Introduction to CMMI for Development Version 1.3

OFFERED BY Cepeda Systems & Software Analysis, Inc. (CSSA), an SEI Partner

Successful completion of this course is required for any individual who:

- Is assigned as a team member for an SEI-authorized SCAMPI[SM] CMMI for Development (CMMI-DEV) appraisal
- Intends to become an SEI-certified SCAMPI Lead Appraiser for CMMI-DEV

WHO SHOULD ATTEND THIS COURSE?

In addition to Lead Appraisers and Appraisal Team members, who are required to attend, this course is also essential for:

- Product Developers, Product Managers, and Practitioners interested in understanding the best practices captured in Capability Maturity Model Integration (CMMI) models.
- Systems and Software Engineering Process Group (SEPG) members and managers who are leading process improvement efforts within their organizations, whether or not they are preparing for a formal SCAMPI appraisal.

COURSE DESCRIPTION

This three-day course introduces participants to CMMI and its fundamental concepts. CMMI-DEV is a tool that helps organizations improve their ability to develop and maintain quality products and services. CMMI models are an integration of best practices from proven discipline-specific process improvement models, including the CMM® for Software, EIA 731, and the Integrated Product Development CMM. This course has been updated to be part of Version 1.3 of the CMMI Product Suite. The course was also improved to respond to change requests submitted by students, instructors, practitioners, and others.

Introduction to CMMI-DEV helps prepare participants to make valid judgments regarding an organization's implementation of industry's best practices. The course is helpful in identifying issues that are addressed in performing process improvement as defined by the CMMI-DEV model. This course fulfills a prerequisite requirement for any course requiring an official SEI Introductory CMMI course

COURSE TOPICS

Topics covered in this course include:

- INTRODUCTION
- MODEL-BASED PROCESS IMPROVEMENT
- OVERVIEW OF CMMI COMPONENTS
- INSTITUTIONALIZATION
- PROCESS AREAS OF CMMI MODELS
- STRUCTURE OF THE CONTINUOUS AND STAGED REPRESENTATIONS
- NEXT STEPS

COURSE OBJECTIVES

The course will help participants

- Understand the importance of having defined processes within an engineering organization and the rationale for process improvement.
- Comprehend the architecture of the CMMI model (maturity/capability levels, process areas, goals, and generic practices).
- Gain a sufficient understanding of PA components to function as a CMMI-Based Appraisal team member.
- Be able to apply the CMMI principles to meet the needs of systems engineering and software engineering organizations.

PREREQUISITES

Participants must have knowledge of systems engineering, software engineering, and management, including exposure to quality assurance, configuration management, and basic management principles.

SCHEDULE

Introduction to CMMI-DEV is a three day course, 8:30 A.M. - 5:00 P.M. Expect two hours of homework for the first and second evening of the course.

COURSE MATERIALS

Participants receive the CMMI for Development model and a course notebook.

ABOUT CSSA

Based in Madison, AL, CSSA provides process improvement and software and systems engineering services to projects and organizations of all sizes in a wide variety of industries. Further information on our services can be obtained at: www.cepedasystems.com

ABOUT THE INSTRUCTOR

Sandra Cepeda, CEO and Principal Engineer of CSSA, is an SEI-Certified Instructor for this course. As one of the authors of CMMI and SCAMPI, a SCAMPI Lead Appraiser, and an SEI Consultant, Sandra brings unique and invaluable insights into the background and interpretation of the model. Sandra's hands-on systems and software engineering as well as process improvement background provides engineers, managers, and process improvement professionals with a practical approach to applying the model in their organizations.