

**MASSACHUSETTS MARITIME ACADEMY**  
**INTERNAL COMBUSTION ENGINES I, EN2232**  
**SYLLABUS AND COURSE POLICIES**

**Instructor:** Cdr. William Eident, Professor, Chief engineer, steam, motor and gas turbine, any horse power

**Texts:** *Diesel Engines*, volumes I and II, for ship propulsion and power plants, Author; Kees Kuiken

**Office:** 217 Harrington Bldg.

**Office hours:** Monday, Wednesday, Friday; 1200 to 1300

**COURSE GOALS;**

1. To prepare the student to correctly **start, operate and maintain** a marine diesel engine.
2. To prepare the student to **trouble shoot and repair** marine diesel engines.
3. To prepare the student to **pass the USCG administered third assistant marine engineers license exam.**

**TOPIC**

- |   |                      |
|---|----------------------|
| 1. Introduction to the diesel engine.   | Chapters 1 and 2     |
| 2. Operating principles, 2 and 4 stroke | Chapter 3            |
| 3. Efficiencies and losses              | Chapters 4 and 5     |
| 4. Diesel power plants                  | Chapter 18           |
| 5. Construction and terminology         | Chapters 6, 7 and 28 |
| 6. Bedplates and construction           | Chapter 30           |
| 7. Combustion and emissions             | Chapter 22           |
| 8. Maintenance and repairs              | Chapter 27           |
| 9. Air supply                           | Chapter 12           |
| 10. Fuels and fuel injection systems    | Chapters 8 and 9     |

Grade	letter	cumulative as per catalog
90 TO 100	A	4
87 TO 89.9	A-	3.67
84 TO 86.9	B+	3.33
81 TO 83.9	B	3
78 TO 80.9	B-	2.67
75 TO 77.9	C+	2.33
72 TO 74.9	C	2
69 TO 71.9	C-	1.67
66 TO 68.9	F	1.33
63 TO 65.9	F	1
60 TO 62.9	F	0.67
0 TO 59.9	F	0

STCW COURSE

# Volume 2

## Chapter 4 Steam Plants

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# Academic Calendar AY 2011/2012

Revised 3-31-2011

## 2011 Fall Term (73 Days)

Sunday-Thursday	7-18 August	MAPS
Saturday	20 August	Begin Freshmen Regimental Orientation, Class of 2015
Wednesday-Friday	31 August-2 September	Freshmen Mini-Cruise
Saturday	3 September	Orientation Graduation
Monday	5 September	Labor Day – Freshmen Report at 1600
Tuesday	6 September	Faculty Forum, Freshmen Academic Orientation
Tuesday	6 September	3/C report at 1400, 1/C and 2/C report at 1500
Wednesday	7 September	Commence Classes 0800, Add/Drop begins
Wednesday	14 September	Last Day to Add Classes
Saturday	17 September	Homecoming
Wednesday	28 September	Last Day to Drop Classes
Saturday	1 October	Open House
Sunday	2 October	4/C Recognition / Family Day
Monday	10 October	Columbus Day - Holiday, No Classes
Monday-Friday	17-21 October	Registration for Winter Term
Tuesday	18 October	Deficiencies due to Registrar by 1000
Saturday	22 October	Open House
Monday	24 October	Uniform Change - Summer to Winter
Thursday	10 November	<b>Observe Friday Academic Schedule</b>
Friday	11 November	Veterans' Day - Holiday, No Classes
Monday-Friday	14 November - 2 December	Advising and Registration for Spring Term
Tuesday	15 November	Last Day to Withdraw from Classes
Saturday	19 November	Open House
Tuesday	22 November	Commence Thanksgiving Break after Last Class
Monday	28 November	Resume Classes
Sunday	4 December	Athletic Open House
Thursday	15 December	End Academics (All Classes)
Friday	16 December	Begin Final Examinations (All Classes)
Thursday	22 December	Last day, Final Examinations
Friday	23 December	Final Grades Due to Registrar's Office by 0900
Tuesday	27 December	Academic Board Meets – 0900
Tuesday	27 December	End Fall Term

## 2012 Winter Term (Sea Term 52 days)

Tuesday	3 January	Winter Sea Term Begins - All Classes Report
Sunday	8 January	Ship Departs Buzzards Bay
Monday	9 January	Commence Winter Academic Session (DGCE)
Monday	16 January	Martin Luther King, Jr. Day – Holiday
Friday	17 February	End of Winter Academic Session (DGCE)
Sunday	19 February	Ship Arrives Buzzards Bay – Arrival Day Open House
Monday	20 February	Presidents' Day – Holiday
Thursday	23 February	End Winter Sea Term

## 2012 Spring Term (75 Days)

Tuesday - Friday	21-24 February	Late Registration for Spring Term, New Transfer Student Orientation
Sunday	26 February	Cadets Report – 4/C at 1300, 3/C at 1400, 1/C & 2/C at 1500
Monday	27 February	Academic Orientation – Faculty/Staff/Cadets
Tuesday	28 February	Commence Classes 0800, Add/Drop begins
Tuesday	6 March	Last Day to Add Classes
Tuesday	20 March	Last Day to Drop Classes
Saturday	7 April	Welcome Aboard
Monday	9 April	Uniform Change – Winter to Summer
Wednesday	11 April	<b>Observe Friday Academic Schedule</b>
Thursday	12 April	Commence Patriots' Day Weekend after last class
Monday	16 April	Patriots' Day Holiday - No Classes
Tuesday	17 April	<b>Resume Classes</b>
Tuesday	17 April	Mid-Term Deficiencies due to Registrar's Office by 1000
Monday - Friday	23 April - 11 May	Advising and Registration for Fall Term
Friday-Saturday	27-28 April	Environmental Symposium
Saturday	5 May	Open House
Monday	7 May	Last Day to Withdraw from a Course
Monday - Thursday	14-18 May	License Examinations - Suspend Academic Classes <b>(Class of 2012 License Candidates only)</b>
Monday	28 May	Memorial Day Holiday – No Classes
Tuesday	29 May	<b>Observe Monday Academic Schedule</b>
Wednesday	6 June	End Academics (All Classes)
Thursday	7 June	Begin Final Examinations (All Classes)
Wednesday	13 June	Final Examinations End
Thursday	14 June	Final Grades due to Registrar's Office by 0900
Saturday	16 June	Graduation, Class of 2012
Monday	18 June	Academic Board Meets – 0900
Friday	22 June	End Spring Term