



WICHITA STATE UNIVERSITY AND COWLEY COLLEGE PATHWAY AGREEMENT Pre-Engineering / Bachelor's Degree in Aerospace Engineering June 10, 2020

The purpose of the Agreement is to provide Cowley College's students a four-year coordinated program through the pre-engineering curriculum from Cowley College (CC) followed by a Bachelor of Science degree in Aerospace Engineering from Wichita State University (WSU). This agreement will provide guidance for both parties in advising students.

This agreement is for Cowley College students who have:

- Completed the attached degree plan in Pre-Engineering.
- Achieved a minimum cumulative GPA of 2.0.
- Applied for admission to WSU.

Cowley College students meeting the above requirements will:

- Be guaranteed admission to WSU with completion of application requirements and receipt of transcripts.
- Enter with second semester sophomore status toward a baccalaureate degree.
- Be guaranteed to transfer 48 credit hours from Cowley College which count towards the Bachelor of Science degree in Aerospace Engineering from WSU.

This partnership reflects the following objectives, institutional expectations, and operational principles:

- Expanded student program opportunities, course articulation understandings, and transfer coordination considered mutually beneficial in this coordinated partnership.
- Graduates will possess the technical skills and conceptual background, creative mindset and applied experiences to address the workforce needs for achieving the desired economic development in the State of Kansas.
- All students must complete all major, institutional, and required degree requirements appropriate to the program curricula at the degree granting institution in order to graduate.
- Both Cowley College and Wichita State University College of Engineering program faculty and administrators will
 promote the program with qualified prospective students and share assessment of learning outcomes toward
 the goal of program improvement.
- Students can inquire about academic and participation scholarships, financial aid, and grants by contacting the WSU Financial Aid office (316) 978-3430 and the College of Engineering, Engineering Student Success Center at (316) 978-3420.
- Students transferring to WSU from Cowley College who have not completed this pathway agreement must meet the necessary requirements for admission to WSU, and will have their transcript evaluated on an individual basis.

In order to ensure a successful transition and completion of the bachelors' degree from WSU in this pathway agreement, students should refer to the required degree plan or stipulations of this agreement. Transfer students must complete at least 60 credit hours of four-year college work including 45 credit hours of upper-division work in order to qualify for graduation from Wichita State University. Courses used as prerequisites may have higher grade requirements as described in the WSU undergraduate catalog.

Reverse Transfer

Students, who transfer to Wichita State University from Cowley College before attainment of the Associate of Science degree, are eligible to reverse transfer courses that have WSU/CC equivalency back to Cowley. This allows for the attainment of the Associate of Science degree provided that at least 45 credit hours are earned at Cowley and all other degree requirements are met.

Modification of Agreement

This agreement shall only be modified in writing with the same formality as the original agreement.

Terms of Agreement

The agreement will begin with the 2020-2021 academic year.

Termination of Agreement

Either party may terminate this agreement for any reason with a written notice from either party. This agreement is a collaboration between Wichita State University and Cowley College. Any changes, corrections, or additions to this agreement shall be in writing and signed by all necessary parties between both academic institutions.

Wichita State University

Dr. Richard Muma Provost and Professor Wichita State University

Dr. Dennis Livesay Dean, College of Engineering Wichita State University

1 milli

Dr. L. Scott Miller Chair, Aerospace Engineering Wichita State University

Cowley College

enna

Dr. Dennis C. Rittle President Cowley College

Dr. Michelle Schoon Vice President of Academic Affairs Cowley College

Scott Layton Chair, Natural Science & Mathematics Department Cowley College

Aerospace Engineering Transfer Pathway (1½+2½) Cowley College (three semesters) & Wichita State University (five semesters) Courses taken at Cowley College

Freshman	- 1st Sen	nester 16 Credit Hours	ette state ette
Wichita State University Equivalent	Hours	Cowley College	Hours
ENGL 101 College English I	3-G	ENG 2211 Composition I	3
General Education (Fine Arts)	3-G	Approved General Education (Fine Arts) as found on the WSU Transfer Guide	3
Math 242 Calculus I	5-M	MTH 4435 Calculus I	5
CHEM 211 General Chemistry I	5-M	CHM 4220 Chemistry I	5
Freshman -	- 2nd Sen	nester 16 Credit Hours	
ENGL 102 College English II	3-G	ENG 2212 Composition II	3
General Education (Fine Arts or Humanities or Social & Behavioral Science)	3-G	Approved General Education (Fine Arts or Humanities or Social & Behavioral Science) as found on the WSU Transfer Guide	3
Math 243 Calculus II	5-M	MTH 4440 Calculus II	5
PHYS 313 Physics of Scientists I (4) PHYS 315 University Physics Lab (1)	5-M	PHS 4560 Engineering Physics I	5
Sophomore	- 1st Ser	mester 17 Credit Hours	
COMM 111 Public Speaking	3-G	COM 2711 Public Speaking	3
ECON 201 Principles of Macroeconomics	3-G	ECO 6113 Principles of Macroeconomics	3
Math 344 Calculus III	3-M	MTH 4455 Calculus III	3
PHYS 314 Physics of Scientists II (4) PHYS 316 University Physics Lab II (1)*	4-M	PHS 4561 Engineering Physics II	5
AE 223 Statics	3-C	PHS 4570 Statics	3
Total:	48		49

G: General Education; M: Math/Science; C: Engineering Core

* although credit transfers to WSU, it does not apply towards the B.S. degree in Aerospace Engineering A total of 49 credit hours** are taken at Cowley College

48 credit hours will apply towards the WSU B.S. degree in Aerospace Engineering ** completing the associate's degree will require additional coursework not listed above and/or reverse transfer of coursework taken at WSU back to Cowley College Aerospace Engineering Transfer Pathway (1½+2½) [continued] Cowley College (three semesters) & Wichita State University (five semesters) Courses taken at Wichita State University to complete B.S. in Aerospace Engineering degree

Sophomore – 2nd Semester 15 Credit Hours	
Wichita State University Course	Hours
Math 555 Differential Equations I	3
AE 227 Engineering Digital Computation	3
AE 324 Fundamentals of Atmospheric Flight	3
AE 333 Mechanics of Materials	3
AE 373 Dynamics	3
Junior – 1st Semester 18 Credit Hours	
IME 222 Engineering Graphics (2) and IME 222L Graphics Lab (1)	3
ME 250 Materials Engineering	3
ME 398 Thermodynamics I	3
AE 415 Introduction to Space Dynamics	3
AE 424 Aerodynamics I	3
AE 525 Flight Structures I	3
Junior – 2nd Semester 15 Credit Hours	
AE 502 Aerospace Propulsion I	3
AE 512 Experimental Methods in Aerospace	3
AE 514 Flight Dynamics and Control	3
AE 524 Aerodynamics II	3
AE 625 Flight Structures II	3
Senior – 1st Semester 16 Credit Hours	
PHIL 385 Engineering Ethics	3
AE 528 Aerospace Design I	4
AE 607 Flight Control Systems	3
Aerospace Engineering Technical Electives (2)	6
Senior – 2nd Semester 17 Credit Hours	
EE 282 Circuits I	
AE approved Math/Natural Science elective	
AE 628 Aerospace Design II	4
Aerospace Engineering Technical Electives (2)	
Total	81