



**WICHITA STATE UNIVERSITY AND COWLEY COLLEGE 2+2 AGREEMENT  
Associates of Science Degree/Bachelor's Degree in Computer Science  
July 24, 2019**

The purpose of the 2+2 Agreement is to provide Cowley College's students a four-year coordinated program through the pre-engineering curriculum where students will receive an Associates of Science degree at Cowley College (CC) in the first two years and a Bachelor of Science degree in Computer Science from Wichita State University (WSU) after two additional years. This agreement will provide guidance for both parties in advising students.

This agreement is for Cowley College students who have:

- 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 meeting the above 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 59 credit hours from Cowley County to 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 an A.S. 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 associates' and bachelors' degrees from both institutions in this 2+2 agreement, students should refer to the required degree plans 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 Associates of Science degree, are eligible to reverse transfer courses that have WSU/CC equivalency back to Cowley. This allows for the attainment of the Associates 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 2019-2020 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.

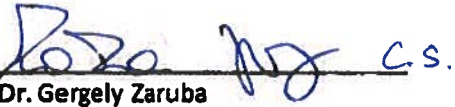
**Wichita State University**



Dr. Richard Muma  
Provost and Professor  
Wichita State University




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



Dr. Gergely Zaruba  
Department Chair  
Electrical Engineering and Computer Science  
Wichita State University

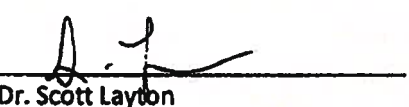
**Cowley College**



Dr. Dennis C. Rittle  
President  
Cowley College



Dr. Michelle Schoon  
Interim Vice President of Academic Affairs  
Cowley College



Dr. Scott Layton  
Faculty and Chair  
Natural Science Department  
Cowley College

**Computer Science Pathway (2+2)**  
**Cowley College & Wichita State University**  
**Courses taken at Cowley College for completion of Associates Degree of Science**

<b>Freshman – 1st Semester (Taken at Cowley) 13 Credit Hours</b>		
<b>Wichita State University Equivalent</b>	<b>Cowley College</b>	<b>Hours</b>
ENGL 101 College English I	ENG 2211 Composition I	3
General Education (Fine Arts)	Approved General Education (Fine Arts) as found on the WSU Transfer Guide	3
MATH 242 Calculus I	MTH 4435 Calculus I	5
ENGR 101 Introduction to Engineering (TE*)	PHS 4545 Introduction to Engineering	2
<b>Freshman – 2nd Semester (Taken at Cowley) 15 Credit Hours</b>		
ENGL 102 College English II	ENG 2212 Composition II	3
General Education (Social and Behavioral Science)	Approved General Education (Social and Behavioral Science) as found on the WSU Transfer Guide	3
MATH 243 Calculus II	MTH 4440 Calculus II	5
CS 211 Introduction to Programming	CIS 1876 C Programming	3
HPS 2000 Elective (not transferable to B.S. degree)	Heath & Physical Education Elective	1
<b>Sophomore – 1st Semester (Taken at Cowley) 15 Credit Hours</b>		
COMM 111 Public Speaking	COM 2711 Public Speaking	3
IME 255 Engineering Economy	PHS 4555 Engineering Economy	3
CS 194 Introduction to Digital Design	CIS 1894 Introduction to Digital Design	4
PHYS 313 Physics for Scientists I and PHYS 315 University Physics Lab I	PHS 4560 Engineering Physics I	5
<b>Sophomore – 2nd Semester (Taken at Cowley) 17 Credit Hours</b>		
General Education (Social & Behavioral Science)	Approved General Education (Social and Behavioral Science) as found on the WSU Transfer Guide	3
CS 238 Assembly Language Programming	CIS 1909 Assembly Language Programming	3
PHYS 314 Physics for Scientists II and PHYS 316 University Physics Lab II	PHS 4561 Engineering Physics II	5
IME 254 Engineering Probability and Statistics I	MTH 4445 Engineering Probability and Statistics I	3
General Education (Further Studies in Humanities)	Approved General Education (Further Studies in Humanities) as found on the WSU Transfer Guide	3

\*Technical Elective

A total of 60 credit hours taken at Cowley College for completion of Associates Degree of Science  
59 credit hours will transfer to WSU towards B.S. degree in Computer Science

**Computer Science Pathway (2+2)**  
**Cowley College & Wichita State University**  
**Courses taken at Wichita State for completion of B.S. in Computer Science**

<b>Junior – 1st Semester (Taken at WSU) 16 Credit Hours</b>	
<b>Wichita State University Requirement</b>	<b>Hours</b>
CS 311 Object-Oriented Programming	4
PHIL 125 Introduction to Logic (Satisfies General Education Humanities Category)	3
MATH 321 Discrete Structures I	3
MATH 511 Linear Algebra	3
Technical Elective	3
<b>Junior – 2nd Semester (Taken at WSU) 16 Credit Hours</b>	
PHIL 354 Ethics and Computers (Satisfies Issues and Perspectives Requirement)	3
CS 400 Data Structures and Algorithms I	4
CS 394 Introduction to Computers Architecture	3
MATH 322 Discrete Structures II	3
CS 480 Introduction to Software Engineering	3
<b>Senior – 1st Semester (Taken at WSU) 15 Credit Hours</b>	
CS 510 Programming Language Concepts	3
CS 540 Operating Systems	3
EE 585 Electrical Design Project I	2
Technical Elective	4
Technical Elective	3
<b>Senior – 2nd Semester (Taken at WSU) 14 Credit Hours</b>	
CS 464 Computer Networks	3
CS 560 Design and Analysis of Algorithms	3
CS 665 Introduction to Database Systems	3
EE 595 Electrical Design Project II	2
CS 410 Program Paradigms	3

A total of 61 credit hours taken at Wichita State for the completion of the  
B.S. degree in Computer Science