



“Whoever commands the sea, commands the trade; whosoever commands the trade of the world commands the riches of the world, and consequently the world itself.”

Sir Walter Raleigh



Ocean Engineering Systems Management

Leaders for Global Operations track in Ocean Engineering Systems Management

A new track for graduate students beginning in fall 2012. Graduates of this track will earn a dual degree from the MIT department of Mechanical Engineering and the MIT Sloan School of Management while also completing a six-month internship at an industry partner site.

There is a high demand today in the ocean industry, especially in shipping, for highly skilled managers with a strong technical background. The shipping industry is thriving: over 70% of all trade by volume in the USA is conducted by ships, accounting for more than \$3 trillion of economic activity annually. In the European Union the percentage of goods carried by ships is even higher, while trade between the USA and Europe with Asian countries is expected to double by 2025.



Think like an engineer. Act like a leader.

LGO's integrated curriculum is designed to build leadership from the ground up, beginning with a broad academic foundation necessary for world-class companies to excel in manufacturing and operations, from probability and statistics to finance and marketing.

The Ocean Engineering Systems Management track provides students with the opportunity to focus their engineering program and to develop knowledge and skills valued by companies and required in today's global environment.

Students are also expected to integrate knowledge from both the technical and the management spheres for a variety of practical applications — from designing a product to creating and implementing an operations strategy.

Skills learned in class are put to the test during the LGO internship, where students are challenged to employ their leadership skills to tackle projects for partner companies and conduct research contributing to the master's thesis.

Department of Mechanical Engineering

Massachusetts Institute of Technology
Building 3-174
Email: me-gradoffice@mit.edu
Website: <http://meche.mit.edu/>

Leaders for Global Operations

Massachusetts Institute of Technology
Building E40-315
Email: lgo@mit.edu
Website: lgo.mit.edu



24-month dual-degree Master's program
(MBA or SM in Management; SM in Mechanical Engineering)

Four semesters on campus

Internship:

Six months at company site during first Spring and Summer, or first Summer and second Fall

Operations and Manufacturing

(from concept through production, delivery, & service)

Thesis research conducted during internship with two faculty advisors assigned

one from the Department of Mechanical Engineering,
one from the School of Management

LGO Summer Courses:

15.064 Engineering Probability and Statistics

15.066 Systems Optimization and Analysis for Operations

ESD.60 Creating High-Velocity Organizations

ESD.930 Special Module on Lean/Six Sigma Methods

2.701 Principles of Naval Architecture

Two Classes in propulsion and/or manufacturing from:

2.611 Marine Power and Propulsion

2.810 Manufacturing Processes and Systems

2.830 Control of Manufacturing Processes

2.875 Mechanical Assemblies

ESD.267/ESD.268 Supply Chain Planning/Manufacturing System and Supply Chain Design

One course in Design from:

2.703 Principles of Naval Ship Design

2.739 Product Design and Development

2.744 Product Design

Other Mechanical Engineering subjects

for total of 72 units