#### 1

# **CONSTRUCTION COST ESTIMATING (COES1-CE)**

### COES1-CE 9308 Construction Cost Estimating (0 Credits)

Acquire an overview of the theory, procedures, and practices used to develop project estimates and final bid price. Topics include the bidding process; the bid package; general conditions; subcontractor bid comparisons; planning for the estimate; internal and external management considerations; the pre-design, conceptual, and preliminary budgets; design review; pre-construction and detailed estimates; unit prices; lump-sum bids; direct and indirect costs; overhead; bonds; and insurance.

**Grading:** SPS Non-Credit Graded **Repeatable for additional credit:** Yes

## COES1-CE 9358 Reading and Interpreting Construction Drawings (0 Credits)

Construction project managers need to be able to read construction drawings and plans accurately. This course covers plans, specifications, and construction/working drawings for reinforced concrete, steel, wood frame, and masonry construction, as well as for some mechanical and electrical construction. Topics include floor plans, elevations, sections, details, symbols, schedules, specifications, and abbreviations used in architectural and engineering drawings.

**Grading:** SPS Non-Credit Graded **Repeatable for additional credit:** Yes

## COES1-CE 9371 Advanced Construction Documents: From Drawings to the Built Form (0 Credits)

For those who already have a basic knowledge of construction drawings and plans, this course explores plan reading in greater detail, the coordination of trades, and general constructability issues such as the drawn detail versus the built form. Building systems—including the foundation, framing, curtain wall, mechanical and electrical systems, and the relationship between material designations and the coordination of individual building components—also are covered in depth.

**Grading:** SPS Non-Credit Graded **Repeatable for additional credit:** Yes