COLLEGE OF ENGINEERING
SUMMARY OF ACADEMIC DEGREE PROGRAMS

Kansas State University has the largest and most comprehensive College of Engineering in the region with an undergraduate enrollment of more than 3,800 students. Listed below are the college’s Bachelor of Science degree programs, including areas of concentration within the degree programs and formal options (in italics):

- **Architectural Engineering**
  - Building structures
  - Building power distribution
  - Building plumbing and fire protection systems
  - Heating, ventilation and air-conditioning (HVAC) systems
  - Illumination and acoustics
  - Building communication systems

- **Biological Systems Engineering**
  - Biological engineering
  - Environmental engineering
  - Machinery systems
  - Air quality and control
  - Biomaterials processing
  - Machinery and equipment
  - Bioremediation and ecological engineering
  - Precision agriculture
  - Water and natural resources management

- **Chemical Engineering**
  - Biotechnology
  - Energy and fuels
  - Environmental engineering
  - Materials science and engineering

- **Civil Engineering**
  - Construction engineering
  - Environmental engineering
  - Structural engineering
  - Transportation/materials engineering
  - Geotechnical engineering
  - Water resources/hydraulic engineering
  - General civil engineering

- **Computer Engineering**
  - Embedded systems
  - Multimedia and networking
  - Architecture and design

- **Construction Science and Management**
  - Construction estimating, scheduling and operations
  - General building construction
  - Heavy, highway and utility construction
  - Project management
  - Specialty construction

- **Computer Science**
  - Artificial intelligence
  - Bioinformatics
  - Cybersecurity
  - Embedded (real-time) systems
  - Digital entertainment technology
  - Mobile applications
  - Parallel, distributed and operating systems
  - Programming languages
  - Web technologies

- **Electrical Engineering**
  - Bioengineering
  - Communication systems and signal processing
  - Digital electronics
  - Integrated circuits and devices
  - Power systems

- **Industrial Engineering**
  - Integrated and automated manufacturing systems
  - Manufacturing processes
  - Engineering management
  - Ergonomics
  - Operations research
  - Process improvement
  - Quality engineering
  - Health care systems engineering
  - Logistics and supply chain engineering

- **Mechanical Engineering**
  - Nuclear engineering
  - Aerospace engineering
  - Automatic control systems
  - Automotive engineering
  - Composite materials
  - Heating, cooling and refrigeration systems
  - Power systems

All of the engineering degree programs are accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org. The computer science degree program is accredited by the Computing Accreditation Commission of ABET, http://www.abet.org. The construction science and management degree program is accredited by the American Council for Construction Education.
In conjunction with regular curricula, the following programs are offered:

**Honors Program**
Open to students with superior academic records, this program culminates in the senior year with projects of significant application not only in engineering, but other areas of the university with which the program is integrated.

**Professional Experience**
After completion of the freshman year, a student may participate in the cooperative education program, an industrial internship or summer employment in an industrial setting. While acquiring valuable engineering experience, students earn a significant portion of their college expenses.

**International Programs**
With the impact of the new technologies and global communications on world markets, students are encouraged to gain valuable international experiences by participating in international internships, exchange programs and study abroad.

**Minors Programs**
A minors program enables students to take 15 credit hours or more in areas of special interest outside their major fields. Minors may be earned in a variety of areas including chemistry, leadership, business, computer science and nuclear engineering. Upon completion of requirements established by the faculty responsible for the minor field, the student will receive an appropriate entry on his or her transcript.

**Interdisciplinary Studies and Dual Degrees**
In addition to dual-degree programs combining engineering with other areas such as business administration and computer science, many students find that an engineering degree is an excellent foundation for graduate studies in other professions such as law, medicine and teaching.

**Integrated B.S. - M.S. Program**
Students who have completed the sophomore year with outstanding scholastic records are eligible to participate in a five-year integrated program leading to Bachelor of Science and Master of Science degrees in some of the fields of engineering. Program features include: 1) integrated planning; 2) participation in research as an undergraduate; 3) enrollment in graduate level courses in the senior year; and 4) consideration for financial assistance in the form of scholarships, fellowships, research assistantships and part-time work.

**Multicultural Engineering Program (MEP)**
MEP supports the success of multicultural students by building learning communities and creating leadership opportunities. MEP fosters both academic and professional growth, monitors student progress and assists with transition to employment upon graduation.

**Women in Engineering (WiE)**
WiE provides opportunities for women in engineering to connect, share and support each other during their time at Kansas State University. WiE sponsors social and networking activities through its mentors and departmental associations, including Women in Civil Engineering, Mechanical and Nuclear Engineering Women, Chemical Engineering Women and other groups. Women mentors and leaders in the College of Engineering create and plan many of the activities. WiE also sponsors outreach programs for middle and high school students.

**NOTICE OF NONDISCRIMINATION**
Kansas State University prohibits discrimination on the basis of race, color, ethnicity, national origin, sex (including sexual harassment and sexual violence), sexual orientation, gender identity, religion, age, ancestry, disability, genetic information, military status, or veteran status, in the University’s programs and activities as required by applicable laws and regulations. The person designated with responsibility for coordination of compliance efforts and receipt of inquiries concerning nondiscrimination policies is the University’s Title IX Coordinator: the Director of the Office of Institutional Equity, equity@k-state.edu, 103 Edwards Hall, Kansas State University, Manhattan, Kansas 66506, (785) 532-6277. The campus ADA Coordinator is the Director of Employee Relations, charlott@k-state.edu, who may be reached at 103 Edwards Hall, Kansas State University, Manhattan, Kansas 66506, (785) 532-6277. Revised July 7, 2015.