# Rock Valley College and NIU CEET Transfer Guidelines for B.S. Degree in <u>Electrical Engineering</u>

## The 2+2 Plan for Community College Students

The Department of Electrical Engineering welcomes transfer students from Illinois community colleges. Students find it easy to continue their studies at NIU if they plan well. Therefore, following the course guidelines in this brochure while completing an Associate in Engineering Science (AES) Degree is highly recommended [1]. Students should always work closely with their community college advisor.

## **Courses at Rock Valley College**

| Courses at Rock Valley College |  | Equivalent courses at NIU   |
|--------------------------------|--|---|
| *SPH 131                       | Fundamentals of Communication  | COMS 100  |
| **ENG 101                      | Composition I  | ENGL 103  |
| **ENG 103                      | Composition II   | ENGL 203  |
| CHM 120                        | General Chemistry I  | CHEM 210 and CHEM 212   |
| CIS 276 <b>OR</b><br>MTH 164   | Intro to C/C++ Programming <b>OR</b> The Computer In Mathematics C/C++ | CSCI 240 (students who took MTH 164 will need to see CSCI Department to adjust) |
| MTH 135                        | Calculus w/ Analytic Geometry I  | MATH 229  |
| MTH 235                        | Calculus w/ Analytic Geometry II                                       | MATH 230  |
| MTH 236                        | Calculus w/ Analytic Geometry III                                      | MATH 232  |
| MTH 240                        | Differential Equations   | MATH 336  |
| PHY 215                        | Mechanics, Wave Motion and Thermodynamics                              | PHYS 253  |
| PHY 225                        | Electricity, Magnetism, Light and Modern Physics                       | PHYS 273  |
| EGR 206                        | Statics  | MEE 210   |
| EGR 207                        | Dynamics   | MEE 211   |
| EGR 231                        | Engineering Circuit Analysis   | ELE 210 and ELE 210U  |
| EGR 250                        | Digital Electronics  | ELE 250 and ELE 250U  |
| EGR 101                        | Introduction to Engineering  | UEET 101  |
|                                |  |   |

<sup>\*</sup>Satisfies NIU Foundational Studies Oral Communication Requirement.

<sup>\*\*</sup>Satisfies NIU Foundational Studies Writing Requirement.

<sup>[1]</sup> Only A.A. and A.S. degrees satisfy NIU's general education requirements.

#### **General Education Requirements**

NIU's College of Engineering and Engineering Technology no longer requires special sequences in Social Sciences and Humanities. Therefore, students only need to satisfy NIU's general education requirements. When choosing general education ("knowledge domain") courses, please consult with your RVC advisor, verify general education requirements in the NIU Undergraduate Catalog, and check the NIU Community College Articulation Tables for transferability. Students are also required to fulfill a Human Diversity requirement, which may be fulfilled by a knowledge domain course.

### **Courses at NIU**

Remaining classes to be taken at NIU's College of Engineering and Engineering Technology to earn a Bachelor of Science Degree in **Electrical Engineering:** 

| ELE 315                    | Signals and Systems  |  |
|----------------------------|--|--|
| ELE 330                    | Electronic Circuits  |  |
| ELE 335                    | Theory of Semiconductor Devices I  |  |
| ELE 340                    | Electrical Power Systems   |  |
| ELE 356                    | Computer Engineering II  |  |
| ELE 360                    | Communications Systems   |  |
| ELE 370                    | Engineering Electromagnetics   |  |
| ELE 380                    | Control Systems I  |  |
| ELE 395                    | Electrical Engineering Junior Design   |  |
| ELE 495                    | Senior Electrical Engineering Design I   |  |
| ELE 496                    | Senior Electrical Engineering Design II  |  |
| ISYE 220                   | Engineering Economy  |  |
| ISYE 335<br>OR<br>STAT 300 | Probability and Statistics for Engineers OR Introduction to Probability and Statistics |  |
| PHYS 283                   | Fundamentals of Physics III: Quantum Physics   |  |

#### **Technical Electives**

In addition to the courses listed above, students are required to complete 15-18 hours of electives within CEET. Specific electives will be reviewed with student's assigned faculty advisor and academic catalog.

### For More Information

Department of Electrical Engineering CEET EB 330 Northern Illinois University DeKalb, IL 60115-2854 (815) 753-9974

Visit our Home Page. This site provides information on course descriptions, course syllabi, lab tours, faculty profiles, student organizations, suggested 4-year degree plans, other useful links, etc.



#### For undergraduate application materials, contact:

Office of Admissions Northern Illinois University DeKalb, IL 60115-2857 admissions@niu.edu

Apply online at: http://www.admissions.niu.edu/admissions/

For more information on transfer programs at NIU:

Call (815) 753-0446 or (800) 892-3050 (toll free) and ask to speak with a Transfer Counselor.

For more information about AES program at Rock Valley College, contact Business/CIS/Engineering and Technology at (815) 921-3101.

**Disclaimer:** Although NIU attempts to accommodate the course requests of all students, some course offerings may be limited by financial, space, and staffing considerations, or may otherwise be unavailable. Nothing in this brochure may be construed to promise or guarantee registration in any course or course of study (whether required or elective), nor may anything be construed to promise or guarantee the completion of an academic program within a specific length of time. All degree requirements are subject to the provisions and notices in the Undergraduate Catalog. Information in this brochure is valid through August 2020.