

# HECTOR J. CRUZ, PE, MSCE

## EDUCATION:

Master of Science Civil Engineering (MSCE), May, 1998  
Emphasis on Structural Engineering  
University of Puerto Rico - UPR- (ABET Accredited)  
Cum laude GPA: 3.70/ 4.00

Bachelor of Science Civil Engineering (BSCE), May 1996  
University of Puerto Rico - UPR- (ABET Accredited)  
Cum laude GPA 3.13/ 4.0

## LICENSURE:

Registered Professional Engineer -PE- in the State of Florida  
Registered Professional Engineer -PE- in the Commonwealth of Puerto Rico

## PROFESSIONAL ENGINEERING WORK EXPERIENCE:

Project Engineer, November 2008 – Present

The Pepper Engineering Group, Inc (Miami, FL)

- Perform forensic engineering assessment of damaged structures.
- Over 175 investigative assignments completed, including: hurricane damage, roof damage, flooring failures, water intrusion, and fire damage among others.

Independent Consultant, June 2008 – November 2008

- Consulting engineering services, including land development for CKE Group, Inc (Miami Lakes, FL).

Senior Structural Engineer, September 2007 – June 2008

Principle Design & Development, (West Palm Beach, FL)

- Design of residential projects and medical facilities
- Review of engineering documents, as part of in-house quality assurance program
- Construction administration services
- Review of shop drawings and clarification/ resolution of construction issues

Senior Structural Engineer, January 2007 - July 2007

Douglas Wood & Associates, (Coral Gables, FL)

- Development of structural design plans by researching, analyzing, selecting and applying structural engineering concepts, approaches, technologies and criteria

- Check for compliance of building components & cladding (including impact resistant doors and windows) to meet applicable ASCE-7 wind pressures.
- Design of new construction and historic preservation
- Conceptual design of two pedestrian bridges in compliance with AASHTO and local regulation, including design specifications and preliminary design of sub-structure/ foundation

Principal - Senior Structural Engineer, 2005-2007

HCA Structural Services, PSC, (San Juan, Puerto Rico)

- Founder of consulting firm, providing engineering design services to architects, owners/ developers and builders
- Design of a wide range of projects, including single-family homes, low-rise multi-family buildings and warehouses
- Performed structural assessments of deteriorated structures, including repair recommendations/ specifications

Part-Time Professor/ Lecturer, 1998-2006\*

Polytechnic University of Puerto Rico, (San Juan, Puerto Rico)

- Taught undergraduate courses in Civil Engineering.
- \* Offered courses in 1998, 1999, 2000, 2002 and 2006.

Senior Structural Engineer/ Executive Assistant, 2000-2001

CSA North America, (Cincinnati, Ohio)

- Performed structural assessment of industrial facilities -steel mill- (AK Steel), Dayton, Ohio
- Review of engineering documents
- Provide administrative support to company CEO

Structural Engineer, 1999-2000

Erwin Rodriguez & Associates, (San Juan, Puerto Rico)

- Structural design of Utuado Arena, with an estimated capacity of 4,000 persons
- Structural design of various housing projects
- Evaluation of innovative system (precast concrete panels -Waffle-Crete- and their connections), considered to be used for low-income housing projects

Junior Structural Engineer, 1998-1999

CSA Architects & Engineers, (San Juan, Puerto Rico)

- Structural design of water/ environmental infrastructure
- Design of low-rise multi-family buildings

NON-RELATED EXPERIENCE:

Pilot, 2001-2005

PROFESSIONAL AFFILIATIONS:

Professional College of Engineers and Land Surveyors of Puerto Rico  
("Colegio de Ingenieros y Agrimensores de Puerto Rico" -CIAPR-)

RESEARCH:

Performed research on ways to reduce the seismic response of buildings  
using Tuned Mass Dampers (TMD's)

Publication: EFFECT OF TUNNED MASS DAMPERS ON THE SEISMIC RESPONSE  
OF BUILDINGS

CODES:

▪FBC

▪NDS

▪ACI-318

▪ASCE 7

▪AISC

▪UBC

COMPUTER SKILLS:

▪ETABS

▪STAAD

▪SAFE

▪AutoCad

▪RISA

▪MathCad

LANGUAGES:

Bilingual: English & Spanish