



Objectives Sheet

BCF 331 - Advanced Concepts in Cost Analysis

Course Learning/Performance Objectives followed by enabling learning objectives

BCF 331.U01.01	Define and apply the steps of the cost estimating process
BCF 331.U01.01.01	Convey to analysts the multidisciplinary nature of cost estimating and how each discipline contributes to the outcome
BCF 331.U01.01.02	Describe the roles of supervisor that relate to steps of the cost estimating process
BCF 331.U01.01.03	Discuss the importance of technical and programmatic requirements to a cost estimate
BCF 331.U01.01.04	Develop an estimate plan that follows the established process and has a high probability of delivering on time
BCF 331.U01.02	Define the role of a supervisor for the cost organization
BCF 331.U01.02.01	Identify how to assemble and direct optimally sized cost teams
BCF 331.U01.02.02	Examine methods to create development opportunities for long-term employee growth
BCF 331.U01.02.03	Define how to implement a process to deliver quality estimates
BCF 331.U01.02.04	Define the role of the cost supervisor in the new hire interview process
BCF 331.U01.02.05	Define the role of the cost supervisor in the promotion interview process
BCF 331.U01.02.06	Create and maintain the necessary analytical infrastructure within the organization
BCF 331.U02.01	Identify how to select the most appropriate methodology for a cost estimate
BCF 331.U02.01.01	Recognize the three requirements of contractor actual costs that must be satisfied when collecting cost data to be used in a cost estimate
BCF 331.U02.01.02	Explain to program offices and customers how contractor actual costs differ from contract negotiated prices and other financial data
BCF 331.U02.01.03	Differentiate the difference between actual costs and other financial data
BCF 331.U03.01	Ensure Work Breakdown Structures (WBS) are adequate for cost estimating
BCF 331.U03.01.01	Differentiate between acquisition logistics and O&S in a WBS and CES
BCF 331.U03.01.02	Validate the WBS elements of an estimate
BCF 331.U03.01.03	Identify the fixed and variable elements of a WBS
BCF 331.U03.01.04	Analyze and determine if the depth of the WBS reflects an appropriate level of detail for the cost estimate
BCF 331.U03.02	Prepare employees to understand key events in a program schedule and evaluate if the schedule is reasonable
BCF 331.U03.02.01	Identify key events of a program schedule
BCF 331.U03.02.02	Perform schedule analysis to determine if the program's schedule looks reasonable
BCF 331.U03.02.03	Perform schedule analysis to determine if there is schedule uncertainty
BCF 331.U04.01	Plan to advocate for and adhere to Cost and Software Data Reporting (CSDR) policy so actual costs are collected for programs
BCF 331.U04.01.01	Recognize basic CSDR requirements, including the basic approval process
BCF 331.U04.01.02	Define the process of gaining OSD DDCA approval of program and contract CSDR plans
BCF 331.U04.01.03	Apply techniques to overcome the challenges with implementing CSDRs
BCF 331.U04.02	Draft CSDR plans that satisfy cost estimating needs
BCF 331.U04.02.01	Draft CSDR plans to invoke the appropriate reports for each WBS element
BCF 331.U04.02.02	Draft CSDR plans to choose logical frequencies for submittals
BCF 331.U05.01	Learn how to collect contractor actual costs if CSDR data is not available
BCF 331.U05.01.01	Justify and negotiate custom data collection with the Program Manager and prime contractor
BCF 331.U05.01.02	Review an employee's cost collection data request for clarity, conciseness, and alignment with the needs of a cost estimate (cost, technical, and programmatic data)
BCF 331.U05.01.03	Demonstrate that collecting data is an iterative process
BCF 331.U06.01	Apply principles regarding contract burdening
BCF 331.U06.01.01	Define the different type of contractor costs that need to be burdened
BCF 331.U06.01.02	Define the relationship between the DD Form 1921-3 Contractor Business Data Report (CBDR) and a Forward Pricing Rate Agreement (FPRA)
BCF 331.U06.01.03	Examine the structure of an FPRA
BCF 331.U06.01.04	Apply the contractor burdening process using an FPRA
BCF 331.U07.01	Understand how to correctly incorporate normalization into cost estimates
BCF 331.U07.01.01	Evaluate impact of and apply inflation and escalation to data used in cost estimates



Objectives Sheet

BCF 331 - Advanced Concepts in Cost Analysis

Course Learning/Performance Objectives followed by enabling learning objectives

BCF 331.U07.01.02	Evaluate the applicability and choice of the three different learning curve theories
BCF 331.U07.01.03	Apply normalization for technical characteristics (weight, power, material, thrust, SLOC, etc.)
BCF 331.U07.01.04	Discuss the use of cost factors only as a last resort method
BCF 331.U08.01	Perform and interpret statistical regressions
BCF 331.U08.01.01	Evaluate which regression method to use including when to use the Ridge Regression technique to achieve usable regression results
BCF 331.U08.01.02	Analyze and interpret marginal draft regression results
BCF 331.U08.01.03	Analyze and interpret outlying data points of a regression
BCF 331.U09.01	Use correct inputs and interpret results of a cost estimate simulation
BCF 331.U09.01.01	Explain the difference between uncertainty and risk, and the problems that can result from confusing the two
BCF 331.U09.01.02	Evaluate how to choose the number of uncertainty inputs in a cost estimate
BCF 331.U09.01.03	Collect data to create probability distributions to use in an estimate
BCF 331.U09.01.04	Apply the lognormal distribution as a default, in the absence of sufficient data to create a probability distribution
BCF 331.U09.01.05	Apply uncertainty to Cost Estimating Relationships (CER), in addition to inputs
BCF 331.U09.01.06	Apply uncertainty to learning curve slopes or T1 values, based on the sources being used to model them
BCF 331.U10.01	Design and deliver a well-defined cost estimate presentation
BCF 331.U10.01.01	Document the cost estimate
BCF 331.U10.01.02	Develop a cost estimate and presentation to address the needs of the audience
BCF 331.U10.01.03	Apply best practices for designing a brief
BCF 331.U10.01.04	Apply best practices for delivering the presentation
BCF 331.U10.01.05	Employ best practices for design of individual slides in the presentation