



2+2 Articulation Agreement Between
Wichita State University and Butler Community College

March 27, 2019

The purpose of this 2+2 agreement is to provide Butler Community College students the opportunity to transfer coursework from Butler Community College (Butler) to Wichita State University (WSU) in pursuit of a baccalaureate degree with a major in Electrical Engineering.

This agreement is for Butler students who have:

- Earned an Associates of Arts (A.A.) or Associates of Science (A.S.) degree
- Achieved a minimum cumulative GPA of 2.0
- Applied for admission to WSU

Butler 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 all credits (100 level and higher) up to but not exceeding 64 credits from Butler with an earned grade of a C or better

Students can inquire about academic and participation scholarships, financial aid, and grants by contacting the WSU Financial Aid office (316-978-3430) or Butler's Advising Office (316) 322-6404.

For graduation from WSU with a Bachelor of Science in Electrical Engineering degree, students will need to fulfill transfer coursework from Butler along with all WSU general education requirements, degree requirements, and must meet all requirements for graduation as outlined by WSU.

To apply for admission students may contact the WSU Admissions office by calling: (316) 978-3085. Information and applications can also be found online at: www.admissions@wichita.edu.

Students transferring to WSU from Butler who have not completed an A.A. or A.S. must meet the necessary requirements for admission to WSU, and will have their transcript evaluated on an individual basis.



Wichita State University

Butler Community College

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**Dr. Richard D. Muma
Provost and Professor**

A handwritten signature in blue ink, appearing to be 'Dr. Kimberly Krull', written over a horizontal line.

**Dr. Kimberly Krull
President**

A handwritten signature in black ink, appearing to be 'DL', written over a horizontal line.

**Dr. Dennis Livesay
Dean, College of Engineering**

A handwritten signature in blue ink, appearing to be 'Lori Winingham', written over a horizontal line.

**Lori Winingham
Vice President of Academics**

Electrical Engineering Pathway (2+2)
Butler Community College & Wichita State University
Courses taken at Butler Community College for completion of Associates in Science Degree

| | | Freshman – 1st Semester (Taken at Butler) 15 Credit Hours | |
|---|--------------|---|--------------|
| Wichita State University Equivalent | Hours | Butler Community College | Hours |
| ENGL 101 College English I (3) | 3-G | EG 101 English Composition I | 3 |
| MATH 242 Calculus I (5) | 5-M | MA 151 Calculus I w/Analytic Geometry | 5 |
| CHEM 211 General Chemistry I (5) | 5-M | CH 110 College Chemistry I | 5 |
| ENGR 101 Introduction to Engineering (2) | 2-T | EN 115 Engineering Concepts | 2 |
| | | Freshman – 2nd Semester (Taken at Butler) 15 Credit Hours | |
| ENGL 102 College English II (3) | 3-G | EG 102 English Composition II | 3 |
| MATH 243 Calculus II (5) | 5-M | MA 152 Calculus II w/Analytic Geometry | 5 |
| CS 211 Introduction to Programming (4) | 3-C | IN 200 Beginning C++ w/Game Programming | 3 |
| General Education (Fine Arts) (3) | 3-G | Approved General Education (Fine Arts) as found on the WSU Transfer Guide | 3 |
| HPS 2000 Elective (not transferable) | 0 | Any Fitness/Wellness Elective | 1 |
| | | Sophomore – 1st Semester (Taken at Butler) 17 Credit Hours | |
| COMM 111 Public Speaking (3) | 3-G | SP 100 Public Speaking | 3 |
| MATH 344 Calculus III (3) | 3-M | MA 253 Calculus III w/Analytic Geometry | 3 |
| PHYS 313 Physics for Scientists I (4) and PHYS 315 University Physics Lab I (1) | 4-M 1-C * | PH 251 Physics I | 5 |
| IME 255 Engineering Economy (3) | 3-C | EC 250 Engineering Economics | 3 |
| General Education (Social & Behavioral Sciences) (3) | 3-G | Approved General Education (Social & Behavioral Science) as found on the WSU Transfer Guide | 3 |
| | | Sophomore – 2nd Semester (Taken at Butler) 17 Credit Hours | |
| General Education (Social & Behavioral Sciences) (3) | 3-G | Approved General Education (Behavioral Science) as found on the WSU Transfer Guide | 3 |
| MATH 350 Modeling Differential Equations (Satisfies MATH 555 Diff. Eq. I requirement) (3) | 3-M | MA 260 Differential Equations | 3 |
| PHYS 314 Physics for Scientists II (4) and PHYS 316 University Physics Lab II (1) | 4-M 0 | PH 252 Physics II | 5 |
| General Education (Humanities) (3) | 3-G | Approved General Education (Humanities) as found on the WSU Transfer Guide | 3 |
| AE 223 Statics (3) | 3-C | EN 260 Statics | 3 |
| Total | 62 | | 64 |

G: General Ed.; M: Math/Science; C: Engineering Core; T: Technical Elective

* this one credit hour transfers in towards the major to make up the credit hour lost during the transfer of IN200->CS 211; thus for students under this umbrella, the PHYS315 class will appear under "Engineering Core"

A total of 64 credit hours taken at Butler Community College for completion of Associates in Science degree
62 credit hours will transfer to WSU towards B.S. degree in Electrical Engineering

Electrical Engineering Pathway (2+2)
Butler Community College & Wichita State University
Courses taken at Wichita State for completion of B.S. in Electrical Engineering

| Junior – 1st Semester (Taken at WSU) 17 Credit Hours | |
|--|--------------|
| Wichita State University Requirement | Hours |
| EE 282 Circuits I | 4 |
| ME 398 Thermodynamics | 3 |
| MATH 511 Linear Algebra | 3 |
| CS 194 Introduction to Digital Design | 4 |
| General Education-Further Studies | 3 |
| Junior – 2nd Semester (Taken at WSU) 15 Credit Hours | |
| EE 284 Circuits II | 3 |
| PHIL 385 Engineering Ethics | 3 |
| EE 492 Electronic Circuits I | 4 |
| EE 488 Electric Machines & Transformers | 4 |
| EE 285 L Programming w/MATLAB for EE/CE | 1 |
| Senior – 1st Semester (Taken at WSU) 14 Credit Hours | |
| EE 463 Applied Engineering Electromagnetics | 3 |
| EE 383 Signals and Systems | 3 |
| EE 585 Electrical Design Project I | 2 |
| IME 254 Engineering Probability & Statistics I | 3 |
| Technical Elective | 3 |
| Senior – 2nd Semester (Taken at WSU) 16 Credit Hours | |
| EE 684 Introduction to Control Systems Concepts | 3 |
| EE 493 Electronic Circuits II | 4 |
| EE 595 Electrical Design Project II | 2 |
| EE 586 Introduction to Communications Systems | 4 |
| Technical Elective | 3 |
| Total | 62 |

The plan above requires 45 hours of upper-division course work.
A total of 62 credit hours taken at Wichita State for the completion of the B.S.
degree in Electrical Engineering