

Fundamental Formats Seminar Series

Location: TBD,

Time: TBD

Cost: \$320.00; includes Project Delivery Practice Guide and Workbook (\$150 value non-member price)

This is a workshop, it is not intended to be a lecture series. Pre-session preparation of reading assignments and homework is provided below by session. The reading assignments are essential to the understanding and comprehension of the material covered in each session. You are expected to attend all of the classes, should you miss a session, you are expected to read on the material and catch up on the discussion with your colleagues.

Instructor: Margaret G. Chewning FCSI, CCS
SpexResources, LLC
Tidewater VA Chapter CSI

Reference Materials:

Project Delivery Practice Guide, (required)
The CSI CDT Exam Study Workbook (recommended)

The Program Syllabus will follow the Domains established for the CDT Certification Exam:

Session 01: Fundamentals

Knowledge Item No. 1-1: Job roles and responsibilities of the four project teams
Knowledge Item No. 1-2: Stages of facility life cycle with associated activities and documents
Knowledge Item No. 1-3: Project stages with associated activities and documents
Knowledge Item No. 1-4: Written Formats
 Knowledge Item No. 4-11: MasterFormat®
 Knowledge Item No. 4-12: SectionFormat™
 Knowledge Item No. 4-13: PageFormat™
Knowledge Item No. 1-5: Graphic Formats
Knowledge Item No. 1-6: Legal implications of contract documents
Knowledge Item No. 1-7: Sustainable design and construction
 Legal Implications of Construction Documents

Objectives:

- ✓ To understand the composition and responsibilities of four Project Teams who come together as a single Team.
- ✓ To gain an insight into the definitions of the various stages of the life cycle of a facility, the activities and documents produced during each stage, and team member responsibilities.
- ✓ To introduce the basic relationship between drawings and specifications and to emphasize the importance of coordination.
- ✓ To introduce the basic structure of OmniClass™, UniFormat™, and MasterFormat™ and the primary ways in which they are utilized in construction documents.
- ✓ To understand the legal issues that are important to the project delivery process.

Session 02: Planning & Pre-Design

Knowledge Item No. 2-1: Programming, planning, and pre-design
 Knowledge Item No. 2-2: Feasibility and impact studies and facility evaluations
 Knowledge Item No. 2-3: Design and construction services
 Knowledge Item No. 2-4: Site selection activities and purposes

Knowledge Item No. 2-5: Project budget
 Knowledge Item No. 2-6: Project scheduling
 Knowledge Item No. 2-7: Delivery methods
 Knowledge Item No. 2-8: Team selection process
 Knowledge Item No. 2-9: Planning for commissioning

Objectives:

- ✓ To understand the progress of a project through the necessary stages of programming, planning, and pre-design.
- ✓ To introduce the basic concepts of feasibility and impact studies, feasibility studies, site selection activities, project budget, and project scheduling.
- ✓ To understand the basic concepts of the environmental impact of buildings, sustainability, GreenFormat™, and green building.
- ✓ To gain an insight into the roles and responsibilities of the design and construction teams.
- ✓ To become familiar with the tripartite relationship.
- ✓ To identify the factors that affect project delivery.
- ✓ To briefly introduce the six Project Delivery Methods.
- ✓ To explore the team selection process.

Session 03: Design Process

Knowledge Item No. 3-1: Schematic design documentation
 Knowledge Item No. 3-2: Design development documentation
 Knowledge Item No. 3-3: Quality assurance/quality control requirements
 Knowledge Item No. 3-4: Procedures to control project variables
 Knowledge Item No. 3-5: Cost estimates and estimating techniques used during design phase
 Knowledge Item No. 3-6: Life cycle costs and value analysis
 Knowledge Item No. 3-7: Documentation of decision-making process
 Knowledge Item No. 3-8: Design objectives and constraints
 Knowledge Item No. 3-9: Product evaluation and selection
 Knowledge Item No. 3-10: Building Information Modeling – BIM

Objectives:

- ✓ To understand the process of converting Owner's program into written and graphic documents for schematic design and design development.
- ✓ To gain an insight into how quality is established for a Project.
- ✓ To identify the considerations that influence the design of a Project.
- ✓ To introduce the basic concepts of life cycle costs and value analysis.
- ✓ To identify the attributes that should be included in the evaluation and selection of products.

Session 04 and 05 : Construction Documents

(2 sessions)

Knowledge Item No. 4-1: Project Manual - Division 00: procurement requirements
Knowledge Item No. 4-2: Project Manual - Division 00: contracting requirements and forms
Knowledge Item No. 4-3: Project Manual - Division 01: general requirements
Knowledge Item No. 4-4: Project Manual - Divisions 02-49: specifications
Knowledge Item No. 4-5: Drawings
Knowledge Item No. 4-6: Modification process
Knowledge Item No. 4-7: Document coordination
Knowledge Item No. 4-8: Methods of specifying
Knowledge Item No. 4-9: Specification language
Knowledge Item No. 4-10: Hierarchy of general, administrative, and procedural requirements
Knowledge Item No. 4-12: SectionFormatTM
Knowledge Item No. 4-13: PageFormatTM
Knowledge Item No. 4-14: Warranties
Knowledge Item No. 4-15: Insurance

Objectives:

- ✓ To understand how construction documents define the rights of, responsibilities of, and relationships between the parties.
- ✓ To gain an insight of the benefits of using standard documents created by professional associations.
- ✓ To introduce the definitions, purposes, and content of each of the procurement and contract documents.
- ✓ To understand the distinctions between procurement and contracting requirements and documents.
- ✓ To become familiar with the procedures for soliciting pricing for the Work.

Outline:

- ✓ Elements of Construction Documents
- ✓ Elements of Procurement Documents
- ✓ Elements of Contract Documents
- ✓ Elements of Project Manual
- ✓ Procurement Requirements
- ✓ Contracting Requirements
- ✓ General Conditions
- ✓ Specifications
- ✓ Contract Drawings
- ✓ Resource Drawings
- ✓ Coordination between graphic and written documents
- ✓ Methods of specifying
- ✓ Specifications language
- ✓ Hierarchy of general, administrative, and procedural requirements
- ✓ SectionFormatTM
- ✓ PageFormatTM
- ✓ Warranties
- ✓ Insurance



Session 06: Procurement, Pre-Construction and Construction

Knowledge Item No. 5-1: Pricing
Knowledge Item No. 5-2: Availability of Procurement Documents
Knowledge Item No. 5-3: Competitive Bidding Process
Knowledge Item No. 5-4: Direct Negotiating Process
Knowledge Item No. 5-5: Purchasing
Knowledge Item No. 5-6: Subcontracting
Knowledge Item No. 5-7: Controlling Variables
Knowledge Item No. 5-8: Procurement Options
Knowledge Item No. 5-9: Basis of Payment
Knowledge Item No. 6-1: Notice to proceed, letter of intent to award, or executed agreement
Knowledge Item No. 6-2: Contract Documents
Knowledge Item No. 6-3: Preconstruction Submittals
Knowledge Item No. 6-4: Permits and Regulatory Issues
Knowledge Item No. 6-5: Preconstruction Meetings
Knowledge Item No. 6-6: Verification of Site Conditions
Knowledge Item No. 6-7: Mobilization
Knowledge Item No. 6-8: Establishing a Field Office
Knowledge Item No. 7-1: Meetings and meeting documentation
Knowledge Item No. 7-2: Submittals

Objectives:

- ✓ To understand the transition from design to construction through the procurement process.
- ✓ To understand the basic concepts of pricing.
- ✓ To identify the pricing considerations for the various Project Delivery Methods.
- ✓ To explore the various components of Owner-Contractor Contracts.
- ✓ To introduce submittals and the role they play during construction.
- ✓ To identify the contractual lines of communications.
- ✓ To become familiar with the procedures for handling substitutions during bidding.
- ✓ To gain an insight into the distribution and control of Project information.

Outline:

- Construction Activities
- Submittals
- Interpreting and Administering the Documents
- Procurement and ProcureContract Modifications
- Substitutions
- Communication identified in the Conditions of the Contract
- Observations and Inspections



Session 07: Construction and Life-Cycle Activities

Knowledge Item No. 7-3: Site visits, observations, inspections, and stopping the Work
Knowledge Item No. 7-4: Quality assurance/quality control implementation
Knowledge Item No. 7-5: Contract interpretations and modifications
Knowledge Item No. 7-6: Executing the work
Knowledge Item No. 7-7: Claims and disputes
Knowledge Item No. 7-8: Measurement and payment
Knowledge Item No. 7-9: Project closeout
Knowledge Item No. 8-1: Commissioning
Knowledge Item No. 8-2: Role and responsibilities of facility manager during project closeout
Knowledge Item No. 8-3: Facilities operations and maintenance
Knowledge Item No. 8-4: Resource materials
Knowledge Item No. 8-5: Facility evaluations
Knowledge Item No. 8-6: Decommissioning

Objectives:

- ✓ To become familiar with role of substitutions during construction.
- ✓ To understand the importance of site visits, observations, meetings, and inspections.
- ✓ To explore the roles and responsibilities of the various team members during construction.
- ✓ To understand basic concept of facility management.
- ✓ To gain an insight into Facility Managers role in Project Closeout.
- ✓ To introduce the correction period, how long it lasts, and the responsibilities of the Facility Manager during this period.
- ✓ To identify the day-to-day functions of a facility and its systems, the basic types of maintenance, and the documents associated with operations and maintenance.
- ✓ To understand the basic types of record documents.
- ✓ To become familiar with facility evaluations.
- ✓ To understand the difference between total Project commissioning and systems and equipment commissioning.

Outline:

- Site visits, observations, meetings, and inspections
- Roles and responsibilities
- Construction by Owner or by separate Contract
- Contract Time
- Quality assurance/ quality control implementation
- Payments and completion
- Protection of persons and property
- Uncovering and correction of the Work
- Termination or suspension of the Contract
- Claims and disputes
- Performance and payment bonds

--End of Syllabus--

