

## **Electronics and Power Electronics (STRCTR-726)**

### **Length**

40 hours (5 days)

### **Objective**

To enhance the knowledge and understanding of Management Level Engineering officers in the areas of Semiconductors / Solid-State Devices, Power Supplies, Power Electronic and to analyze circuits and problems related to the semiconductor devices used in electronic circuits as required by Function 2, Electrical, Electronic and Control Engineering at the Management Level in compliance with STCW 2010 Manila Conference Amendments.

To carry out a series of exercises (using kits / breadboards / simulation) to reinforce the theory on electronic circuits.

### **This Course is USCG Approved and STCW Compliant. The course certificate will state:**

“This course is hereby recognized as a Coast Guard Approved Training Course as outlined in Subpart C of Part 11, Title 46, Code of Federal Regulations. Any applicant who has successfully completed our Electronics and Power Electronics (Management Level) (STRCTR-726) course will meet the competence requirements of Section A-III/2, Table A-III/2 of the STCW Code, as amended, within the function: Electrical, Electronic, and Control Engineering at the Management Level for the following Knowledge, Understanding and Proficiency areas:

- That portion concerning Electronics and Power Electronics contained under the competency of Manage operation of electrical and electronic control; AND
- Those portions concerning the Troubleshooting and Functional Test of Electrical and Electronic semiconductor devices used in Control Equipment contained under the competency of Manage troubleshooting, restoration of electrical and electronic control equipment to operating condition.”

### **Scope**

This course is intended to meet USCG requirements as listed above in the USCG Approved and STCW Compliant Course Certificate section.

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### **Entry standards**

- Hold a license credential endorsed for Officer in Charge of an Engineering Watch as Assistant Engineer, DDE (Limited Engineer), or 3 A/E unlimited horsepower or higher.
- Proficient in the English language

### **Please be prepared for class with the following:**

- No extra class material required

### **Teaching Facility**

STAR Center, Dania Beach, Florida