The National Society of Structural Engineers Associations (NCSEA) is pleased to present the 2013 survey of schools and colleges throughout the United States. The schools surveyed offer educational opportunities for students desiring to become professional civil/structural engineers. NCSEA has sponsored the survey since 2002. Curriculum on which the survey is based is primarily that which practicing engineers have determined as appropriate for structural engineering students working to obtain recognition as a structural engineer in the workplace. Although the emphasis of the National Council of Structural Engineers Associations is on those structural engineers in the vertical and horizontal construction aspects of the industry, structural engineers have prominent roles in other related fields such as the airframe industry and industrial machine design.

For those following the progress of structural engineering education in the United States, it has long been recognized that the emphasis and focus of curriculum, and curriculum content, is constantly under review. Readers of STRUCTURE, NCSEA’s monthly STRUCTURAL CONNECTION publication, and attendees at the NCSEA annual conference and Institutes have observed the ebb and flow of the process. Since the 2010 survey, NCSEA has gathered opinions from structural engineers and instructors regarding:

- Offering a single course split in Masonry and Timber
- Expanding the core curriculum to include non-traditional structural materials such as aluminum and cold formed steel
- Accepting the substitution of computers as an educational tool to improve the student’s understanding of structural function, in lieu of Matrix Methods
- Changing the two concrete courses to be two core requirements for Cast-In-Place Concrete or reducing the demands within Concrete 1 and retaining Concrete 2 for Prestress Post-Tensioning.

And, for the first time, the 2013 survey sought to determine school interest in a student version of the structural certification available to registered engineers (SECB certification); 76% of responding schools expressed interest in the program.

Change follows discussion, and systematized discussion results in consensus. This same process established NCSEA’s proposed curriculum over 10 years ago, and it is the process that will lead to modifications in the current curriculum, adjustments in school and college programs, and changes in the mindset of practitioners.

Parents as well as students use the survey to help plan for the future. Readers of this article and participants in the survey are effective in maintaining its relevance.

NCSEA is considering making the survey timelier by conducting a web based survey every year for two years, followed by a detailed interactive response survey from schools every 3rd year. We hope you enjoy reading the 2013 survey, studying the curriculum, and commenting on both.

For the current proposed curricula and past survey results, visit www.structuremag.org/EducationSurveys.aspx.

NCSEA and its Education Committee would like to receive your thoughts on the current state of the proposed curricula and the latest survey results. Please send your comments to NCSEA.Education@structuremag.org.
### Full Curricula

The following is a list of schools/Universities who responded directly to the 2013 survey AND who have indicated that they provide the full curricula as proposed by the NCSEA Education Committee.

#### University

- Arizona State University
- Auburn University
- Clemson University
- California Polytechnic State University
- California State University, Fresno
- Colorado State University
- Colorado State University – Fort Collins*
- Columbia University in the City of New York*
- Kansas State University
- Michigan Technological University
- Milwaukee School of Engineering
- Missouri University of Science and Technology*
- Montana State University
- New Jersey Institute of Technology
- New Mexico State University
- North Carolina State University
- Oregon State University
- Rose-Hulman Institute of Technology
- Sacramento State*
- Texas A&M University
- University of Alabama
- University of Arkansas*
- University of Detroit Mercy*
- University of Florida
- University of Kansas
- University of Maine*
- University of Minnesota
- University of Nevada Las Vegas
- The University of New Hampshire
- University of North Carolina at Charlotte
- University of Southern California
- University of Texas at Austin
- University of the Pacific
- University of Washington
- University of Wisconsin-Madison
- University of Wisconsin-Milwaukee
- University of Wyoming

* The schools/universities who did not respond directly to the 2013 survey, yet do list courses which comprise the full curricula (as determined by a review of the school’s website).

### Partial Curricula

The following is a list of schools/Universities who responded directly to the 2013 survey but who have indicated that they do not provide the full curricula as proposed by the NCSEA Education Committee. The Table indicates which courses are, or are not, offered.

<table>
<thead>
<tr>
<th>University</th>
<th>Analysis 1</th>
<th>Analysis 2</th>
<th>Matrix Methods</th>
<th>Steel Behavior and Design 1</th>
<th>Steel Behavior and Design 2</th>
<th>Concrete Behavior and Design 1</th>
<th>Concrete Behavior and Design 2</th>
<th>Timber Behavior and Design</th>
<th>Masonry Behavior and Design</th>
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* The table continues on the next page.
Schools/universities who have indicated that they do not provide the full curricula as proposed by the NCSEA Education Committee, continued.

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Schools/universities who have indicated that they do not provide the full curricula as proposed by the NCSEA Education Committee, continued.

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The following is a list of schools/universities who did not respond directly to the 2013 survey, and do not list the full range of courses which comprise the full curricula (as determined by a review of the school’s website).

Alabama A&M
Arkansas State University
Berkeley University of California
Blue Mountain Community College
Bradley University
Brigham Young University
Broome Community College
Brown University
Cal State Long Beach
Cal State University - Northridge
California Tech
California State University - Fullerton
California State University - Los Angeles
Carnegie Mellon University
Case Western Reserve University
Catholic University of America
Central Connecticut State University
Central Piedmont Community College
Christian Brother University
Cincinnati Technical College
The Citadel
City University of New York
Clarkson University
College of San Mateo
Cornell University
CSU Chico
District of Columbia University
Drexel University
Fairleigh- Dickinson University
Fairmont State University
Florida Institute of Technology
Georgia Institute of Technology
George Washington University
Georgia Southern University
Horry-Georgetown Technical College
Howard University
Iowa State University
Johns Hopkins University
Lakeland Community College
Lamar University
Louisiana State University

continued on next page
Schools/universities who do not list the full range of courses which comprise the full curricula, continued.

Louisiana Tech University
Loyola Marymount University
Manhattan College
Massachusetts Institute of Technology
Merrimack College
Metropolitan State College
Miami University
Michigan State University
Middlesex County College
Mississippi State University
Missouri Western State University
Morgan State University
Murray State University
Nassau Community College
North Carolina A&T State University
North Dakota State University
Northwestern University
Norwich University
Oregon Institute of Technology
Penn State
Pennsylvania State University- Dunmore
Polytechnic Institute of New York University
Portland State University
Prairie View A&M University
Pratt Institute
Princeton University
Purdue University
Rice University
Roger Williams University
Rowan University
San Diego State University
San José State University
Sandhills Community College
Seattle University
South Carolina State University
Southern Illinois University
Southern Methodist University
Southern Polytechnic State University
Stanford University
Swarthmore College
Syracuse University
Temple University
Tennessee State University
Tennessee Tech University
Texas A & M University
Texas Tech University
Tulane University
United States Air Force Academy
United States Coast Guard Academy
United States Military Academy - West Point

University at Buffalo, The State University of New York
University of Akron
University of Alabama - Birmingham
University of Alabama - Huntsville
University of Alaska Fairbanks
The University of Arizona
University of California, Los Angeles
University of Central Florida
University of Cincinnati
University of Colorado
University of Connecticut
University of Delaware
University of District of Columbia
University of Hawaii
University of Hawaii Manoa
University of Illinois at Chicago
University of Illinois at Urbana-Champaign
The University of Iowa
University of Louisville
University of Maryland
University of Massachusetts Amherst
University of Massachusetts Dartmouth
University of Massachusetts Lowell
University of Memphis
University of Missouri
University of Nebraska Omaha
University of Nebraska-Lincoln
University of Nevada, Reno
The University of New Orleans
University of Notre Dame
University of Oregon
University of Pennsylvania
University of Pittsburgh
University of Pittsburgh Johnstown
The University of Rhode Island
University of South Carolina
University of Southern Indiana
University of Tennessee - Knoxville
University of Tennessee - Martin
The University of Texas at Arlington
University of Texas at El Paso
The University of Utah
University of Virginia
University of Wisconsin - Platteville
Utah State University
Vanderbilt University
Villanova University
Virginia Military Institute
Walla Walla University
Washington State University
Wayne State University
Wentworth Institute of Technology
West Virginia University Institute of technology
Western Kentucky University
Widener University
Youngstown State University