

Refrigeration (Operational Level)

Length 40 hours (5 days)

<u>Scope</u>

The course provides the engineer with the ability to understand the basic principles of shipboard refrigeration and HVAC, and to troubleshoot and provide permanent/temporary repairs to shipboard HVAC/R systems at the operational level. Course includes hands-on training using several refrigeration trainers as well as CBT utilizing SIMUTEC program.

Objective

To provide the student with the necessary knowledge and skills required to operate and maintain shipboard HVAC/R systems. To meet the CFR requirements for General and Basic Theory on construction, operation, maintenance, troubleshooting, and repair on refrigeration and air conditioning compressors and systems. To meet the requirements of STCW Table A-III/1 Proficiency as Officers in Charge of an Engineering Watch in a Manned Engine-Room or Designated Duty Engineer in a Periodically Unmanned Engine-Room. This course will include the IMO model course: Competence 1.6: Operate Main and Auxiliary Machinery and Associated Control Systems.

Entry Standards

The course is intended for engineering candidates for certification as officers in charge of the engineering watch (OICEW) in a manned engine room or designated duty engineers in a periodically unmanned engine room and for licensed junior engineers who want to extend and refine their refrigeration and HVAC knowledge and skills. The candidate must hold or be able to attain a Universal Technician Certificate per IAW 46 CFR part 82.

Teaching Facility

STAR Center, Dania Beach, Florida