

Richmond Community College AAS Electric Utility Substation Relay Technology to Bachelor of Science in Electrical Engineering Technology

This program plan outlines how students can apply their Richmond Community College AAS Electric Utility Substation Relay Technology to Excelsior University's B.S. in Electrical Engineering Technology degree program.

This is only a guide in how credits will transfer into an Excelsior University degree program. **Actual transferability of credits are dependent upon current Excelsior University degree requirements and policies upon the date a student is admitted to Excelsior.** All students will be reviewed individually as it relates to the transferability of credits into an Excelsior University degree program.

Revision: March 2024

| Richmond CC | Semester Hours | Excelsior University Requirements | Semester Hours |
|---|----------------|--|----------------|
| ACA 122: College Transfer Success | 1 | Not Applicable | 0 |
| ECO 251: Principles of Microeconomics (3) or 252: Principles of Macroeconomics (3) | 3 | Social Science/History Requirement | 3 |
| ELC 112: DC/AC Electricity or ELC 131: Circuit Analysis | 4 | Duplicative Credit | 0 |
| ENG 111: Writing and Inquiry | 3 | Written English Requirement | 3 |
| EUS 110: Introduction to Electric Utility Industry | 4 | Excess Credit | 0 |
| MAT 171: Precalculus Algebra AND MAT 172: Precalculus/Trigonometry | 8 | Pre Calculus Requirement and Arts and Sciences Elective* | 8 |
| ELC 117: Motors and Controls (4) or 231: Industrial Controls (3) | 3 | Technology Elective (ELC 117 only) (ELN 231 dupes) | 4 |
| ENG 112: Writing/Researching the Disciplines | 3 | Written English Requirement | 3 |
| EUS 130: Electric Utility Print Reading | 4 | Technology Elective | 4 |
| EUS 210: Large High Voltage Power Transformers I | 3 | Excess credit | 0 |
| ELN 229: Industrial Electronics | 4 | Technology Elective(no credit for power) | 4 |
| EUS 215: Large High Voltage Power Transformers II | 3 | Technology Elective | 3 |
| EUS 225: Elec Utility Substation & Human Performance | 2 | Excess Credit | 0 |
| EUS 230: Electric Utility Protective Relaying I | 3 | Excess Credit | 0 |
| EUS 240: Substation Ancillary Systems | 3 | Applied Professional Requirement | 3 |
| ELC 128: Intro to Programmable Logic Controller | 3 | Technology Elective/Concentration Requirement | 3 |
| EUS 220: High Voltage Power Circuit Breakers | 3 | Technology Elective (power concentration only) | 3 |
| EUS 235: electric Utility Protective Relaying II | 3 | Excess Credit | 0 |
| EUS 255: Electric Utility Troubleshooting | 2 | Excess Credit | 0 |
| EUS 260: Capstone & Case Studies in EUSRT | 2 | Excess Credit | 0 |
| Humanities/Fine Arts Elective | 3 | Humanities Requirement | 3 |
| PCI 172: SCADA Systems | 4 | Not Applicable | 0 |
| TOTAL CREDITS REQUIRED | 71 | TOTAL CREDITS ACCEPTED | 44 |

*Students must complete MAT 171 **AND** MAT 172 to meet Excelsior Pre Calculus requirement. If only one course is completed Arts & Science credit will be awarded

| Additional Credits That May Be Transferred <u>OR</u> Taken With Excelsior | | | |
|---|----------------|---------------------------------------|-----------|
| Richmond CC | Semester Hours | Excelsior University Requirements | |
| ENG 312: Professional and Technical Writing | 3 | Written English Requirement (ENG*312) | |
| Communications Elective | 3 | Communications Requirement | |
| PHI 240: Introduction to Ethics | 3 | Ethics Requirement | |
| Social Sciences/History Electives | 6 | Social Sciences/History Requirement | |
| MAT 271: Calculus 1 | 4 | Calculus I Requirement | |
| MAT 272: Calculus II | 4 | Calculus II Requirement | |
| MAT 285: Differential Equations | 3 | Differential Equations Requirement | |
| PHY 151: Physics I | 3 | Physics I Requirement | |
| PHY 152: Physics II | 3 | Physics II Requirement | |
| PHYS 110A: Physics I Lab OR PHYS 203: Physics II Lab | 1 | Physics Lab Requirement | |
| CHM 151: Chemistry | 3 | Chemistry Requirement | |
| Natural Sciences Electives | 3 | Natural Sciences Requirement | |
| Arts & Sciences Elective | 10 | Arts & Sciences Requirement | |
| TOTAL ADDITIONAL CREDITS | | | 49 |
| Credits To Be Taken With Excelsior University | | | |

Excelsior University Credit Requirements

| | |
|---|-----------|
| INL 102: Information Literacy | 1 |
| IND 101: Cornerstone A (Foundations) OR IND 301: Cornerstone B (Pathways) | 3 |
| ELEC 152: Circuit Theory I | 3 |
| ELEC 153: Circuit Theory II | 3 |
| ELEC 160: Electronics I | 3 |
| ELEC 161: Electronics II | 3 |
| ELEC 201: Digital Electronics | 3 |
| ELEC 202: Microprocessors | 3 |
| IT 240: Introduction to Computer Programming | 3 |
| IT 390: Project Management | 3 |
| Upper Level Electives *16 credits must be upper level *9 of the credits will be in concentration area | 0 |
| ELEC 495: Integrated Technology Assessment Capstone | 3 |
| TOTAL CREDITS | 31 |

| EVALUATION SUMMARY | | Semester Hours |
|---|--|----------------|
| Credits Accepted from Richmond CC | | 44 |
| Additional Credits That May Be Transferred OR Taken With Excelsior | | 49 |
| Credits To Be Taken With Excelsior | | 31 |
| TOTAL CREDITS REQUIRED | | 124 |

* All credits with the exception of information literacy, cornerstone, and capstone may be transferred from other institutions.

* Students must choose from one of the following concentrations: Electronics, Power Systems

* Excelsior University reviews every student individually and this guide is just a sample scenario. Actual requirements will be dependent on the courses a student transfers to Excelsior.

