



Practical Applications of Structural Dynamics in Accordance with the Latest Codes and Standards

COURSE DESCRIPTION:

Authored by Timothy W. Mays, Ph.D., P.E., *Practical Applications of Structural Dynamics* is a comprehensive and example filled design guide on everything from simplified to extremely detailed applications of structural dynamics to the design of structural systems including but not limited to buildings, bridges, marine structures, foundation systems, antiterrorism systems, and even retrofitting structures to reduce vibrations. The new, standalone publication contains page after page of comprehensive technical content and easy to read theoretical applications followed by practical design examples. All relevant code provisions (e.g., 2015 IBC, 2014 AASHTO, 2017 MOTEMS) for applying the approaches used in the guide are fully presented in the guide. Simplified design aids are also included in the publication.

Part I of the course provides a detailed overview of structural dynamics as needed to fully understand the material presented in the book and to make the remaining portions of the course very easy for the attendee to follow. Part II of the course presents simplified, yet code compliant, applications of structural dynamics to the design of marine structures and other structures where impact is the prime concern. Part III moves into the world of linear and nonlinear analysis and the design of structural systems for blast loads. A comparison of example problem results for nonlinear static versus traditional dynamic methods used by engineers is also presented in this section. Part IV covers all remaining topics to include, but not limited to, floor vibrations, structural system vibrations, and soil structure interaction with an emphasis on preventing damage from pile driving. Please note that although adequate theoretical background is given during the course, those wanting a more developed understanding of the applications presented in the course and those wanting additional topics plus more example problems on the topics discussed in the course should definitely consider purchasing the optional course text.

Course hours are approved for all states including FL and NY through the National Council of Structural Engineers Associations. All attendees will receive one copy of *Practical Applications of Structural Dynamics*. If you want a better understanding of the dynamic analysis and design of a variety of structural systems from one source that ties it all together, you don't want to miss this opportunity.

Space is limited. Please register early.

WHAT DO ATTENDEES RECEIVE?

- 4.0 Professional Development Hours
- Binder of complete course notes and example problems worked during the course
- Access to freeware used for some topics
- Breakfast
- Textbook (*Practical Applications of Structural Dynamics*)

SCHEDULE:

- 7:30 – 8:00 am Registration and Breakfast
- 8:00 – 9:00 am Introduction to Structural Dynamics
- 9:00 – 10:00 am Ship and Other Impact Applications
- 10:00 – 11:00 am Blast, Antiterrorism, and Other Applications
- 11:00 – 12:00 pm Floor, System, and Pile Driving Applications

COURSE INSTRUCTOR:

Timothy Wayne Mays, Ph.D., P.E. is President of SE/ES and a Professor of Civil Engineering at The Citadel in Charleston, SC. Dr. Mays previously served as Executive Director of the Structural Engineers Associations of South Carolina and North Carolina. He currently serves as NCSEA Publications Committee Chairman. He has received three national teaching awards (ASCE, NSPE, and NCSEA) and both national (NSF) and regional (ASEE) awards for outstanding research. He is the recipient of the 2009 NCSEA Service Award. He is a prolific speaker who participates in code development and his areas of expertise are code applications, structural design, seismic design, steel connections, structural dynamics, and civil engineering aspects of antiterrorism.



Structural Engineering
and Education Solutions, LLC

National Council of
Structural Engineers Associations



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Registration Form

DATE AND LOCATION:

Wednesday
March 29, 2017 @ 7:30 a.m.

Federal Reserve Bank
Ten Independence Mall
100 North 6th Street
Philadelphia, PA 19106
**Enter on the 6th Street side and
bring identification for security.**

To Register, please complete the application below and mail it with your payment to DVASE at 1231 Highland Avenue, Fort Washington, PA 19034. You may also pay via PAYPAL using the link in the cover email.

Name: _____
Company: _____
E-mail: _____
Address: _____
City: _____ State: _____ Zip: _____
Daytime Phone: _____
Amount Enclosed with Check: _____
FL or NY License Number(s) (for reporting hours): _____

COST:

EARLY BIRD – REGISTER AND PAY BY MARCH 17

\$165 – DVASE Members
\$200 – Non-Members

BEGINNING MARCH 18

\$190 – DVASE Members
\$225 – Non-Members

Discounts are available for firms sending multiple attendees. Please call DVASE office @ 215-628-9844 or email bsagusti@barrhorstman.com if you are sending 3 or more registrants from the same firm. Enter Additional Attendee Names Here: _____

DELAWARE VALLEY ASSOCIATION OF STRUCTURAL ENGINEERS

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