Science Degree. 64 credit hours will transfer to WSU towards B.S. degree in Biomedical Engineering.

Biomedical Engineering Pathway (2+2)

Cowley Community College - Wichita State University

Courses taken at Cowley Community College

Junior - 1st Semester 15 Credit Hours	
Wichita State University	
BME 115 Biomedical Engineering Seminar	1
BME 335 Biomedical Computer Applications	1
AE 223 Statics (to be taken at Cowley) (15/15)	3
ME 398 Thermodynamics	3
BME 477 Intro to Biomaterials	3
Engineering Technical Elective	2
Junior - 2nd Semester 15 Credit Hours	
BME 450 Biomechanics	3
CHEM 533 Elementary Organic Chemistry	3
Engineering Technical Elective	3
EE 282 Circuits I	4
MATH 555 Differential Equations	2
Senior - 1st Semester 18 Credit Hours	
BME 585 Capstone Design I	3
PHIL 385 Engineering Ethics	3
BME 482 Design of Biodevices	3
BME 462 Intro to Biomechanics	3
Engineering Technical Elective	2
Engineering Technical Elective	2
Senior - 2nd Semester 15/16 Credit Hours	
BME 595 Capstone Design II	3
BME 488 Biomaterials	3
CHEM 661 Introduction to Biochemistry (15/16)	3
Engineering Technical Elective	2
Engineering Technical Elective	2
Total:	64/65

The plan is to be required to 150 hrs of upper division work
 A total of 64/65 credit hours taken at Wichita State for the completion of an M.S. degree in Biomedical Engineering.