

MARINE ELECTRO-TECHNOLOGY - MINOR

The Marine Engineering Electro-Technology Minor provides students with the knowledge and skills to maintain, troubleshoot and repair shipboard electrical equipment. As vessels become increasingly automated, the need for mariners and shoreside employees with advanced electronics and networking skills has become essential. This minor's curriculum consists of electrical theory and practical application of troubleshooting and diagnostics of shipboard machinery. Machinery includes engine room equipment, deck equipment, computer networking, High Voltage, and navigation systems.

This program requires a grade of "C" or better for the courses to be used as evidence of meeting "Option 2" of MCP-FM-NMC5-216 (03) for approved training toward the Electro-Technical Officer endorsement. A student can use this minor towards an original electro-technical rating when combined with Qualified Assessor Endorsed Assessments for IMO's Section A-III/6 and A-III/7 of the STCW code with required sea service. Endorsement options for post-completion should be discussed with a MARE advisor to determine eligibility based on the student's degree and this minor.

Program Requirements

| Code | Title | Semester Credit Hours |
|------------------------------------|--|-----------------------|
| MARE 235 | Digital Fundamentals for Marine Engineers | 3 |
| MARE 325 | Shipboard Networking Systems | 3 |
| MARE 335 | Power Electronics for Shipboard Applications | 3 |
| MARE 345 | High Voltage Technology for Marine Engineers | 3 |
| MARE 445 | Marine Navigation Systems | 3 |
| Total Semester Credit Hours | | 15 |