

## Panel 16:

# Natural Disasters, Coastal Infrastructure and Emergency Management (NDCIEM)

Topic: Coastal and Ocean Engineering Programs:  
Relative Focus on Natural Disasters

## Panel 16: NDCIEM

Moderator:

Robert W. Whalin, Ph.D., P.E.

Panel Members:

Billy L. Edge, Ph.D, P.E. (Texas A&M University)

Robert G. Dean, Ph.D, P.E. (University of Florida, Emeritus)

Margery Overton, PH.D, P.E. (North Carolina State University)

J. Richard Weggel, Ph.D., P.E. ( Drexel University)

## Panel 16: NDCIEM

### Academic Programs Reviewed

- Drexel University
- University of Rhode Island
- University of Delaware
- Johns Hopkins University
- Old Dominion University
- North Carolina State
- University of North Carolina
- Duke University
- University of South Carolina
- University of Florida
- University of Miami
- University of South Florida
- Florida Institute of Technology
- Florida Atlantic University

## Panel 16: NDCIEM

### Academic Programs Reviewed

- California Institute of Technology
- University of South Alabama
- University of New Orleans
- Louisiana State University
- Texas A&M University
- Texas A&M Corpus Christi
- Texas A&M Galveston
- University of San Diego
- University of California Berkeley
- Stanford University
- University of Washington
- University of Hawaii
- Stevens Institute of Technology
- Oregon State University

## Panel 16: NDCIEM Example Courses

University of Rhode Island – Volcanoes and the Environment;  
Volcaniclastic Sedimentation;

Johns Hopkins University – Wind Engineering;  
Earthquake Engineering;

University of South Florida – Design of Structures to Resist Natural Hazards;  
Natural Disasters;

Florida Atlantic University – Coastal Hazards;

University of New Orleans – Ocean and Coastal Engineering;  
The Geography of Hazards & Disasters;  
Planning for Hazards;

Texas A&M Corpus Christi – Living with Coastal Hazards;

University of San Diego – Natural Disasters;

## Panel 16: NDCIEM Example Courses

Louisiana State University -Hurricane Engineering;  
Research in Disaster Science and Management;  
Directed Reading in Disaster Science and  
Management;  
Natural Hazards and the Built Environment;

University of California Berkeley –  
Structural Dynamics and Earthquake Engineering;  
Earthquake Hazard Mitigation;  
Earthquake-Resistant Design;  
Advanced Earthquake Analysis;  
Geotechnical Earthquake Engineering;  
Natural Hazards and Problems;

Stevens Institute of Tech. -Multi-Hazard Engineering;  
Coastal and Flood Plain Engineering;  
Earthquake Engineering Design;

## Panel 16: NDCIEM Example Courses

- University of Washington - Living with Volcanoes;  
Volcanic Processes;  
Volcanoes and Glaciers of the Pacific Northwest;  
Earthquakes;  
Geologic Hazards;  
Wind Engineering Design;
- University of Hawaii - Natural Hazards;  
Volcanoes in the sea;  
Volcanology;  
Natural Disasters: Geoethics and the Layman;  
Explosive Volcanism;  
Disaster Management: Understanding the Nature of  
Hazards;

## Panel 16: NDCIEM

Jackson State University

B.S. Civil Engineering

Civil Engineering Track

Environmental Engineering Track

Coastal Engineering Track

(Focus on Natural Disasters)

## Panel 16: NDCIEM

Jackson State University

Coastal Engineering Track

Required Courses:

Introduction to Coastal Natural Disasters

Wave Theory (Linear/Spectral)

Introduction to Coastal Processes

Coastal Engineering Design I

## Panel 16: NDCIEM

Jackson State University

M.S Engineering (Coastal Engineering)

Required Courses:

Coastal Engineering Design II

Introduction to Hurricane Engineering

Long Waves and Tides

Analysis of Coastal Natural Disasters in Southeast USA