

2008 PROGRAM OUTCOMES ASSESSMENT SUMMARY REPORT

PROGRAM: MARINE ENGINEERING -CERTIFICATE

DATE: 11 JANUARY 2008

DEMONSTRATION OF LEARNING: *What assignments or projects demonstrate student learning outcomes are achieved?*
[Note: evidence of learning contained in Assessment methods and Findings sections.]

Learning Outcomes	Assessment methods
<p>Satisfy the training requirements of QMED (Qualified Member Engineering Department) endorsements</p>	<p>The U.S. Coast Guard competency standards and assessments are integrated throughout the curriculum except for the English and Math courses which are independent courses required by the college. Coast Guard questions are included in the finals for all other courses.</p> <p>Performance testing is conducted during at-sea practicum MGO 147 and MGO 177</p> <p>MGO 200 – Internship at sea; students are assigned positions on industry ships. Coast Guard assessment embedded with Coast Guard competencies matrix. Program Letter of Completion details eligibility for STCW, MMD and each endorsement.</p> <p>These assessments apply to all of the following learning outcomes.*</p>
<p>Satisfy the training requirements of Seafarers' Training, Certification and Watch keeping (STCW) Code, including at-sea internship), and having completed basic safety training.</p>	<p>*</p> <p>Safety training and assessment are done through two courses, and integrated throughout the program. MGO 103 (Survival Craft) is a day long safety training at sea, MGO 113 (Marine Safety).</p>
<p>Demonstrate ability to obtain the unlicensed ratings of oiler, junior engineer, refrigerating engineer, electrician, and pump man without further testing.</p>	<p>*</p>

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Be eligible without further testing for fireman/water tender if their 60-day at-sea student internship is on steam vessels.	*
Be eligible to examine for Designated Duty Engineer Limited – 1000 Horsepower, provided they can present 4 months of sea service as QMED.	*

EXTERNAL EVIDENCE? *Alumni, employer, Curriculum Review, Technical Advisory Committee feedback?*

Technical Advisory Committee – representatives from industry meet quarterly keep program informed about changes in industry and changes in regulations and standards.

U.S. Coast Guard – establishes competency standards for all certifications and endorsements and reviews program on a regular basis.

International Maritime Organization (IMO) – issues the MMD (Merchant Mariners Document) with endorsements

Standards and Training Certification of Watchkeeping issues the STCW certificate – ratings form part of a navigational watch endorsement.

FINDINGS: *What have you learned from your outcomes assessment activities?*

The majority of students complete the program with certifications and endorsements enabling them to enter industry positions with starting salaries of \$55,000 to \$75,000 per year.

Students indicate they are well prepared for both their internships and for employment when they complete the program.

Employer satisfaction is high as indicated by specific feedback on internship evaluations.

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The Coast Guard is beginning to make changes in the recertification process for the mariner. Industry input is part of the process and the recertification process is on-going. There is no deadline for this process. Delete the sentence "

Industry changes include new technology and larger vessels which should be integrated into program curriculum.

ACTIONS TAKEN: *What program changes have you made in the last three years? -- WHAT WAS THE IMPETUS FOR CHANGE?*

The program proposed a new facility to accommodate the changing needs of the program for space, equipment, technology and industry demand for qualified workers. The building replacement is #1 on the State list and by March, 15, 2009 the decision to allocate funds will be finalized. Building will take place 2010-2011.

The program adjusts curriculum to accommodate industry demands. For example, commercial boats are getting bigger, platforms are more complex, crews are smaller, and there is demand for greater technical competencies. Curriculum changes that respond to these developments are initiated through changes in Coast Guard standards and competencies lists.

ACTIONS PLANNED: *What program changes or new assessment activities are you planning for next year?*

As a result of the Coast Guard recertification requirements, the program will be introducing a continuing education program to prepare marine engineers for the recertification exams.

The new building will allow for expanded work and classroom space, updated equipment and technology, but new faculty must be hired to accommodate demand for increased enrollment. Two additional full time faculty will be required to meet these demands.

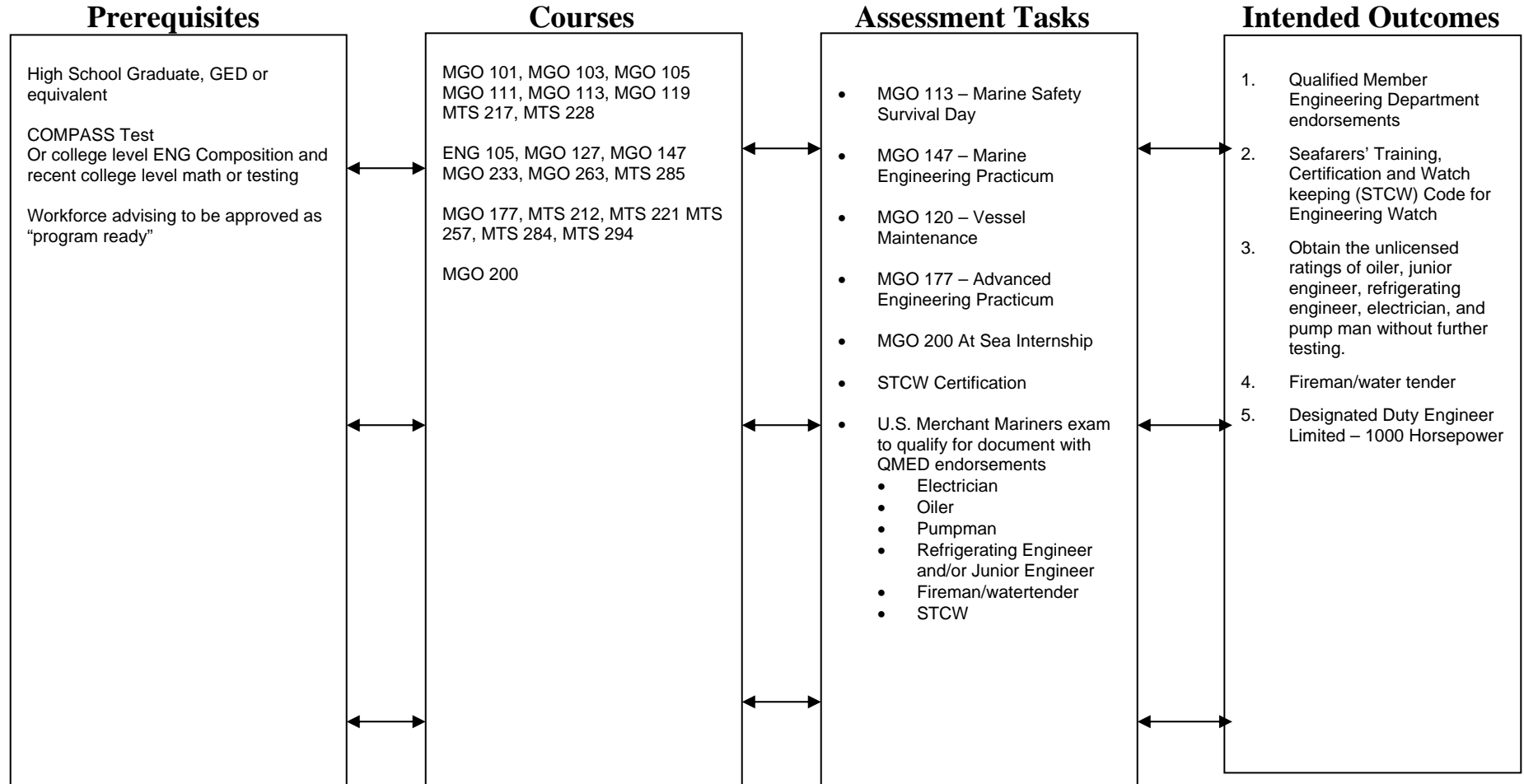
Program Name:

Marine Engineering - Certificate

Revised 11 January 2008

Theme(s): Safety and survival; technical competence; shipboard culture and protocol; cooperation and teamwork; leadership

Program Role: Prepares students for employment in the maritime industry as professional mariners.



What must students understand to demonstrate the intended outcome?

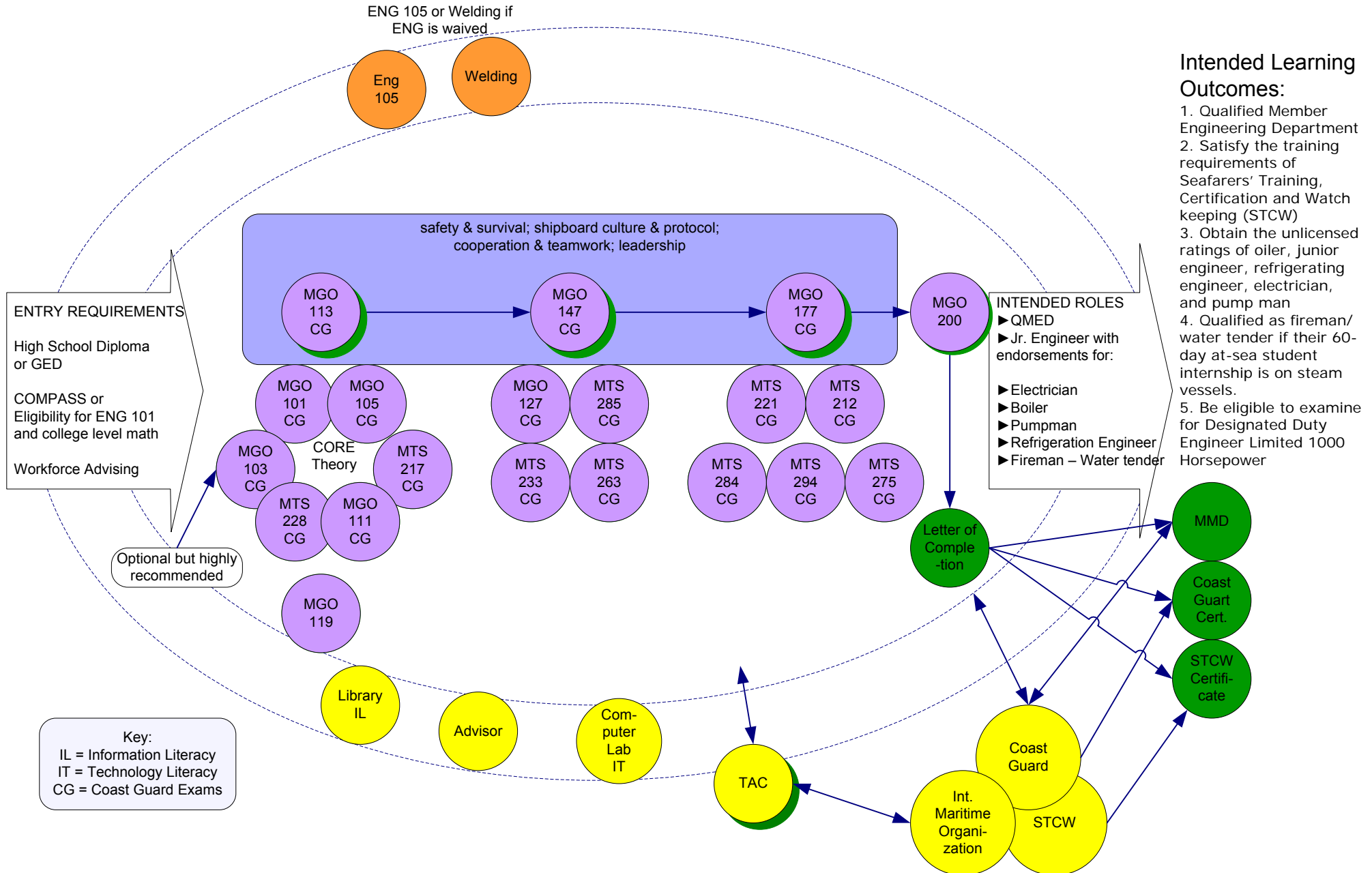
What skills must students master to demonstrate the intended outcome?

What will students do in here to demonstrate evidence of the outcome?

What do students need to be able to DO "out there" that we're responsible for "in here"??

Program: Marine Engineering - Certificate

Snapshot on: 11 January 2008



Program Assessment Inventory

Program: Marine Engineering – Certificate

Assessment methods used to determine that students are prepared to succeed and that they have achieved the program learning outcomes when they complete degrees or certificates.

	<i>Early program</i>	<i>Mid program</i>	<i>End of program</i>
<i>Students are prepared to learn (prerequisites)</i>			
ASSET test scores			
COMPASS test scores	<i>x (or transcripts)</i>		
SLEP test scores			
Other?			
<i>Students are assessed as they move through the program</i>			
Competencies assessment	<i>Coast Guard competencies testing embedded</i>		
Internship feedback			<i>MGO 200</i>
Pre-Mid-Post assessment	<i>ongoing</i>		
Service Learning experience feedback			
Student course evaluations	<i>quarterly</i>		
Student focus groups			
Student grades	<i>quarterly</i>		
Student interviews			
Student self assessment			
Student surveys			
<i>Students are assessed as they complete the program</i>			
Completion statistics			
Capstone projects			
Graduation statistics			
Portfolios			
Presentations			
<i>External assessment data is collected</i>			
Transfer rates			<i>by college</i>
Employer surveys			
Technical Advisory Committee	<i>meets quarterly</i>		
License certification success rates			<i>by college</i>
Performance in 4 year programs			
Employment rates			<i>x</i>
Salary statistics			<i>union rates*</i>
Survey of former students			<i>informal</i>
Other?	<i>*\$55,000 to \$75,000 to start</i>		

Marine Engineering Technology – Certificate

2006 Learning Outcomes

Graduates successfully completing the Marine Engineering Technology Certificate will:

1. Satisfy the training requirements of 46 CFR 12.15-7 for QMED (Qualified Member Engineering Department) endorsements provided they present documentary evidence of at least 90 days engine room service while enrolled in the program (30 days on SMA's training vessels plus 60 days during the student at-sea internship).
2. Satisfy the training requirements of Section A-III/4 and Table A-III/4 of the Seafarers' Training, Certification and Watch keeping (STCW) Code, Specification of Minimum Standard of Competence for Ratings Forming Part an Engineering Watch, provided they also present evidence of having been assessed in the related practical demonstrations, at least 60 days of engine room service (during the student at-sea internship), and having completed basic safety training.
3. Demonstrate their ability to obtain the unlicensed ratings of oiler, junior engineer, refrigerating engineer, electrician, and pump man without further testing.
4. Be eligible without further testing for fireman/water tender if their 60-day at-sea student internship is on steam vessels.
5. Be eligible to examine for Designated Duty Engineer Limited – 1000 Horsepower, provided they can present 4 months of sea service as QMED.