

Locations and Accommodations:

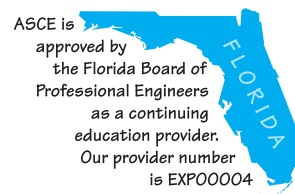
*rate subject to cut-off dates and apply only the day before and the days of the seminar, with check-out on the last day of the seminar.

LAS VEGAS, NV/ JANUARY 15-16, 2004

Alexis Park Resort
375 East Harmon Ave
Las Vegas, NV 89109
800-582-2228
ASCE Hotel Rate:
\$109 Single/Double*

TAMPA, FL/ FEBRUARY 12-13, 2004

Hyatt Regency Tampa
Two Tampa City Center
Tampa, FL 33602
800-233-1234
ASCE Hotel Rate:
\$139 Single/Double*



SAVE 10% Send three or more from the same organization and save 10% on each enrollment

ASCE offers more than 500 online courses on a wide variety of technical, management, and regulatory topics. These courses are available through ASCE's distance learning partnerships. For a complete listing of these courses or to register, please go to:

www.asce.org/conted/distancelearning/

ASCE members receive discounts of 15% or more on most online courses.

REGISTRATION INFORMATION:

ENROLLMENT: Phone, fax or mail your registration. Registration fee must be paid in advance. We accept credit cards, checks, and purchase orders (paperwork required). Make check payable to "ASCE Continuing Education." See registration form for additional information.

ON-SITE ENROLLMENT: If your schedule does not permit you to register in advance, you may register on-site. Although this does not guarantee that you will receive all course materials that day, they will be mailed to you 2-3 weeks after the seminar. PLEASE be sure to contact ASCE at 1-800-548-2723 no later than the day before the seminar to confirm that the seminar is going forward as planned.

CONFIRMATION LETTER: Registrations received at least two weeks prior to the seminar will be confirmed in writing. You should receive confirmation within 10 business days of your registration; if not confirmed, please call.

TIME: 8:30am – 4:30pm. Registration begins at 8:00am.

CERTIFICATES: Earn 1.4 Continuing Education Units (CEUs). (1 Continuing Education Units = 1 Professional Development Hour)

TEAM DISCOUNTS: Three people from the same company attending the same seminar location and date can receive a 10% discount off each enrollment fee when registering at the same time. Larger discounts will be negotiated for larger groups.

RENTAL CARS: ASCE has negotiated special rates with Hertz, the official car rental company for ASCE Continuing Education. A brochure with instructions will be enclosed with confirmation letter.

INSTRUCTOR SUBSTITUTION: ASCE reserves the right to substitute an equally qualified instructor should unforeseen circumstances require.

CANCELLATIONS/REFUND POLICY: If you need to cancel your registration, please contact us as early as possible. Cancellations must be made in writing on your company letterhead with attendee's name, and the name and date of the seminar and faxed to 703-295-6144. There will be a charge of \$95 for cancellations within 10 business days of the seminar and no refunds for cancellations within 5 business days of the seminar. You can transfer the registration to another date or seminar, but this must be done before the 5-day deadline in order to receive full credit for monies paid. No transfers or refunds will be issued within 5 business days of the seminar. There will be no credits issued after the seminar has begun. Your registration may be transferred to another individual anytime, up to the first day of the seminar. If a non-member is replacing a member's registration, the non-member is responsible for the price difference. ASCE is not responsible for non-refundable expenses such as airfare, hotels, cancellation/transfer fees or any other expenses except for seminar registration fees. If ASCE cancels a seminar due to insufficient enrollment, your registration fee will be refunded.

HOTEL ACCOMMODATIONS: Please make your reservations early. ASCE negotiates discounted rates that are subject to cut off dates. Accommodations are not included in your registration fee.

DISCOUNTED AIRFARES: Use United Airlines and save money on airfares when traveling to ASCE Seminars. Call United Airlines Meeting Reservations Center at 1-800-521-4041, 7 Days a week from 7:00 am to 12:00 midnight eastern time. Refer to ID #557AG. If you wish to use a travel agency, you must tell your agent to book your reservation under the above ID# to receive your discount.

DRESS: Casual business attire is appropriate.

MEMBERSHIP: Go to www.asce.org to join ASCE and save on future continuing education opportunities. Enter 04CEUCAT in the promotion code section of the membership application.



1801 Alexander Bell Drive
Reston, Virginia, 20191-4400

Bridge Rehabilitation

ASCE Individual Member # _____

[ASCE membership numbers are NOT TRANSFERABLE within any given company]

PE: Yes No PhD: Yes No

Name _____

(ASCE membership numbers are NOT TRANSFERABLE within any given company)

Title _____ Nickname for Badge _____

Company _____

Address _____

City _____ State _____ Zip _____

Telephone _____ Fax _____

Email _____

Payment Information: Must be complete before processing can occur

A check for \$ _____ is enclosed.

Charge my credit card:

Please fill in mail code

Card Number: _____

Exp. Date: _____

Name (exactly as it appears on card): _____

(above name on label)

If Faxing, a copy of check or purchase order is required.

34BR214

Locations: Please check one

- Las Vegas, NV / January 15-16, 2004
 Tampa, FL / February 12-13, 2004

Fees: Please check one

- Members \$935
 Non-Members \$1,135

ASCE Distance Learning:

Wind Loads Online Course
 \$399 M \$499 NM

Designing Modern Timber Bridges
 \$276 Ind \$899 Org*

Earthquake Protective Design
 \$135 M \$165 NM

(add \$7.50 for shipping first item, \$2.00 each additional item)*

*additional cost outside the USA and for overnight delivery.

Please route to a colleague who will benefit by attending.

**Individual/Organization price. If purchased at the individual price, the course may be used solely by the individual for educational purposes. It may not be duplicated, sold, or rented to others.

How to reach us:

Mail: ASCE Continuing Education
P.O. Box 79536, Baltimore,
Maryland 21279-0536

Phone: 1-800-548-2723
703-295-6300 (international)

Fax: 703-295-6144

Email: conted@asce.org

Please do not remove mailing/label/
Mail-FAX entire panel back with registration info



Continuing Education
ASCE

NEW SEMINAR Bridge Rehabilitation

Las Vegas, NV / January 15-16, 2004

Tampa, FL / February 12-13, 2004

- Gain an understanding of overall bridge rehabilitation procedures
- Learn existing bridge condition evaluation
- Learning decision-making models
- Learn state-of-the-art bridge rehabilitation techniques

1.4
CEUs

Bridge Rehabilitation

Purpose and Background

With rapid aging of the national highway infrastructure, states and local governments are spending more and more money on bridge rehabilitation. Currently, most states spend more money on bridge replacement and rehabilitation than building new bridges. This trend will certainly continue.

Bridge rehabilitation design differs from new bridge design in many ways. It requires a very high degree of knowledge and skill in structure condition evaluation, structural analysis, application of new materials, maintenance of traffic (staged construction), construction methods, and project lifecycle cost analysis. All of these are project specific, and require sound judgment to develop the best design alternative. Because of the complexity, most universities do not offer undergraduate or graduate courses on this subject.

This two-day seminar covers subjects such as: structure condition evaluation, bridge load rating and rehabilitation analysis, state-of-the-art rehabilitation techniques, alternative analysis models, new material applications, construction methods and constructability analysis, and project lifecycle cost analysis.

Seminar Benefits:

- Gain an understanding of overall bridge rehabilitation procedures
- Learn existing bridge condition evaluation
- Learning decision-making models
- Learn state-of-the-art bridge rehabilitation techniques

Who Should Attend?

Structural engineers and bridge designers, project managers, bridge owners, transportation policy or decision makers, and other bridge engineering professionals

Seminar Instructor:

JIM J. ZHAO, P.E. is a chief bridge engineer with Nolan Associates, Inc., a structural and civil engineering firm in Ellicott City Maryland. He is in charge of bridge design and overall project management for the firm. He received his master's degree from University of Ottawa, and his undergraduate degree from Tongji University. Mr. Zhao has eighteen years of experience in design, teaching and research in structural engineering. He has authored several articles on this subject. He is licensed in Maryland, Massachusetts, West Virginia, Texas, Maine and Canada. He serves on ASCE-ACI joint committees on "Concrete Bridge Design" and on "Pre-stressed Concrete Design".

His recent publications include: Timber Bridge Design, published by RedVector, 2002; Project Risk Management, published by RedVector, 2002; Bridge Design Basic (AASHTO LRFD), published by RedVector, 2001. Besides these, he co-authored: State-of-the-Art Report on Partially Prestressed Concrete, ACI 423.5R-99, 1999; Recommendations for Concrete Members Prestressed with Unbounded Tendons, ACI 423.3R-96, 1996; Analysis and Design of Reinforced Concrete Bridge Structures, ACI 343R-95, 1995.



Wind Loads Online Course

This course is an online version of the popular ASCE workshop. Topics include wind effects (e.g., Bernoulli's equation, patterns over buildings, and effects of roof geometry), basic design wind speed, design wind loads, how to use the ASCE-7 standard (plus three worked solutions), frequently asked questions, other codes, and where to get further information. After completing this course, you will be able to: explain basic air flow concepts and the effects of wind on structures; describe and calculate different wind speed measures; describe and calculate the parameters of the design wind speed equations, and; use the standard to calculate design wind loads. **8.0 PDHs.**

Designing Modern Timber Bridges

This video course examines the different types of timber bridge superstructures in use today, the basics of wood as an engineering material, and the different types of structural wood products, wood mechanical connections, and preservative treatments. Design procedures for wood construction are also reviewed. The course focuses on the design of two main types of timber bridge superstructures: 1) those composed of longitudinal girders with transverse decks, and 2) those composed of longitudinal decks. The course covers the use of sawn lumber and glued-laminated timbers in both of these main superstructure types. The course concludes with a discussion of issues related to timber bridge inspection, maintenance, and rehabilitation. **6-hour video. 0.6 CEUs.**

Earthquake Protective Design

In this 90-minute video, leading experts on seismic design examine the causes of earthquakes, techniques to evaluate the seismic performance of new and existing structures, and strategies to reduce the risk of loss due to earthquakes. **.15 CEUs.**



In-House Presentations

Let us come to you.

This seminar can be:

- Presented at your organization
- Scheduled at your convenience
- Tailored to the needs of your staff

An on-site program can reduce the per person cost by more than 25% and your total training cost by 50%.

Call ASCE Continuing Education at: **1-800-548-2723**

SUMMARY OUTLINE

DAY 1

Introduction

- Define seminar objective
- Brief review of bridge rehabilitation procedures
- Bridge files (records)
- Bridge inspections
- Condition evaluation and load rating analysis
- Load rating examples

New Materials and Techniques

- Substructure rehabilitation
- Superstructure rehabilitation
- Earthquake retrofitting design
- Applications of new construction materials and construction methods

Staged Construction

- MOT introduction
- Design procedures
- Construction consideration
- Bearings and deck joints
- Example problems and solutions

DAY 2

Decision Making Models

- Decision matrix
- Lifecycle cost analysis
- Risk analysis
- Replacement vs. rehabilitation
- Examples

Case Studies

- Case study 1 – Kanawha River Bridge Replacement / Rehabilitation Project, Charleston, West Virginia.
- Case study 2 – Casselman River Bridge Rehabilitation, on US 40, Maryland.



For a complete listing of Continuing Education seminars, visit ASCE's website at: **www.asce.org/conted/**