



Program Completion Guide

**ASSOCIATE IN APPLIED SCIENCE - ELECTRIC UTILITY SUBSTATION AND RELAY TECHNOLOGY (A50510)**

Student Name: \_\_\_\_\_ ID #: \_\_\_\_\_ Date of Enrollment: \_\_\_\_\_

Advisor Name: \_\_\_\_\_ Contact Information: \_\_\_\_\_

**Note: Developmental coursework may be required. Please refer to the Developmental Education Guide for additional information.**

**A: Electric Utility Substation and Relay Technology: Basic Power Systems Certificate (C50510) Course Requirements 15 credit hours: Complete Section A.**

Courses	Cr.	Recommended Semester	Prerequisites/ Corequisites	Semester Registered/ Planned	Semester Completed/ Grade
ELC 131 Circuit Analysis I	4	1 <sup>st</sup> year – fall	Pre: MAT 003 Tier 2 or BSP 4003 Tier 2		
EUS 110 Intro to Electric Utility Industry*	4	1 <sup>st</sup> year – fall	Pre: MAT 003 Tier 2 or BSP 4003 Tier 2 or MAT 071, ENG 002 BSP 4002 or ENG 111		
EUS 130 Electric Utility Print Reading*	4	1 <sup>st</sup> year – spring	Pre: ELC 131 and EUS 110		
EUS 210 Large High Voltage Power Transfmr I*	3	1 <sup>st</sup> year – spring	Pre: EUS 110		

**B: Electric Utility Substation and Relay Technology Associate in Applied Science Degree (A50510) Course Requirements: 71-73 credit hours: Complete Sections A and B.**

Courses	Cr.	Recommended Semester	Prerequisites/ Corequisites	Semester Registered/ Planned	Semester Completed/ Grade
ACA 122 College Transfer Success	1	1 <sup>st</sup> year – fall	None		
ECO 251 Principles of Microeconomics or ECO 252 Principles of Macroeconomics	3	1 <sup>st</sup> year - fall	Pre: MAT 003 or BSP 4003, ENG 002 or BSP 4002 or ENG 111		
ELC 131 Circuit Analysis I or ELC 112 DC/AC Electricity	4 5	1 <sup>st</sup> year – fall	Pre: MAT 003 Tier 2 or BSP 4003 Tier 2  Pre: MAT 003 or BSP 4003		
ENG 111 Writing and Inquiry	3	1 <sup>st</sup> year – fall	Pre: ENG 011 Co: None		
MAT 171 Precalculus Algebra	4	1 <sup>st</sup> year – fall	Pre: MAT 003 Tier 3 or BSP 4003 Tier 3 or MAT 071		
ELC 117 Motors and Controls or ELN 231 Industrial Controls	4 3	1 <sup>st</sup> year – spring	Pre: ELC 112 or ELC 131  Pre: ELC 112 or ELC 131		
ENG 112 Writing/Research in the Disciplines	3	1 <sup>st</sup> year – spring	Pre: ENG 111		
MAT 172 Precalculus Trigonometry	4	1 <sup>st</sup> year – spring	Pre: MAT 171 with a grade of “C” or better		
EUS 215 Large High Voltage Power Transfmr II*	3	2 <sup>nd</sup> year – fall	Pre: EUS 210		
EUS 225 Elec. Util. Safety & Human Performance	2	2 <sup>nd</sup> year – fall	Pre: EUS 110 and EUS 130 Co: None		
EUS 230 Electric Utility Protective Relaying I*	3	2 <sup>nd</sup> year – fall	Pre: EUS 130		
EUS 240 Substation Ancillary Systems*	3	2 <sup>nd</sup> year – fall	Pre: EUS 130		
ELN 229 Industrial Electronics	4	2 <sup>nd</sup> year – fall	Pre: ELC 112 or ELC 131		
ELC 128 Introduction to PLC	3	2 <sup>nd</sup> year – spring	Pre: ELC 112 or ELC 131		



EUS 220 High Voltage Power Circuit Breakers*	3	2 <sup>nd</sup> year – spring	Pre: ELC 117 or ELN 231, and EUS 130		
EUS 235 Electric Utility Protective Relaying II*	3	2 <sup>nd</sup> year – spring	Pre: EUS 230		
EUS 255 Elect. Utility Troubleshooting	2	2 <sup>nd</sup> year – spring	Pre: EUS 215 and EUS 230 Co: EUS 235		
EUS 260 Capstone & Case Studies in EUSRT*	2	2 <sup>nd</sup> year – spring	Pre: EUS 215 Co: EUS 235		
PCI 172 SCADA Systems	4	2 <sup>nd</sup> year – spring	None		

**Electives: (Must take one Humanities/Fine Arts from lists below unless a specific course is required above.)**

<b>Humanities/Fine Arts Electives (3 credit hours)** Courses with the following prefixes will satisfy this requirement: ART, DRA, ENG (literature courses only), HUM, MUS, PHI, REL, and SPA (Intermediate Spanish I only).</b>			
<b>Course</b>	<b>Recommended Semester</b>	<b>Semester Registered/Planned</b>	<b>Semester Completed/Grade</b>
	2 <sup>nd</sup> year - fall		

**NOTES:** \*All courses must be completed with a grade of “C” or better.  
\*\*See course catalog for prerequisite and/or corequisite requirements.

**Students please read the following and sign below.**

I understand that as an RCC student, I am ultimately responsible for my schedule. I understand that I must complete each course with a grade of “C” or better and follow the established course sequence or my ability to graduate on time may be affected.  
My advisor has information regarding other colleges and transfer opportunities that I can investigate after completing my degree/diploma/certificate, and I understand that if I would like more information I can schedule an appointment with him/her.

Student Name: \_\_\_\_\_ Student Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Advisor Name: \_\_\_\_\_ Advisor Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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