**RECOMMENDED TRANSFER COURSES**

**COLLEGE of ENGINEERING**
**BUTLER COMMUNITY COLLEGE**
**2019-2020 Transfer Guide**

It is the policy of Wichita State University (WSU) to accept all credits – with the exception of remedial coursework – earned at a post-secondary institution accredited by one of the U.S. regional accrediting agencies. Each academic college or department within WSU determines how those credits apply toward a particular degree program. Sometimes there can be a significant difference between what transfers and what counts toward a degree, especially if the courses are vocational in nature.

**FOUNDATION COURSES**
(must complete all three courses with a grade of C- or better – for at least 9 credit hours)
- EG 101 English Composition I
- EG 102 English Composition II
- SP 100 Public Speaking

**INTRODUCTORY FINE ARTS**
(complete one course - for at least 3 credit hours)
- AR 100 Art Appreciation
- AR 262 Ceramics II
- MU 100 Music Appreciation
- TA 206 Introduction to Theater Art

**INTRODUCTORY HUMANITIES**
(complete one course - for at least 3 credit hours except Computer Science (CS) – see page 2)
- ENGL
  - LT 201 Introduction to Literature I
  - LT 205 Intro to the Short Story
- HIST
  - HS 121 Hist of Western Civilization I
  - HS 122 Hist of Western Civilization II
  - HS 131 US History I
  - HS 132 US History II
- HUMN
  - HS 201 Hist of World Civilization I
  - HS 202 Hist of World Civilization II
- PHIL
  - PL 101 Introduction to Logic
  - PL 290 Philosophy I
  - PL 291 Ethics
- REL
  - RG 190 New Testament
  - RG 191 Old Testament
  - RG 210 Comparative Religions
- SPAN
  - FL 201 Intermediate Spanish
- WOMS
  - BS 107 Women & Gender Studies

**INTRODUCTORY SOCIAL & BEHAVIORAL SCIENCES**
(complete two courses - one in each of two subject areas - for at least 6 credit hours)
- ANTH
  - BS 106 Intro to Cultural Anthropology
- CJ
  - CJ 102 Intro to Criminal Justice
  - CJ 212 Criminology
- COMM
  - MC 161 Intro to Mass Communications
- ECON
  - EC 201 Prin of Macroeconomics
  - EC 200 Principles of Microeconomics
- ETHS
  - BS 222 Diversity & Inequality in the US
- GEOS
  - SC 120 Principles of Geography
- POLS
  - PO 141 American Federal Government
  - PO 201 International Relations
- PSY
  - BS 160 General Psychology
  - BS 115 Substance Abuse Awareness
  - BS 260 Developmental Psychology
  - BS 270 Child Psychology
- SOC
  - BS 105 Sociology
  - BS 110 Contemporary Social Problems
- SCWK
  - SW 102 Intro to Social Work

**FURTHER STUDY and ISSUES & PERSPECTIVES**

One Further Study course in Humanities or Social & Behavioral Sciences (may not take further study in Philosophy, Fine Arts or Mathematics and Natural Sciences) **AND** one Issues & Perspectives (I&P) course (for at least 6 credit hrs)

**FURTHER STUDY HUMANITIES**
COMM
- MC 206 Intro to Film Theory
- SP 102 Interpersonal Communication
ENGL
- LT 204 Introduction to Poetry
- LT 211 British Lit I:Origins -1784
- LT 212 British Lit II:1784-Present
- LT 215 American Lit I:Colonial-1865
- LT 216 American Lit II:1865-Present
- LT 218 Shakespeare
SPAN
- FL 202 Spanish Readings

**FURTHER STUDY SOCIAL & BEHAVIORAL SCIENCES**
ECON
- PO 142 State & Local Government
PSY
- BS 115 Substance Abuse Awareness
- BS 260 Developmental Psychology
- BS 270 Child Psychology
SOC
- BS 110 Contemporary Social Problems
- BS 210 Marriage & Family

This Transfer Guide is for information only and is not a contract. Courses/requirements subject to change.

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ISSUES & PERSPECTIVES
• All engineering majors will take PHIL 385 Engineering Ethics at WSU, except for CS, CE and ET.
• Cybersecurity majors will take PHIL 354 Ethics and Computers at WSU.

ENGINEERING MAJORS:
• Aerospace Engineering (AE)
• Biomedical Engineering (BME)
• Computer Engineering (CE)
• Computer Science (CS)
• Electrical Engineering (EE)
• Industrial Engineering (IE)
• Product Design & Manufacturing Engineering (PDME)
• Mechanical Engineering (ME)
• Engineering Technology (ET) Concentrations:
  • Engineering Technology Management
  • Civil Engineering Technology
  • Cybersecurity
  • Mechatronics Technology

MATH & NATURAL SCIENCES - ALL ENGINEERING MAJORS:
• CH 110 College Chemistry I/Lab (except CS and CE)
• MA 151 Calculus I w/Analytic Geometry
• MA 152 Calculus II w/Analytic Geometry
• MA 253 Calculus III w/Analytic Geometry (ONLY ME, AE and EE)
• MA 260 Differential Equations (except CS, IE and ET)
• MA 220 Statistics for Management, Life & Social Sciences (except AE, ET and ME)
• PH 251 Physics I (LAB) (except ET)
• PH 252 Physics II (LAB) (except ET)

NATURAL SCIENCES ELECTIVES - ONLY Aerospace, Industrial & Mechanical Engineering majors:
(complete one course in BIOL, CHEM GEOL or PHYS – lab required)

BIOL
• BI 215 Majors Biology I (Cell) (LAB)
• BI 220 Majors Biology II (Organisms) (LAB)
• BI 226 Anatomy & Physiology w/ review I AND BI 227 Anatomy & Physiology w/ review II (LAB)
• BI 240 Anatomy & Physiology (LAB)

CHEM
• CH 115 College Chemistry II (Lab)
• CH 240 Organic Chemistry I (Lab)

GEOL
• PS 102 Physical Geology (LAB)

PHYS
• PH 103 Descriptive Astronomy (LAB)

OTHER COURSES BY MAJOR:
Aerospace Engineering (AE):
• EN 101 Engineering Graphics I AND
• EN 102 Engineering Graphics II
• EN 260 Statics

Biomedical Engineering (BME):
• BI 215 Majors Biology I (Cell)
• BI 226 Anatomy & Physiology w/ review I AND BI 227 Anatomy & Physiology w/ review II (LAB)
• CH 115 College Chemistry II (LAB)
• EC 250 Engineering Economics
• EN 260 Statics
• EN 115 Engineering Concepts

Computer Engineering (CE):
• EC 250 Engineering Economics
• IN 200 Beginning C++ with Game Programming
• IN 245 CCNA I Internetworking Fundamentals
• IN 275 Info Technology Ethics
• EN 115 Engineering Concepts

Computer Science (CS):
• Computer Science majors choose PL 101 Introduction to Logic (minimum grade of C or better). PL 101 will also satisfy the general education humanities requirement.
• EC 250 Engineering Economics
• EN 115 Engineering Concepts
• IN 200 Beginning C++ with Game Programming
• IN 245 CCNA I Internetworking Fundamentals
• IN 275 Info Technology Ethics

Electrical Engineering (EE):
• EC 250 Engineering Economics
• EN 115 Engineering Concepts
• EN 260 Statics
• IN 200 Beginning C++ with Game Programming

Industrial Engineering (IE):
• EC 250 Engineering Economics
• EN 101 Engineering Graphics I AND
• EN 102 Engineering Graphics II
• EN 115 Engineering Concepts
• IN 200 Beginning C++ with Game Programming
• IT 204 (or) EN 201 Materials & Processes of Industry

Product Design & Manufacturing Engineering (PDME):
• EC 250 Engineering Economics
• EN 101 Engineering Graphics I AND
• EN 102 Engineering Graphics II
• EN 115 Engineering Concepts
• EN 260 Statics
• IT 204 (or) EN 201 Materials & Processes of Industry

Mechanical Engineering (ME):
• EN 101 Engineering Graphics I AND
• EN 102 Engineering Graphics II
• EN 260 Statics
• IT 204 (or) EN 201 Materials & Processes of Industry
**Engineering Technology (ET):**
- BA 104 Information Processing Systems (ET-Management ONLY)
- BA 126 Accounting AND BA 127 Accounting II (ET-Management ONLY)
- EC 250 Engineering Economics
- EN 101 Engineering Graphics I AND EN 102 Engineering Graphics II
- EN 115 Engineering Concepts
- EN 212 Electrical Circuits
- IN 200 Beginning C++ with Game Programming
- IT 204 (or) EN 201 Materials & Processes of Industry
- PH 143 General Physics I (LAB)

**Transfer Students Should Remember**

60 hours minimum must be completed at a 4-year institution.

45 hours of upper division coursework must be completed at a 4-year institution.

30 hours minimum must be completed at WSU to earn a degree from WSU.

24 of the last 30 or 50 of the last 60 hours must be completed at WSU to earn a degree from WSU.

To graduate from an engineering program, a candidate must attain 2.0 grade point average (GPA) in each of the following categories:
- all college and university work attempted (cumulative GPA)
- all work attempted at WSU-WSU GPA
- all work in the student's major at WSU including Engineer of 2020 requirements.

Most engineering courses have prerequisites and/or co-requisites; the prerequisite course must have been completed before a course can be taken, and the co-requisite must have been taken prior to or to be taken concurrently with the required course sequence.

Specific engineering courses for each major will be provided during student advising.

For information on 2+2 Articulation Agreements between WSU and Butler CC in CE, CS, EE, IE, IME and ET specific concentrations please contact your Community College Advisor.

**For more information, go to:**

[wichita.edu/engineering](http://wichita.edu/engineering)

or

Contact: Dual Advisor [wichita.edu/engadvising](http://wichita.edu/engadvising)

Or at (316) 978-3400