Center for Maritime Systems
Stevens Institute of Technology

The Center for Maritime Systems is a truly unique research and education center that combines the fields of naval architecture, coastal and ocean engineering, physical oceanography, and marine hydrodynamics to create a trans-disciplinary enterprise that can address both the highly-specialized issues confronting each discipline, as well as the more complex, integrated issues facing natural and man-made maritime systems. The CMS addresses the issues affecting the health, both economic and environmental, and the physical security of ports and waterways worldwide. The focus of the activities involves marine craft hydrodynamics, observing systems, field investigations, environment modeling, acoustic detection, and port security and commerce.

GRADUATE PROGRAMS

Master's of Engineering Degree in Ocean Engineering
Master's of Engineering Degree in Maritime Systems
Doctor of Philosophy Degree in Ocean Engineering

UNDERGRADUATE PROGRAMS

Bachelor of Engineering Degree in Naval Engineering

RESEARCH HIGHLIGHTS

New York Harbor Observation and Prediction System (ONR funded)
The Atlantic Center for the Innovative Design and Control of Small Ships (ONR funded)
New Jersey Coastal Protection Technical Assistance Service (Funded by the State of New Jersey)
Stevens-NJ Sea Grant Cooperative Extension in Coastal Processes (NJMSC/NOAA funded)
New Jersey Coastal Monitoring Network (Funded by the State of New Jersey)
New York Harbor Contaminated Sediments Study (NJDEP & NJDOT funded)
Ferry Wake Analysis and Mitigation in New York Harbor (NJDOT OMR funded)
Improving the NYC Urban Dispersion Program Meteorological Network (DHS funded)

DAVIDSON LABORATORY

Founded in 1935, the Davidson Laboratory at Stevens Institute of Technology is one of the largest and most renowned hydrodynamics and ocean engineering research facilities in the world. The facility is comprised of two large scale modeling basins; a 320 foot long High-speed Towing & Wave Tank and a 75-foot square Rotating Arm and Oblique Sea Basin. Pioneering studies in both physical modeling and computer simulation of marine craft designs ranging from high speed planning boats to submarines have contributed to the Laboratory's international reputation. Contributions to the field of ocean engineering include wave tank simulations of various sea states and the analysis of forces on offshore structures. Today, the Laboratory continues to be a pioneer in the study of advanced hydrodynamics through the study of computational fluid dynamics, acoustics, coastal and environmental processes, and boundary layer turbulence.

Stevens Institute of Technology is a 134-year-old private university in Hoboken, N.J., that specializes in Technogenesis, a term it has trademarked. Technogenesis is defined as "the educational frontier where students, faculty and industry jointly nurture new technologies from concept to realization." For more news about Stevens Institute of Technology visit www.stevens.edu