

MIT/ Woods Hole Joint Program in Oceanography and Applied Ocean Science and Engineering

The [Joint Program of the Woods Hole Oceanographic Institution](#) (WHOI) and the Massachusetts Institute of Technology offers advanced degrees in oceanography and applied ocean science and engineering. Graduate study encompasses virtually all of the basic sciences as they apply to the marine environment: physics, chemistry, geology, geophysics, and biology. Students who choose applied ocean science and engineering may concentrate in the major fields (civil, environmental, mechanical/ocean, and electrical engineering). More than 160 scientists/faculty from the two institutions participate in the joint program. There are currently 123 students enrolled in the five areas of study offered: biological, chemical, or physical oceanography; marine geology and geophysics; and oceanographic engineering.

Since all MIT faculty involved in the joint program are members of an academic department, their individual accomplishments and awards are reported through those departments. These include the departments of Civil and Environmental Engineering, Mechanical Engineering, Electrical Engineering and Computer Science, Biology, and Earth, Atmospheric, and Planetary Sciences.

Major Improvements/Enhancements to Joint Program Videoconferencing Facility

The Joint Program has a dedicated videoconferencing/distance education classroom located in Room 24-411, which is used year-round for classes, special events and meetings between MIT and WHOI. The original Tandberg equipment in the facility was purchased in 2002, and was state-of-the-art at that time. Addressing the need to replace the old equipment with High Definition (HD) compatible components, the Joint Program has installed the following:

- A single, large-screen display replacing two small-screen TVs
- A ceiling-mounted projection screen in both the front and the rear of the room
- A second HD camera to enhance the viewing of shared documents
- Laptop inputs (front and rear)
- A new high-resolution document display
- A wireless-mike system which will be compatible with the newly-mandated FCC frequency
- Front and rear outputs for auto-recording of classes
- New audio components which produce more evenly-distributed sound
- Front-of-room lectern with custom A/V inputs which can be adjusted for height
- Centralized touch-screen panels which allow the user to control the input/output of the presentation

These enhancements were completed in time for spring term. They provide increased flexibility and ease of use for both students and faculty who make extensive use of our videoconferencing facility throughout the year.

Strategic Planning Committee's Final Report on 2009 External Review

The strategic planning committee comprised of faculty and scientists from both MIT and WHOI formed to address the topics raised in last year's external review of the program has issued their final report. Key recommendations include:

- Create a Joint Program Education Council to oversee joint aspects of program governance
- Establish a Joint Program faculty comprising members from MIT and WHOI who actively participate in program
- Facilitate interdisciplinary research by implementing a more flexible curriculum and a general exam format with customized content
- Promote the Joint Program and highlight timely themes in oceanography by creating and maintaining an engaging and effective Joint Program website
- Broaden the Joint Program with cooperative links to other graduate programs at MIT (e.g., Program in Atmospheres, Oceans, and Climate, Geobiology, and Microbiology) and to policy programs at MIT and WHOI
- Include the Joint Program in strategic planning at MIT and WHOI (hiring, courses, fundraising)

The directors are organizing discussions on how and whether to implement the proposed recommendations, to be completed before the end of September. In addition, to implement one of the recommendations, the directors are organizing a one-day retreat for late September/early October to introduce new staff at both institutions to each other, to familiarize them with the "old hands" active in the program, and to inform them about the capabilities and facilities of each institution.

Edward Boyle

Director

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Ronni Schwartz

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