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SUMMARY



Electrician's Mate (Nuclear) (EM)



L=Lower Division Baccalaureate/Associate Degree
 U=Upper Division Baccalaureate
 V=Vocational Certificate
 G=Graduate

Military Progression: (The amount of credit reflected in this section is dependent upon a Sailor's rank.)

| | Type | Semester Hours | Cumulative Hours |
|---|------|----------------|------------------|
| Fireman | | | |
| Blueprint Reading | L | 1 | |
| Introduction to Marine Engineering | L | 3 | |
| Swimming (If qualified as a Swimmer, First Class) | L | 1 | |
| | | | 5 L |
| Electrician's Mate, Third Class | | | |
| Computer Applications | L | 3 | |
| Principles of Electric Circuits | L | 2 | |
| Technical Mathematics | L | 3 | |

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|--|---|---|---|------|
| | | | | 13 L |
| Electrician's Mate, Second Class (Replaces EM3 Credits) | | | | |
| | Computer Applications | L | 3 | |
| | Electrical Systems Troubleshooting, Maintenance, and Repair | L | 2 | |
| | Principles of Electric Circuits | L | 2 | |
| | Technical Mathematics | L | 3 | |
| | Technical Writing | L | 3 | |
| | | | | 18 L |
| Electrician's Mate, First Class (Replaces EM2 Credits) | | | | |
| | Advanced Electrical Systems Maintenance | L | 2 | |
| | Computer Applications | L | 3 | |
| | Electrical Systems Troubleshooting, Maintenance, and Repair | L | 2 | |
| | Principles of Electric Circuits | L | 2 | |
| | Principles of Supervision | L | 3 | |
| | Technical Mathematics | L | 3 | |
| | Technical Writing | L | 3 | |
| | | | | 23 L |
| Chief Electrician's Mate (Replaces EM1 Credits) | | | | |
| | Advanced Electrical Systems Maintenance | L | 2 | |
| | Computer Applications | L | 3 | |
| | Electrical Systems Troubleshooting, Maintenance, and Repair | L | 2 | |
| | Introduction to Management | L | 3 | |
| | Leadership Development | L | 3 | |
| | Principles of Electric Circuits | L | 2 | |
| | Principles of Supervision | L | 3 | |

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|--|-----------------------|---|-------|---------|
| | Technical Mathematics | L | 3 | |
| | Technical Writing | L | 3 | |
| | Management Practicum | U | 1 - 3 | |
| | Operations Management | U | 3 | |
| | | | | 29 L |
| | | | | 4 - 6 U |

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|---|--|--|--|--|
| Senior Chief Electrician's Mate (Replaces EMC Credits) | | | | |
|---|--|--|--|--|

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|--|---|---|-------|---------|
| | Advanced Electrical Systems Maintenance | L | 2 | |
| | Computer Applications | L | 3 | |
| | Electrical Systems Troubleshooting, Maintenance, and Repair | L | 2 | |
| | Introduction to Management | L | 3 | |
| | Leadership Development | L | 3 | |
| | Principles of Electric Circuits | L | 2 | |
| | Principles of Supervision | L | 3 | |
| | Technical Mathematics | L | 3 | |
| | Technical Writing | L | 3 | |
| | Management Practicum | U | 1 - 3 | |
| | Operations Management | U | 3 | |
| | | | | 29 L |
| | | | | 4 - 6 U |

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|--|--|--|--|--|
| Master Chief Electrician's Mate (Replaces EMCS Credits) | | | | |
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|--|---|---|---|--|
| | Advanced Electrical Systems Maintenance | L | 2 | |
| | Computer Applications | L | 3 | |
| | Electrical Systems Troubleshooting, Maintenance, and Repair | L | 2 | |
| | Introduction to Management | L | 3 | |
| | Leadership Development | L | 3 | |
| | Principles of Electric Circuits | L | 2 | |
| | Principles of Supervision | L | 3 | |

| | | | | |
|--|-----------------------|---|-------|---------|
| | Technical Mathematics | L | 3 | |
| | Technical Writing | L | 3 | |
| | Management Practicum | U | 1 - 3 | |
| | Operations Management | U | 3 | |
| | Strategic Management | U | 3 | |
| | | | | 29 L |
| | | | | 7 - 9 U |

Initial Skills Training:

| | | | | |
|---|-----------------------------------|---|---|------|
| Recruit Training (Basic Training) (A-950-0001) | | | | |
| | First Aid and Safety | L | 1 | |
| | Personal and Community Health | L | 1 | |
| | Personal Fitness and Conditioning | L | 1 | |
| | | | | 3 L |
| | | | | |
| Electrician's Mate, Class A (A-662-0016) | | | | |
| | Electrical Maintenance | V | 4 | |
| | | | | 3 L |
| | | | | 4 V |
| | | | | |
| Engineering Common Core (A-651-0118) | | | | |
| | Industrial Safety | L | 2 | |
| | | | | 5 L |
| | | | | 4 V |
| | | | | |
| Engineering Electrical Core (A-651-0119) | | | | |
| | AC Circuits | L | 2 | |
| | DC Circuits | L | 2 | |
| | Electromechanical Technology | L | 3 | |
| | Electronics Technology | L | 3 | |
| | Technical Mathematics | L | 2 | |
| | | | | 17 L |

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|--|---|---|---|------|
| | | | | 4 V |
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| Naval Nuclear Power School, Enlisted (A-661-0010) | | | | |
| | AC Circuits | L | 2 | |
| | Atomic and Nuclear Physics | L | 1 | |
| | DC Circuits | L | 2 | |
| | Digital Principles | L | 2 | |
| | Electric Machines | L | 2 | |
| | General Chemistry and Principles of Materials | L | 3 | |
| | General Physics | L | 5 | |
| | Heat Transfer and Fluid Flow | L | 3 | |
| | Hydraulic Systems | L | 2 | |
| | Nuclear Reactor Engineering | L | 3 | |
| | Radiation Protection Technology | L | 1 | |
| | Technical Mathematics | L | 4 | |
| | | | | 47 L |
| | | | | 4 V |
| | | | | |

Follow on Training:

The following courses are available to personnel within the Electrician's Mate (EM) rating, but a given individual may not take all courses.

| | | | | |
|--|---------------------------|---|---|--|
| CV Catapult Electrician (C-604-2013) | | | | |
| | Basic Electrical Circuits | L | 2 | |
| | Industrial Safety | L | 1 | |
| | | | | |
| SSM Automatic Degaussing System Maintenance for DD-963 Class (A-690-0022) | | | | |
| | Electrical Maintenance | V | 2 | |
| | | | | |

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|--|---|---|---|--|
| DD-963 60/400 Hertz Frequency Converter (Air-Cooled) Maintenance (A-652-0241) | | | | |
| | Electronic Systems Troubleshooting and Maintenance | L | 3 | |
| | | | | |
| | | | | |
| Electrical Control Devices (J-662-0044) | | | | |
| | Electromechanical Control Systems Troubleshooting and Maintenance | L | 3 | |
| | | | | |
| | | | | |
| Electric Motor Rewind (J-662-0021) | | | | |
| | AC/DC Motor Fundamentals | L | 3 | |
| | Electric Motor Repair and Rewinding Laboratory | L | 2 | |
| | | | | |
| Engineering Maintenance Principles, Practices and Administration (A-651-0064) | | | | |
| | Machinery Maintenance | L | 1 | |
| | Machinery Maintenance Laboratory | L | 1 | |
| | | | | |
| FFG-7 Auxiliary Electrical Subsystems Maintenance (A-652-0172) | | | | |
| | Electronic Systems Troubleshooting and Maintenance | L | 3 | |
| | | | | |
| | | | | |
| FFG-7 Auxiliary Electrical Systems Maintenance (A-652-0215) | | | | |
| | Electrical Generation System Maintenance | L | 2 | |
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| FFG-7/DDG-993 60/400 Hertz Frequency Converter (Water-Cooled) System Maintenance (A-652-0243) | | | | |

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|--|--|---|---|--|
| | Electronic Systems Troubleshooting and Maintenance | L | 3 | |
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| | | | | |
| FFG-7/MCD-1 Automatic Degaussing System Maintenance (A-690-0078) | | | | |
| | Electrical Maintenance | 2 | V | |
| | | | | |
| | | | | |
| Lamps MK III RAST (Recovery Assist, Securing and Traversing) Electrical Technician (K-652-2204) | | | | |
| | Motor Control Devices | L | 2 | |
| | Electrical/Electronic Troubleshooting and Repair | L | 3 | |
| | | | | |
| Machinery Systems Console Maintenance (A-623-0112) | | | | |
| | Automation and Control Systems Technology | L | 4 | |
| | Automation and Control Systems Maintenance | V | 6 | |
| | | | | |
| Outboard Motor Overhaul (K-652-0237) | | | | |
| | Outboard Motor Repair and Service | L | 2 | |
| | | | | |
| | | | | |
| Propulsion Alarm and Indicating Systems Maintenance Course (A-651-0047) | | | | |
| | AC/DC Circuit Analysis | L | 2 | |
| | Instrumentation Fundamentals | L | 1 | |
| | | | | |
| Senior Enlisted Propulsion Engineering (A-651-0110) | | | | |
| | Industrial Safety Management | U | 1 | |
| | Power Plant Facilities Management | U | 4 | |

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