

*ExecEng*<sup>SM</sup>

*Symbol of Leadership Excellence in Engineering*

**APPLICATION FOR THE DESIGNATION OF  
*ExecEng*<sup>SM</sup> (EXECUTIVE ENGINEER)**



AMERICAN COUNCIL OF ENGINEERING COMPANIES

1015 15TH STREET NW, 8TH FLOOR

WASHINGTON, DC 20005-2605

(202) 347-7474

WWW.ACEC.ORG

Special Note: State law and regulation differ by jurisdiction. Although attainment of MgtEng<sup>SM</sup> or ExecEng<sup>SM</sup> designations requires a professional engineer license, use of the designation suffix on letterhead, business cards, etc., may only be appropriate for states where the professional engineer holds current registration. If you have any questions, please check with the state licensing board for further clarification.

## PROGRAM

---

ACEC has established the designation ExecEng<sup>SM</sup> (for Executive Engineer) to recognize the singular attainment of experience, education and leadership by worthy individuals in the engineering industry. To earn the designation, individuals must meet the high standards and specific requirements listed herein, submit a completed application and be duly recognized by the Designation Review Board.

ACEC also administers two other management-oriented designations - MgtEng<sup>SM</sup> (Management Engineer) and MgtPro<sup>SM</sup> (Management Professionals), which have requirements that are distinct from the ExecEng<sup>SM</sup> designation.

## ELIGIBILITY

---

To earn the designation of ExecEng<sup>SM</sup> (Executive Engineer), you must have:

1. A valid Professional Engineer (PE) license.
2. Completed a minimum of 300 Professional Development Hours (PDHs) of continuing education in eight (8) of the 12 Knowledge Domains or a Masters/ Doctorate degree in a related field plus 200 PDHs. (Refer to the Appendix for Knowledge Domains and examples.) To have PDHs counted for a single Knowledge Domain, applicant must have at least 7.5 hours of continuing education in that Domain.

The PDHs must be recognized by an accredited education provider such as the National Council of Examiners for Engineering and Surveying (NCEES), International Association for Continuing Education and Training (IACET), or Accreditation Board for Engineering and Technology (ABET).

3. Fifteen (15) to twenty (20) years of experience, including leadership role(s) in a corporate, nonprofit or government organization that is related to engineering or public policy, including the delivery of presentations, papers, or the drafting of articles reaching diverse audiences on engineering, business or public policy issues.
4. Successfully completed one of the following leadership development programs:
  - ACEC Senior Executives Institute (SEI) program; or
  - Recognized university leadership development program (minimum 45 PDHs); or
  - Comprehensive leadership program (minimum 45 PDHs) that is offered by the State Organizations of ACEC; or
  - Other equivalent program as reviewed and accepted by the Designation Review Board.

## RENEWALS

---

In order to stay up-to-date with the latest trends and developments in the industry, it is important for professionals to continue their education.

Designations are valid for a period of three years. To maintain your designation, you must obtain at least 15 PDHs per year - or 45 PDHs every three years - in accordance with Model Law, published by the National Council of Examiners for Engineering and Surveying (NCEES).

Designees are responsible for maintaining supporting documents and records to verify attendance. Records should reflect the type of activity, sponsoring organization, location, date of completion, instructor information, as well as PDH credits earned. PDH records should be recorded and stored at [www.rcep.net](http://www.rcep.net); simply log in as a Basic (free) subscriber. Transcripts may be produced at [www.rcep.net](http://www.rcep.net) for easy designation renewal; simply upgrade to a Power subscription to take advantage of this feature.

At the end of the three-year period, designees should renew by completing the form available for download at [www.acec.org](http://www.acec.org) and submitting the \$100 renewal fee along with proof of PDH history. PDH history may be submitted via an RCEP.net issued transcript or by presenting copies of certificates of completion.

Designations that are not renewed at the end of the three-year period will lapse. Professionals whose designations have lapsed must re-apply in order to obtain the designation.

## INSTRUCTIONS

---

1. Read the entire application kit before you begin completing the application.
2. Pay the non-refundable application fee
  - \$350 ACEC Member
  - \$450 Non-ACEC Member
3. Submit your completed and signed application with payment to:  
The American Council of Engineering Companies  
Attn: Manager, Continuing Education System  
1015 15th Street NW, 8th Floor  
Washington, DC 20005-2605
4. Attach copies of your resume, Professional Engineer (PE) license, Professional Development Hours (PDHs) transcripts/certificates, college or university transcripts of advanced degree(s), and three recommendation letters.

## FREQUENTLY ASKED QUESTIONS ON THE *ExecEng*<sup>SM</sup> (EXECUTIVE ENGINEER) DESIGNATION

### 1. What is the purpose of ExecEng<sup>SM</sup> (Executive Engineer) designation?

The American Council of Engineering Companies (ACEC), a premier national association with a 100-year history of advocacy for the engineering industry, offers the designation of ExecEng<sup>SM</sup> to recognize the accomplishments of leaders in the engineering industry. Achievement of the ExecEng<sup>SM</sup> designation recognizes that the individual has attained the required experience, education and leadership as required under the program and as defined under the 12 ACEC Knowledge Domains (see Appendix of the Application Kit for a complete listing).

### 2. What are the benefits of earning the designation of ExecEng<sup>SM</sup> (Executive Engineer)?

Following are some of the benefits of earning the designation of ExecEng<sup>SM</sup>:

- ExecEng<sup>SM</sup> designation is the highest level of achievement in the business management of engineering. Designation holders achieve the highest credential and differentiate themselves from other leaders practicing in the engineering field.
- The ExecEng<sup>SM</sup> designation shows your commitment to engineering leadership and exemplifies your ability to remain at the forefront of the engineering business management profession.
- A designation holder receives permission from the American Council of Engineering Companies (ACEC) to use the ExecEng<sup>SM</sup> designation suffix on letterhead, business cards and all forms of address.
- The ExecEng<sup>SM</sup> designation holder is issued a certificate attesting to his/her leadership excellence in the field of engineering, which may be framed and displayed as evidence of the attainment.

### 3. Am I eligible to become an ExecEng<sup>SM</sup> (Executive Engineer) designation holder?

To qualify for the ExecEng<sup>SM</sup> designation, you must meet the following requirements:

- a. A valid Professional Engineer (PE) license.
- b. Completion of at least 300 Professional Development Hours (PDHs) of continuing education in eight (8) of the 12 Knowledge Domains OR an advanced degree (Master's/Doctorate) in a related field plus 200 PDHs.
- c. Fifteen (15) to twenty (20) years of experience, including leadership role(s) in a corporate, nonprofit or government organization that is related to engineering or public policy, including presentations, papers and articles addressing diverse audiences on engineering, business or public policy issues.
- d. Successful completion of a leadership development program, such as ACEC Senior Executives Institute (SEI) program, a recognized university leadership professional development program (minimum 45 PDHs), comprehensive leadership programs offered by the ACEC's State Organizations (minimum 45 PDHs), other equivalent executive programs as acceptable to the Designation Program Review Board.

**4. What type of continuing education activities are acceptable to fulfill the requirement of Professional Development Hours (PDHs)?**

The following types of continuing education activities relevant to the ACEC’s 12 Knowledge Domains are acceptable:

Acceptable Continuing Education Activities	Maximum Allowed PDHs
1. College and University-level on-site and online courses	
a. Semester-based course	45 PDHs/Course
b. Quarter-based course	30 PDHs/Course
2. Short courses/tutorials/distance-education courses offered through correspondence, television, videotape and the Internet	1 PDH/Hour of Activity
3. Attending relevant seminars, conventions, conferences, workshops and in-house courses	1 PDH/Hour of Attendance
4. Teaching or Presenting*	
a. College and university-level on-site and online courses	90 PDHs/Course
b. Continuing education on-site and online courses	60 PDHs/Course
c. Short courses/tutorials/distance-education courses offered through correspondence, television, videotape and the Internet	2 PDHs/Hour of Teaching
d. Seminars, conventions, conferences, workshops and in-house courses	2 PDHs/Hour of Presenting
5. Authoring	
a. Published paper or article	5 PDHs/Paper or Article
b. Published book	10 PDHs/Book
6. Active participation in a professional or technical society/association	2 PDHs/Year
7. Patent	10 PDHs/Patent

\* Teaching credit is valid for the first offering or presentation.

**NOTE:**

- If you attend courses that use Continuing Education Units (CEUs), please note that for conversion purposes, 1 CEU = 10 PDHs.
- If you attend courses that use Professional Development Units (PDUs), please note that for conversion purposes, 1 PDU = 1 PDH.

**5. What are the 12 Knowledge Domains?**

The 12 Knowledge Domains are as follows:

- |                                      |  |
|--------------------------------------|--|
| 1. Business Management & Quality     | 8. Communications & Information Technology                 |
| 2. Technical (STEM), Health & Safety | 9. Marketing & Business Development                        |
| 3. Public Policy & Industry Issues   | 10. Project Management & Project Delivery                  |
| 4. Finance & Economics               | 11. Engineering Futures/Forecasting & Engineering Heritage |
| 5. Human Resources                   | 12. Cross Domain Topics & Multi-Disciplinary Issues        |
| 6. Leadership & Ethics               |  |
| 7. Contracts & Risk Management       |  |

**6. Where I can find more details on the 12 Knowledge Domains?**

The details on all 12 Knowledge Domains are provided in the attached Appendix.

**7. How can I organize my continuing education credits?**

ACEC and NCEES have created an online educational management system called the Registered Continuing Education Program (*www.rcep.net*). The system allows the individual applicant to organize continuing education credits and past experience in a format that is held electronically over time. Those applicants not enrolled in a system such as RCEP will need to submit paper-based attestations or certificates showing successful accomplishment of required continuing education courses.

**8. What type of Leadership Program offered by the State Organizations of ACEC is acceptable?**

A leadership program which covers ACEC recognized Knowledge Domains and complies with the criteria established by the American Council of Engineering Companies, and comprehensively covers engineering leadership issues (minimum 45 PDHs).

**9. For how long does my ExecEng<sup>SM</sup> (Executive Engineer) designation remain valid?**

The Designation is valid for three years, and renewable for another three, etc., with subsequent renewals upon the payment of the renewal fee, as long as continuing education PDH requirements are met. Check the renewals section for details.

**If you have additional questions, please email us at [ExecEng@acec.org](mailto:ExecEng@acec.org).**

# APPLICATION CHECKLIST & PAYMENT FORM

Applicant must submit the following checklist and fee payment form with the completed application.

## APPLICATION CHECKLIST \_\_\_\_\_

Check if you have:

- Read the entire application kit
- Completed the application in its entirety
- Signed your application
- Enclosed the application fee
- Enclosed your resume
- Enclosed a copy of your Primary Professional Engineer (PE) license
- Enclosed copies of Professional Development Hours (PDHs) transcripts/certificates
- Enclosed a copy of your advanced degree transcripts
- Enclosed three recommendation letters
- Addressed your application package to:  
The American Council of Engineering Companies  
Attn: Manager, Continuing Education System  
1015 15th Street NW, 8th Floor  
Washington, DC 20005-2605

## PAYMENT FORM \_\_\_\_\_

Please select one:

- I am affiliated with a member organization of the American Council of Engineering Companies (ACEC) and my \$350 application fee is enclosed.  
ACEC-Member Organization Name: \_\_\_\_\_

- I am not affiliated with a member organization of the American Council of Engineering (ACEC) Companies and my \$450 application fee is enclosed.

Please select one:

- Check made payable to the American Council of Engineering Companies
- Visa Card       MasterCard       American Express

\_\_\_\_\_  
Credit Card Number

\_\_\_\_\_  
Expiration Date

\_\_\_\_\_  
Name as it appears on the card (please print)

\_\_\_\_\_  
Signature

PRINT: \_\_\_\_\_  
Last Name \_\_\_\_\_  
First Name \_\_\_\_\_  
Primary PE License # \_\_\_\_\_  
Date \_\_\_\_\_





## APPLICATION FORM for ExecEng<sup>SM</sup> DESIGNATION

### ACADEMIC QUALIFICATIONS

---

Please list your academic qualifications beginning with your most advanced degree. Submit copies of your advanced degree(s) transcripts.

<u>College or University</u> Name/Location	<u>Degree</u> Designation	<u>Degree</u> Major/Minor	<u>Date of Degree Awarded</u> Month/Year

### CONTINUING EDUCATION

---

Please list your continuing education activities which pertain to the 12 Knowledge Domains provided in Appendix. Attach additional sheet(s), if more space is needed. Submit copies of continuing education transcripts/certificates for each listed activity.

<u>Start Date</u> (Month/Day/Year)	<u>End Date</u> (Month/Day/Year)	<u>Title/Topic of</u> <u>Continuing</u> <u>Education Activity</u>	<u>Number of Professional</u> <u>Development Hours</u> (PDHs)	<u>Knowledge Domains</u> (Select from the list provided in Appendix)	<u>Provider/Sponsor of</u> <u>Continuing Education</u> <u>Activity</u>

# APPLICATION FORM for ExecEng<sup>SM</sup> DESIGNATION

## RELEVANT EXPERIENCE

Please, provide employment information beginning with your current or most recent position. Submit a chronological resume which includes an employment history with start and finish dates for each listed position. If more space is needed, please attach additional sheet(s).

TOTAL YEARS OF RELATED EXPERIENCE: \_\_\_\_\_

A. Current or Most Recent Position \_\_\_\_\_

Start date: \_\_\_\_\_ / \_\_\_\_\_      End Date: \_\_\_\_\_ / \_\_\_\_\_  
(Month)      (Year)                                      (Month)      (Year)

Brief Description of Responsibilities \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Company/Organization Name \_\_\_\_\_

Company/Organization Address \_\_\_\_\_  
Street

City                                      State                                      Zip Code

B. Previous Position \_\_\_\_\_

Start date: \_\_\_\_\_ / \_\_\_\_\_      End Date: \_\_\_\_\_ / \_\_\_\_\_  
(Month)      (Year)                                      (Month)      (Year)

Brief Description of Responsibilities \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Company/Organization Name \_\_\_\_\_

Company/Organization Address \_\_\_\_\_  
Street

City                                      State                                      Zip Code

## APPLICATION FORM for ExecEng<sup>SM</sup> DESIGNATION

C. Previous Position \_\_\_\_\_

Start date: \_\_\_\_\_ / \_\_\_\_\_  
(Month) (Year)

End Date: \_\_\_\_\_ / \_\_\_\_\_  
(Month) (Year)

Brief Description of Responsibilities \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Company/Organization Name \_\_\_\_\_

Company/Organization Address \_\_\_\_\_

Street

\_\_\_\_\_  
City

State

Zip Code

D. Previous Position \_\_\_\_\_

Start date: \_\_\_\_\_ / \_\_\_\_\_  
(Month) (Year)

End Date: \_\_\_\_\_ / \_\_\_\_\_  
(Month) (Year)

Brief Description of Responsibilities \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Company/Organization Name \_\_\_\_\_

Company/Organization Address \_\_\_\_\_

Street

\_\_\_\_\_  
City

State

Zip Code

# APPLICATION FORM for ExecEng<sup>SM</sup> DESIGNATION

## LEADERSHIP DEVELOPMENT PROGRAM \_\_\_\_\_

Please provide the following information about a leadership development program that you have completed and submit a copy of transcript or certificate of completion.

Start Date (Month/Day/Year)	End Date (Month/Day/Year)	Location	Title of Leadership Development Program	Provider/Sponsor of the Program

## PROFESSIONAL CONTRIBUTIONS - Part A \_\_\_\_\_

Professional contributions include publishing articles, papers, books, and presentations to diverse audiences.

### Articles/Papers/Books:

List each article, paper, and book you have written and published. Please provide the following information reference for each listed article, paper, and book. Attach additional sheet (s) if needed.

- Title of Article/Paper/Book \_\_\_\_\_  
 Publication \_\_\_\_\_  
 Date of Article/Paper/Book \_\_\_\_\_
  
- Title of Article/Paper/Book \_\_\_\_\_  
 Publication \_\_\_\_\_  
 Date of Article/Paper/Book \_\_\_\_\_
  
- Title of Article/Paper/Book \_\_\_\_\_  
 Publication \_\_\_\_\_  
 Date of Article/Paper/Book \_\_\_\_\_
  
- Title of Article/Paper/Book \_\_\_\_\_  
 Publication \_\_\_\_\_  
 Date of Article/Paper/Book \_\_\_\_\_

# APPLICATION FORM for ExecEng<sup>SM</sup> DESIGNATION

## PROFESSIONAL CONTRIBUTIONS - Part B \_\_\_\_\_

### Presentations:

List your presentations, teaching, and speaking engagements reaching to diverse audiences.

- Title of Presentation \_\_\_\_\_  
Program/Meeting \_\_\_\_\_  
Program/Meeting Sponsor \_\_\_\_\_  
Program/Meeting Date \_\_\_\_\_ Location \_\_\_\_\_
- Title of Presentation \_\_\_\_\_  
Program/Meeting \_\_\_\_\_  
Program/Meeting Sponsor \_\_\_\_\_  
Program/Meeting Date \_\_\_\_\_ Location \_\_\_\_\_
- Title of Presentation \_\_\_\_\_  
Program/Meeting \_\_\_\_\_  
Program/Meeting Sponsor \_\_\_\_\_  
Program/Meeting Date \_\_\_\_\_ Location \_\_\_\_\_
- Title of Presentation \_\_\_\_\_  
Program/Meeting \_\_\_\_\_  
Program/Meeting Sponsor \_\_\_\_\_  
Program/Meeting Date \_\_\_\_\_ Location \_\_\_\_\_
- Title of Presentation \_\_\_\_\_  
Program/Meeting \_\_\_\_\_  
Program/Meeting Sponsor \_\_\_\_\_  
Program/Meeting Date \_\_\_\_\_ Location \_\_\_\_\_
- Title of Presentation \_\_\_\_\_  
Program/Meeting \_\_\_\_\_  
Program/Meeting Sponsor \_\_\_\_\_  
Program/Meeting Date \_\_\_\_\_ Location \_\_\_\_\_

## APPLICATION FORM for ExecEng<sup>SM</sup> DESIGNATION

### REFERENCES

Please provide recommendation letters from three references within the engineering industry who can attest to your leadership experience and qualifications as set forth in this application. Provide the following information about your references.

A. Name \_\_\_\_\_ Title \_\_\_\_\_

Company/Organization Name \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_ Email \_\_\_\_\_

B. Name \_\_\_\_\_ Title \_\_\_\_\_

Company/Organization Name \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_ Email \_\_\_\_\_

C. Name \_\_\_\_\_ Title \_\_\_\_\_

Company/Organization Name \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_ Email \_\_\_\_\_

### AFFIDAVIT

***Application must be signed in order to be processed.*** I hereby certify that all the information provided in this application, and all documents enclosed herewith, are true and accurate to the best of my knowledge. I understand that any misrepresentation on this application may preclude acceptance into the ExecEng<sup>SM</sup> (Executive Engineer) designation program, or may result in discharge from the program at any point.

Print Name \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

# APPENDIX

## 12 Knowledge Domains

### THE KNOWLEDGE DOMAINS

The American Council of Engineering Companies (ACEC) has established the following 12 Knowledge Domains that organize knowledge disciplines into areas of interest for engineers engaged in management and leadership:

1. Business Management & Quality
2. Technical (STEM), Health & Safety
3. Public Policy & Industry Issues
4. Finance & Economics
5. Human Resources
6. Leadership & Ethics
7. Contracts & Risk Management
8. Communications & Information Technology
9. Marketing & Business Development
10. Project Management & Project Delivery
11. Engineering Futures/Forecasting & Engineering Heritage
12. Cross Domain Topics & Multi-Disciplinary Issues

### BRIEF DESCRIPTION OF EACH KNOWLEDGE DOMAIN

- 1) Business Management and Quality: Business and quality management knowledge to effectively organize, develop, and administer an organization, project or program
- 2) Technical (STEM), Health & Safety: Technical science and engineering knowledge to ensure a technically sound project and safe work environment.
- 3) Public Policy and Industry Issues: Knowledge of the political and regulatory processes to facilitate the permitting, funding, delivery and operations of building, infrastructure and industrial projects and programs.
- 4) Finance and Economics: Effective knowledge for developing and administering organizational and project accounting, finance, and tax programs, and influencing engines of economic growth.
- 5) Human Resources: Knowledge for effectively leading, developing and administering personnel management, compensation, benefits, and other HR programs, including mentoring and motivating teams and individuals.
- 6) Leadership and Ethics: Knowledge, skills and attributes to improve individual leadership and organizational performance, while grounded in ethical principles and good business practices.
- 7) Contracts and Risk Management: Knowledge of legal and risk management issues, including contract law, legal institutions and risk assessment and mitigation.
- 8) Communications and Information Technology: Knowledge to effectively acquire, manage and deploy technology systems for information storage, data manipulation, CAD/BIM, communications, and firm operations, plus classical communications theory and knowledge.
- 9) Marketing and Business Development: Knowledge for conceiving, implementing and managing strategic and effective marketing, outreach and sales programs for organizations.
- 10) Project Management & Project Delivery: Theory and existing knowledge of project and program management for the built environment, plus sequential and integrated project delivery methodologies.
- 11) Engineering Futures/Forecasting & Engineering Heritage: History of engineering and science, as well as recognition of the heritage of knowledge and artifacts. Awareness of methods for devising future scenarios and trends forecasting
- 12) Cross-Domain Topics and Multi-Disciplinary Issues (such as sustainability): Topics and meta-disciplines that extend over multiple domains. An example would include the social, economic and technical challenges of a series of new fission plants located in Southern California.

## EXAMPLES OF EACH KNOWLEDGE DOMAIN

### 1. BUSINESS MANAGEMENT AND QUALITY

- Organizational structure I: legal forms of business, including corporation, partnerships, sole proprietorship, S-Corporation, LLC
- Organizational structure II: functional, geographic, client-based
- Fundamental business systems and procedures
- Successful recognition and monitoring of business “Vital Signs”
- Development of and adherence to quality standards
- Basic knowledge management
- Business succession and methods of owner transition
- Creating branch offices
- Advanced quality standards (Peer Review, ISO 9001, etc.)
- Interdisciplinary reviews of business performance
- Business Partnering and Joint Ventures
- Managing a multi-office operation
- Multi-profit centers vs. single profit center
- Increasing productivity and profits
- Ownership transition, business valuation, and mergers & acquisitions
- Managing international operations/global practice

### 2. TECHNICAL (STEM), HEALTH & SAFETY

- Principles of design (for specific engineering sub-discipline or type of project)
- Structural condition assessment
- Technical peer review
- OSHA construction standards competency training
- Wetlands and 404 permitting
- Soil & rock stability - angles of repose and shoring principles
- Stream investigation and analysis
- Water quality assessment
- Structural renovation of historic structures
- Fundamentals of earthquake engineering
- Hurricane, wind, and flood structures
- Security risk assessment for facilities
- Storm water requirements and compliance
- Principles of sustainable design
- Electrical systems - reliability and safety
- Mechanical systems - reliability and safety

### 3. PUBLIC POLICY & INDUSTRY ISSUES

- Political systems and public policy
- The legislative process
- Regulations and the built environment
- Public health and safety - legal precedents
- Budgeting in the public sector for capital projects
- Community involvement
- Civic activism and the engineering profession
- Topical industry issues

### 4. FINANCE AND ECONOMICS

- Introduction to generally accepted accounting principles
- Accounting for management
- An accountant’s guide to information technology
- Balance sheet and income statement prep
- Project compensation terms and invoicing (Fixed-price, cost plus fee, etc.)
- How to evaluate, select and implement a new financial and accounting system
- Accounting for project profitability
- Financial analysis for engineering firms
- Budgeting
- Overhead accounting
- Federal cost accounting standards
- Financial reporting: income statement, balance sheet, cash flows



- Cash management
- Internal financial controls
- Value pricing
- Corporate taxation
- Corporate governance
- Accounting for stock options
- Financial aspects of ownership transition
- Allowable and unallowable costs
- Risk management
- Deferred taxes
- Project financial controls
- Economic feasibility of projects

## 5. HUMAN RESOURCES

- Introduction to interviewing skills
- Employment law and diversity issues
- New employee orientation
- Employee aptitude testing and personality testing
- Workplace communication skills
- Fundamentals of performance management
- Employee handbooks
- Performance Management II (giving feedback, risk management)
- Conflict resolution
- Introduction to coaching & mentoring
- Recruiting stars
- Software for HR professionals
- Benefit programs: how to manage health care costs, outsourcing
- Develop and evaluate performance/personnel surveys
- Successful use of outside training for staff development
- Compensation programs (bonus, etc., best practices)
- Creating career development programs
- Managing retention
- Performance Management III: progressive discipline
- Advanced labor relations
- Developing and implementing an improved work place environment (“Just Break all the Rules”)
- Capitalizing on staff strengths and seniority
- Matrix vs. traditional organizational design and reporting

## 6. LEADERSHIP AND ETHICS

- Leadership fundamentals
- Managing staff and other departments
- Facilitation and negotiation
- Interpersonal communications
- Ethics & decision making
- Leadership styles and accountability
- Basic teamwork, team learning, and dialogue
- Cross-cultural business and human resources issues
- Mentoring and coaching
- Conflict resolution
- Teambuilding, collaboration and intense teamwork
- Problem solving and decision making
- Managing up, relationship dynamics, and political dynamics in firms
- Integration of self, career and firm
- Emotional intelligence
- Strategic thinking: visioning, mission development, and scenario planning
- Developing leaders: energizing inspiring and empowering others
- Personal mastery
- Leading for creativity and innovation
- Systems thinking
- Entrepreneurial thinking
- Building strategic partnerships and alliances

- Global practice
- Ownership transition and stakeholder issues

## **7. CONTRACTS AND RISK MANAGEMENT**

- Basics of contract documents
- Organizational structures (forms of doing business: corporation, partnership, sole proprietorship, S-Corporation, LLC, etc.)
- Joint ventures and teaming
- Using Engineers Joint Contract Documents Committee (EJCDC) and other contract documents
- Types of business insurance
- Risk management (Indemnity, Limitation of Liability, Waiver of Consequential Damages, Pay When Paid, Liquidated Damages)
- Professional liability insurance
- Electronic signatures, website security, and E-Delivery
- Construction site safety
- Tort law for design firms
- Case studies in legal issues
- Advanced contract issues
- Project failure: the many faces of risk
- Construction administration for engineers
- Identifying, assessing, and allocating risk
- Hot topics: Fair Labor Standards Act (FLSA), Financial Accounting Standards Board (FASB), tort reform, etc.
- Negotiating skills

## **8. COMMUNICATIONS AND INFORMATION TECHNOLOGY**

- How to manage email on design projects
- Fundamentals of IT systems
- Project management software
- IT management for a small firm or office
- Using email: Controlling spam and viruses: Protocols for productivity
- How technology can improve project management
- State-of-the-art management of design data
- Budgeting for IT
- IT operational issues
- Liability reduction/risk management: What role can IT play?
- Email policies: risk and security
- Design and delivery in an electronic world
- Leveraging technology for better marketing/business development
- Archiving considerations, document management and retention
- Advanced Internet and Intranet skills for A-E professionals
- Building Information Modeling (BIM)

## **9. MARKETING AND BUSINESS DEVELOPMENT**

- Selling to specific markets
- Bus Dev I: Fundamentals of Sales
- Bus Dev II: Fundamentals of Marketing
- Developing winning proposals
- Market research, tracking demographics, customer surveys
- Client relationship management (CRM)
- Developing a strategic marketing plan
- Developing a public relations program
- Communicating with clients
- Teaching staff to sell and managing sales performance
- Branding
- Negotiating contracts
- Cross-selling
- How to differentiate your firm
- Measuring the return on your marketing/sales investment
- Planning for recessions

- Advanced sales techniques
- Building strong teaming relationships
- Competitive market analysis
- Advanced CRM
- Methods for conducting client surveys
- Developing marketing leadership
- Value pricing
- Finding and winning foreign work

#### **10. PROJECT MANAGEMENT & PROJECT DELIVERY**

- Fundamentals of project management
- Introduction to Qualifications-Based Selection (QBS)
- Integrated delivery systems
- Essentials of design/bid/build
- How to be a successful project manager
- Project management communication skills
- Introduction to partnering & teaming
- Using project management software
- Multi-disciplinary project management
- Developing project scope/schedule/budget
- Subcontractor management
- How to effectively serve client needs
- Electronic signatures, website security, and E-Delivery
- Project contracting (commercial terms: lump sum, fixed price, etc.)
- Client Relationship Management (CRM)
- Building high value relationships
- Successful design/build and integrated project delivery
- Advanced concepts in alternative project delivery
- Coaching/mentoring project staff
- Project manager's role in business development
- Program management

#### **11. ENGINEERING FUTURES/FORECASTING & ENGINEERING HERITAGE**

- History of engineering
- Structural engineering history
- Public works history
- Great American Engineers
- Learning from past successes and failures
- Predicting performance
- Future demands - population growth and engineering
- Forecasting - trends in infrastructure use and demand

#### **12. CROSS DOMAIN TOPICS & MULTI-DISCIPLINARY ISSUES (i.e. SUSTAINABILITY)**

- Green Building and Leadership in Energy and Environmental Design (LEED)
- Green infrastructure and sustainable communities
- Multi-disciplinary approaches to problem solving
- Triple bottom line applied to building and infrastructure projects



AMERICAN COUNCIL OF ENGINEERING COMPANIES  
1015 15TH STREET NW, 8TH FLOOR  
WASHINGTON, DC 20005-2605  
(202) 347-7474  
[WWW.ACEC.ORG](http://WWW.ACEC.ORG)