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## ACE RECOMMENDATIONS



# Electrician's Mate (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
<b>Fireman</b>				
	Blueprint Reading	L	1	
	Introduction to Marine Engineering	L	3	
	Swimming (If qualified as a Swimmer, First Class)	L	1	
				5 L
<b>Electrician's Mate, Third Class</b>				
	Computer Applications	L	3	
	Principles of Electric Circuits	L	2	
	Technical Mathematics	L	3	

				13 L
<b>Electrician's Mate, Second Class (Replaces EM3 Credits)</b>				
	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
<b>Electrician's Mate, First Class (Replaces EM2 Credits)</b>				
	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
<b>Chief Electrician's Mate (Replaces EM1 Credits)</b>				
	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
<b>Senior Chief Electrician's Mate (Replaces EMC Credits)</b>				
	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
<b>Master Chief Electrician's Mate (Replaces EMCS Credits)</b>				
	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:

<b>Recruit Training (Basic Training) (A-950-0001)</b>				
	First Aid and Safety	L	1	
	Personal and Community Health	L	1	
	Personal Fitness and Conditioning	L	1	
				3 L
<b>Electrician's Mate, Class A (A-662-0016)</b>				

	Electrical Maintenance	V	4	
				3 L
				4 V
<b>Engineering Common Core (A-651-0118)</b>				
	Industrial Safety	L	2	
				5 L
				4 V
<b>Engineering Electrical Core (A-651-0119)</b>				
	AC Circuits	L	2	
	DC Circuits	L	2	
	Electromechanical Technology	L	3	
	Electronics Technology	L	3	
	Technical Mathematics	L	2	
				17 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.**

<b>CV Catapult Electrician (C-604-2013)</b>				
	Basic Electrical Circuits	L	2	
	Industrial Safety	L	1	
<b>SSM Automatic Degaussing System Maintenance for DD-963 Class (A-690-0022)</b>				
	Electrical Maintenance	V	2	
<b>DD-963 60/400 Hertz Frequency Converter (Air-Cooled) Maintenance (A-652-0241)</b>				
	Electronic Systems Troubleshooting and Maintenance	L	3	

<b>Electrical Control Devices (J-662-0044)</b>				
	Electromechanical Control Systems Troubleshooting and Maintenance	L	3	
<b>Electric Motor Rewind (J-662-0021)</b>				
	AC/DC Motor Fundamentals	L	3	
	Electric Motor Repair and Rewinding Laboratory	L	2	
<b>Engineering Maintenance Principles, Practices and Administration (A-651-0064)</b>				
	Machinery Maintenance	L	1	
	Machinery Maintenance Laboratory	L	1	
<b>FFG-7 Auxiliary Electrical Subsystems Maintenance (A-652-0172)</b>				
	Electronic Systems Troubleshooting and Maintenance	L	3	
<b>FFG-7 Auxiliary Electrical Systems Maintenance (A-652-0215)</b>				
	Electrical Generation System Maintenance	L	2	
<b>FFG-7/DDG-993 60/400 Hertz Frequency Converter (Water-Cooled) System Maintenance (A-652-0243)</b>				
	Electronic Systems Troubleshooting and Maintenance	L	3	
<b>FFG-7/MCD-1 Automatic Degaussing System Maintenance (A-690-0078)</b>				
	Electrical Maintenance	2	V	
<b>Lamps MK III RAST (Recovery Assist, Securing and Traversing) Electrical Technician (K-652-2204)</b>				
	Motor Control Devices	L	2	
	Electrical/Electronic Troubleshooting and Repair	L	3	

<b>Machinery Systems Console Maintenance (A-623-0112)</b>				
	Automation and Control Systems Technology	L	4	
	Automation and Control Systems Maintenance	V	6	
<b>Outboard Motor Overhaul (K-652-0237)</b>				
	Outboard Motor Repair and Service	L	2	
<b>Propulsion Alarm and Indicating Systems Maintenance Course (A-651-0047)</b>				
	AC/DC Circuit Analysis	L	2	
	Instrumentation Fundamentals	L	1	
<b>Senior Enlisted Propulsion Engineering (A-651-0110)</b>				
	Industrial Safety Management	U	1	
	Power Plant Facilities Management	U	4	

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