

Bismarck State College

Degree Roadmap

A.A.S. Electrical Transmission Systems Technology Degree Requirements Summary

Electrician's Mate (EM)

Students must complete a minimum 15 semester hours in residence with Bismarck State College. Credit transfers restricted to 45 semester hours from non-traditional (credit by exam or military) sources. Minimum 2.0 GPA to graduate.

Course Number/Title	Credits Needed	E-3 FN	E-4 EM3	E-5 EM2	E-6 EM1	E-7 EMC	E-8 EMCS	E-9 EMCM
General Education								
Communications	6							
ENGL 110 College Composition 1 (Required)								
ENGL 120 College Composition II								
ENGL 125 Intro to Professional Writing								
COMM 110 Fundamentals of Public Speaking								
Arts & Humanities/Social Science	3							
Business, Math, Science, Technology (Choose 2 classes from 2 separate areas of study)	6					3	3	3
Program Specific								
ETST 240 Power Industry Concepts	3							
ETST 242 Applied Math for System	2							
Operators								
ENRT 106 DC Fundamentals	2	X	X	X	X	X	X	X
ENRT 108 AC Fundamentals	3	X	X	X	X	X	X	X
ETST 250 Electrical Generation Theories	4							
ETST 254 System Elements I – Substations	3							
ETST 256 System Elements II – Transformers	3							
ETST 258 System Elements III – Protective Relaying	3							
ETST 260 Electrical Diagram Interpretation	2							
ETST 262 Power System Operations	3							
ETST 266 Interconnected System Operations	3							
ETST 268 Power Flow	3							
ETST 270 System Operator Work Practices	3							
ETST 272 Power System Safety	3							
ETST 274 Communications & Control Tech	2							
ETST 276 Power System Economics	3							
ETST 278 Power System Emergency	3							
ETST 280 Reliability Policies & Procedures	3							
Total Credits Needed	66							

Please keep in mind that once a semester begins, you will need to work with your academic advisor to determine an educational plan.

Disclaimer for Navy Degree Roadmaps: Please be aware that this is a sample and a Sailor's actual credit award may vary depending on the ACE recommendation in effect at the time of their training and per department approval.