BSET in Engineering Technology - Concentration in Mechatronics Technology

All courses with an ENGT prefix require that the prerequisite courses (if applicable) are passed with a C- or better grade (1.700/4.000 grade point average).

Course | Title | Hours
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**Foundation & General Ed. Courses**
COMM 111 | Public Speaking | 3
ENGL 101 or ENGL 100 | College English I or English Composition | 3
ENGL 102 | College English II | 3
PHIL 385 | Engineering Ethics | 3
WSUE 102A | First-Year Seminar: Introduction to Technology and Innovation | 3

**Fine arts, social/behavioral sciences & humanities** | Total | 12

**Mathematics/Natural Sciences**
CHEM 211 or PHYS 214 | General Chemistry I or General College Physics II | 5
MATH 242 | Calculus I | 5
MATH 243 | Calculus II | 5
PHYS 213 | General College Physics I | 5

**Engineering Technology Core**
CS 194 or MIS 310 | Introduction to Digital Design or Fundamentals of Business Application Development | 4
ENGT 201 | Introduction to Engineering Technology | 1
ENGT 313 | Applied Dynamics (prerequisite for ENGT 348) | 1
ENGT 323 | Introduction to Fluids | 3
ENGT 334 | Introduction to Strength and Mechanics of Materials | 3
ENGT 320 | Circuits Technology with Lab | 4
ENGT 361 | Industrial Controls and Instrumentation | 4
ENGT 497 | Electrical Machines and Electronic Circuits | 4
ENGT 410 | Robotics Technology | 3
ENGT 411 | Microcomputer-Based Mechanical Systems Technologies | 3
ENGT 348 | Machine Elements | 3

**Technical Electives**
Select 15 credit hours of technical electives preapproved by a faculty advisor. Students taking MIS 310 as part of the core courses will need 16 credit hours of technical electives. Please refer to the engineering technology (ET) website or consult with your ET advisor for current list of technical electives.

**Total Credit Hours** | Total | 47

**Applied Learning**
Students in engineering technology programs are required to complete an applied learning or research experience to graduate from the programs. The requirement can be met by completing the two-course capstone design experience consisting of ENGT 401 and ENGT 402.

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1 PHIL 354 is the preferred course for the Cybersecurity concentration.
2 Recommend courses: ECON 201, PSY 111 or SOC 111.
3 All engineering technology students must complete these courses, regardless of engineering technology concentration.
4 Students taking MIS 310 will take an additional credit hour toward approved technical electives to satisfy the total hour requirements.
5 Details outlined under College of Engineering Requirements (http://catalog.wichita.edu/undergraduate/engineering/#graduationrequirementstext), #6.

*Note:* Students under the mechatronics concentration will take ENGT 313 to satisfy prerequisite requirements for ENGT 348.