ACEC
American Council of Engineering Companies

The Essentials of Project Risk Management for Consulting Engineers

Course Schedule

- **Course Begins**
  September 10, 2025
  Participants receive instructions and full access to course materials
- **Module 1: Introduction to Risk Management and Course Overview**
  September 18, 2025, 1:30 - 2:30 PM
- **Module 2: Professional Services Contracting – Part 1**
  September 25, 2025, 1:30 - 2:30 PM (Live Session 1)
  October 2, 2025, 1:30 - 2:30 PM (Live Session 2)

  Break
- **Module 3: Professional Services Contracting – Part 2**
  October 16, 2025, 1:30 - 2:30 PM
- **Module 4: Managing Risk Posed by Subconsultants and Subcontractors**
  October 23, 2025, 1:30 - 2:30 PM
- **Module 5: Spearin and the Standard of Care: How Good Does a Design Have to Be?**
  October 30, 2025, 1:30 - 2:30 PM

  Break
- **Module 6: Engineers' Business Insurance**
  November 13, 2025, 1:30 - 2:30 PM
- **Module 7: Changes, Claims, and Disputes in Professional Services Contracts and Construction Contracts**
  November 20, 2025, 1:30 - 2:30 PM

  Thanksgiving
- **Module 8: Engineers' Risk Management in Alternative Project Delivery**
  December 4, 2025, 1:30 - 2:30 PM

Detailed Course Outline

1. Introduction to Risk Management and Course Overview

a. This session will introduce participants to the course and briefly address introductory risk management topics applicable to consulting engineers. Matters related to enterprise risk management are not covered in detail in the course, but will be briefly discussed in this session, as they relate to consulting engineering firms.

b. Topics:
   1) Introduction of course leaders
   2) Organization and approach for the course
   3) Overview of syllabus
   4) Introduction to risk management for consulting engineers
   5) Introduction to enterprise business risk management

2. Professional Services Contracting – Part 1

a. Basic means of managing a consulting engineer's risk include judiciously selecting a consulting engineering firm's clients and projects, coupled with the importance of communicating properly and often with clients and others, and executing an appropriate professional services contract. This session will address these matters and focuses on key, risk management provisions of consulting engineers' professional services agreements with clients.

b. Topics:
   1) Selecting clients and projects
   2) Managing client relationships and client expectations of perfection
   3) Basics of effective communication and its role in client risk management.
   4) Client proposals, scopes of services, assumptions, exclusions, language to avoid
   5) Assignment of key staff, and substitution/approval requirements
   6) Client Contracts: Important risk management considerations including:
      a) Form of professional services contracts
      b) Key risk allocation provisions, including indemnity, waiver of damages and limit of liability clauses
      c) Intellectual property, copyright, and ownership of the instruments of service
   7) Other key risk management provisions of professional services contracts including: confidentiality, reliance on pre-existing information, reliance on thirdparty information, certifications, warranties and guarantees, site safety, "time is of the essence" clauses, force majeure and delays
   8) Termination, prevailing party attorneys' fees and dispute resolution clauses.

3. Professional Services Contracting – Part 2

a. Risk is transferred to another entity, via contract, for an associated cost. This session will focus on engineering consultants' ability to obtain appropriate compensation for their scope, schedule, and risk undertaken. This session addresses only non-federal contracts and is general in nature; thus, it also does not address specific state or local laws or regulations.

b. Topics:
   1) Key concepts
   2) Contract considerations during prospecting, proposal, and selection
   3) Internal and External Teaming, Initial Subcontracting Considerations
   4) Compensation methods
   5) Payment terms
   6) Establishing the budget and compensation: Considering risk
   7) Schedule risk
   8) Negotiating

4. Managing Risks Posed by Subconsultants and Subcontractors

a. On many projects, a consulting engineering firm must retain one or more professional subconsultants and subcontractors to perform its contractual obligations. Subconsultants and subcontractors may be needed because the engineer lacks the requisite experience and expertise, or because a team approach was deemed necessary to capture the business opportunity, or because the client required utilization of diversity business enterprises.

   Regardless of the reason, retaining and working with subconsultants and subcontractors presents many risks for consulting engineers. This session will discuss the various risks associated with retaining and working with subconsultants and subcontractors, and strategies for mitigating and controlling such risks.

b. Topics:
   1) Key concepts relative to retaining subs
   2) Deciding to retain subs and selection of subs
   3) Expectations in pursuing business opportunities
   4) Subcontracting—important risk management considerations
   5) Managing subs during project implementation

5. Spearin and the Standard of Care: How Good Does a Design Have to Be?

a. Many capital improvement projects result in allegations of insufficient design by the engineering consultant, or defective drawings and specifications. The resulting finger-pointing and claims can be costly, stressful, and can ruin relationships. How good must a given design be to be consistent with applicable contractual provisions and case law? The answers are in the client-engineer agreement and an important concept called the Spearin Doctrine.

   This session will explain these concepts, discuss who decides when a design or its associated professional services are truly insufficient, and explain how these principles were applied in notable court decisions.

b. Topics:
   1) Design professionals' standard of care—what it is and what it means
   2) The Spearin Doctrine—source, meaning, and application in practice
   3) Who's the judge in determine when the standard of care or Spearin Doctrine has
   4) been breached?
   5) Three relevant cases of interest

6. Engineers' Business Insurance

a. Insurance is an important tool in managing the risks inherent in a consulting engineering practice. This session provides an overview of what engineering consultants should know about insurance matters, with special emphasis on professional liability insurance coverage. While this session will address the basics of what engineering consultants should know about insurance matters, it is not a substitute for the advice and consultation of a qualified insurance professional.

b. Topics:
   1) Introduction to basic insurance terminology and forms
   2) Professional liability (PL) insurance coverage basics
   3) PL coverage: duty to defend and damages caused by negligence
   4) Key PL exclusions—contractual liability, warranties, guarantees, and other policy limitations
   5) PL coverage triggers—claims-made (and reported)
   6) PL notice of claims and circumstances
   7) PL policy limits- per claim/aggregate, defense costs within limits
   8) Solving PL limits adequacy problems—specific job excess (SJX)/specific client Excess (SCX)/specific additional Limits Endorsement (SALE); project Specific professional liability (PSPL), owners professional protective indemnity (OPPI)/contractors professional protective indemnity (CPPI)
   9) PL insurance for subconsultants
   10) Commercial general liability (CGL) insurance basics; CGL vs PL; CGL Additional insured status; construction contractor considerations

11) Other important coverages: automobile liability insurance, workers compensation/employers liability insurance, pollution liability insurance, umbrella/excess liability insurance, cyber liability insurance, property including builder's risk insurance during construction
12) Insurance Certificates for Clients and from subconsultants
13) Insurance requirements in contracts

7. Changes, Claims, and Disputes

a. Changes and even claims, whether relative to the consulting engineer's professional services agreement or a construction contract administered by the engineer, are virtually inevitable in a business environment that sometimes appears to be based on finger-pointing and shifting blame to others. The next step beyond claims—disputes, whether in a courtroom, mediator's office, or arbitrator's office—are also reasonably common in our litigious society.

   It is vital for consulting engineers to understand the essential rules of the road concerning changes, claims, and disputes. If you have not yet participated in difficult negotiations, claims resolution, deposition, and testimony, it may be only a matter of time before you do.

   This session addresses processes and procedures for managing, administering to, and resolving changes, claims, and disputes, so that course participants understand the rules of the road when the road is rough. This session focuses on the current standard contracts of EJCDC and AIA.

b. Topics:
   1) Sources of changes and claims.
   2) Changes, claims, and disputes in construction contracts.
   3) Changes, claims, and disputes in professional services agreements.
   4) Responding to notices/litigation holds.

8. Engineers' Risk Management in Alternative Project Delivery

a. Alternative methods of project delivery, such as design-build, construction manager at risk (CMAR), integrated project delivery (IPD), owner-build (O-B), and construction manager as advisor (CMa), have become increasingly popular. Each has unique aspects, advantages, drawbacks, and risks for consulting engineers who work on such projects.

   As alternative project delivery (APD) gains an increasing share of the North American market for capital projects, consulting engineers who practice largely in the familiar environment of design-bid-build (D-B-B) will likely find themselves being drawn into APD

projects.

This session addresses the basics of what consulting engineers need to know to successfully participate in the various forms of APD, addressing the most-important risks and appropriate risk mitigation approaches for each.

b. Topics:
    1) General concepts applicable to all project delivery methods
    2) Owner-build – consultant assists the owner
    3) Construction manager as advisor – consultant as engineer
    4) Construction manager as advisor – consultant as CMa
    5) Construction manager at risk – consultant as engineer
    6) Design-build – consultant as owner's consultant
    7) Design-build – consultant as engineer subcontracted to design-builder
    8) Design-build – consultant as the design-builder
    9) Integrated project delivery (IPD)