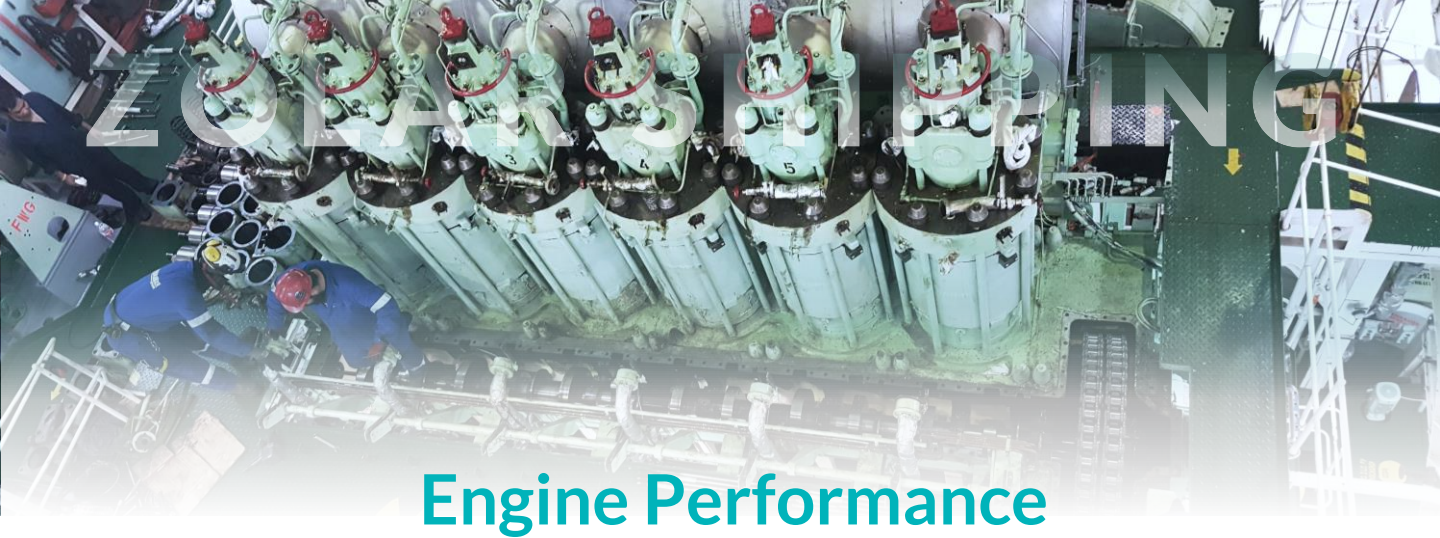




Course Description:

This course provides participants with training to understand diesel engine combustion characteristics and the impact of various factors on faulty combustion. It equips engineers with the skills to assess, interpret, and optimize engine performance for safe and efficient operations.



Course Objectives:

- Read and analyze indicator and draw cards.
- Calculate engine power in the absence of performance cards.
- Apply planimeter and Simpson's rule to calculate curve areas.
- Recognize common mistakes and possible errors when assessing engine performance.
- Record essential data accurately during performance measurements.
- Use performance cards to plan engine component maintenance.
- Understand and compare actual results with sea trial data.



Guidelines:

- Emphasize practical relevance by linking theory to onboard practice
- Use real ship examples to illustrate incorrect card readings and common mistakes
- Encourage discussion on maintenance planning decisions
- Present calculations step by step with worked examples



Entry Standards:

- Chief Engineers (CE)
- Second Engineers (2E)
- Third Engineers (3E)



Certification:

- Certificate of Attendance issued upon successful completion of all tests and exercises.



Facilities:

- Virtual classroom (via Zoom), large display screens, handouts



Course Duration:

- 2 days (5 hours per day, total 10 hours)



Teaching Method:

- Classroom lectures and case study discussions



Assessment:

- Formative assessment through daily exercises (card readings and small calculations)
- Summative assessment with a final exercise: complete engine performance analysis and recommendations
- Feedback session to review mistakes, clarify doubts, and develop corrective strategies



Venue:

- This course is delivered in-house on a regular basis.
- For upcoming schedules, please contact the Training Department at crewtraining@zolarship.com