Integrated System Diagnostics

Integrated System Diagnostics

COURSE CATALOG

ISACA.
Licensed Premium CMMI Partner

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Contents

Integrated System Diagnostics

Overview

Integrated System Diagnostics (ISD) is the premier, high value supplier of model-based process improvement training, consulting, appraisal services, and tools. ISD was founded in 1994 for the purpose of commercializing Software Engineering Institute (SEI) CMM® for Software training, Software Capability Evaluation (SCE) method development, and SCE appraisals. ISD is the joint copyright holder with Carnegie Mellon University for SCE Version 3.0.

General
- We are a CMMI® Institute Partner for CMMI® training, appraisal services, including High Maturity, and CMMI ML2 and ML3 for Practitioners.
- We use a global commercial pool of Certified Lead Appraisers, Certified High Maturity Lead Appraisers, and Certified CMMI® instructors.
- Developed the Appraisal Wizard® suite of tools, including Model Wizard® and Model Mapper®.
- ISD originally operated under a Software Engineering Institute (SEI) Cooperative Research and Development Agreements (CRADA), with commercial licenses; competitively selected to commercialize SEI software process improvement training and services.

Appraisal and Process Improvement Experience
- ISD staff and consultants consists of former SEI personnel, with more than 100-person years' experience in services, systems and software process improvement.
- ISD staff and consultants have participated in or led over 400 process appraisals, within many different application domains and organizational sizes and types, through all maturity levels.

Appraisal Method Development
- Member of the CMMI® Institute SCAMPISM V1.3 upgrade team.
- Developed the Comprehensive Appraisal Method (CAM), ISD's proprietary, ARC Class A, B, and C compliant appraisal method, a source method of SCAMPISM V1.1.
- Developed the SCE method V3.0 under contract to the SEI.
- Led the development and initial release CBA IPI version while working at the SEI.
- Member of the eSourcing Capability Model for Service Providers (eSCM-SP) Method team.

Model and Appraisal Training Development
- Piloted and contributed to the High Maturity Process Areas for CMMI®-DEV v1.3.
- Invited participant to the V1.2a High Maturity Workshop.
- Contributed to the development of the SCAMPISM Lead Appraiser training.
- Member of the Introduction to CMMI® for Services Training development team.
- Member of the eSCM-SP Model and Training Development teams.

Model, Appraisal Method, and Training Leadership
- Core member of the NDIA Multi-Model working group
- Core Member of the CMMI® Next Gen multi-model appraisal working group.
- Charter member of the SCAMPI Lead Appraiser Body of Knowledge (BoK) Advisory Board.
- Charter member of the eSCM Advisory Board.
- Charter Member of the Enterprise SPICE Advisory Board.

Our courses include several on-site or public settings delivery types. We define these as:

Seminars

Seminars are a mix of lecture and student exercises. They are information transfer and knowledge building events typically 1-2 days in length. "Executive Briefings" are 1 day or less seminars. Although participative, there is no specified "output" from the seminars other than conveying informational material to the student. There are multiple versions of our seminars. We use a modular approach to delivering our seminars which allows for combinations and tailoring to best suit the client's needs.

Training

Training courses are skill-building classes. The outcome of lectures and exercises deliver a specific capability to the student that they use after the event. They are typically 2-3 days in length. Courses in this category help prepare the participants to use process improvement models and appraisal methods in their organizations. Most of these courses are officially licensed to ISD through the CMMI Institute or another officially sanctioned entity outside of ISD. (e.g., Foundations of Capability, Building Development Excellence, Building Service Excellence, High Maturity Concepts, CMMI V2.0 Appraisal Method Team Training, Implementing Goal Driven Software Measurement, and eSCM-SP and eSCM-CL). We also teach our own Appraisal Method Training, designed around our Comprehensive Appraisal Method (CAM).

Workshops

Workshops are enabling and skill building events that produce tangible work products. They are "roll up your sleeves" events that use lectures to primarily frame concepts and techniques to be used in workshop exercises. Lectures facilitate the instructor/consultant in supporting useful outputs from the exercises being created by the students. Focus of all lectures and exercises are on producing tangible draft work products to support the process improvement program. Other assets (examples, samples, templates) are used to illustrate and boot-strap creation of the work products. Our workshops are typically 3-5 days in length. Our highly interactive workshops teach participants to apply the workshop principles and techniques. Workshop objectives are focused on implementation in specific application areas such as internal improvement, process development, and measurement.

ISD is a leader in high performance virtual training, enabling more students to attend our broad array of courses. Virtual delivery creates a cost-effective means for smaller numbers of personnel to attend desired classes.

ISD also can deliver courses at your location. For many courses this is the ideal solution. ISD also has home offices in Melbourne and Tampa, FL, and Pittsburgh, PA, and a global partnership in Sao Paulo with ISD Brazil to enable delivery close to you.

Our standard public and client specific training is also offered virtually. Build your skills and help your organization improve its performance.

Get more information about ISD via our website at: http://isd-inc.com/ and training calendar and course descriptions online at: http://isd-inc.com/training/

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Executive Briefings

Process Improvement and Reference Model Executive Briefing

Integrating CMMI® and Six Sigma Executive Briefing

Building the Business Case for Process Improvement Executive Briefing

Integrating CMMI® practices with Agile Methods Executive Briefing

Systems and Software Engineering – System Lifecycle Processes: ISO/IES/IEE 15288:2015 Executive Briefing

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Executives need solid information before committing resources to improvement or innovation strategies. ISD offers executive briefings that answer your questions about the characteristics, costs, benefits, and risks of technology adoption or process improvement activities.

Our executive briefings give you the foundational information you need to sponsor focused efforts that yield measurable improvements in systems and software acquisition, product development and maintenance, or service delivery and management.   These interactive presentations are designed to help the organization identify risks and alternative solutions relevant to adopting advanced technology-based solutions and implementing process improvement programs.

Topics include: Model-Based Process Improvement, Reference Models (e.g., DMM, CMMI®), Appraisal Methods, Technology Transition, and Organizational Change Management. Briefings are modular and can be tailored to meet specific sponsor needs.

Course Attribute	Course Details
Course Content	- Process improvement concepts and principles - Reference Model overview - Costs, Benefits, and Risks of model-based process improvement - Sponsor roles and managing the change effort - Interpreting the reference model for different environments - Applying the reference model to meet your business goals
Material Provided	- Presentation materials - Reference materials
Course Duration	2-4 hours - This class is typically delivered on site to clients but can also be done publicly
Prerequisites	None
Who Will Benefit	Industry and government executives who need to understand benefits and risks associated with technology transition, acquisition management, process improvement, or change management.
Logistics Requirements	- LCD projector and screen - Flip charts - Classroom for up to 20 participants and 1 instructor

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This briefing is designed as an orientation for management to explain how Six Sigma techniques can be successfully integrated with and build on the CMMI® process improvement infrastructure. This seminar shows you how these two proven process improvement techniques can be integrated to:

- Enhance your implementation of CMMI, and

- Provide a structure for performing Six Sigma techniques and projects that support CMMI practices.

The briefing is best presented on-site where the management team can attend. Your instructor will be certified in CMMI, Six Sigma, or both methodologies.

Course Attribute	Course Details
Course Content	- Overview of the basic concepts of Six Sigma and CMMI® - Demonstrate how Six Sigma concepts can be integrated with a CMMI® infrastructure - Demonstrate how Six Sigma tools will enhance, compliment, and support CMMI® processes - Explore next steps towards an action plan to integrate the two methodologies
Material Provided	- Presentation slides - Reference materials
Course Duration	- ½ day. Duration is tailorable from 2 hours to 1 full day. - This class is available in public and client site forums
Prerequisites	- No in-depth knowledge of CMMI® or Six Sigma is required - Helpful if the participant's organizations are already implementing CMMI® or Six Sigma or both.
Who Will Benefit	- Executives who need to determine the best approaches to leverage multiple improvement models - Managers responsible for implementing process improvement programs with multiple techniques - Process Group members
Logistics Requirements	- LCD projector and screen - Flip charts - Classroom for 20 participants and 1 instructor

Integrated System Diagnostics

This briefing is designed as an orientation for management to explain how process improvement programs improve organizational performance. This seminar describes both the typical costs and the expected return on investment (ROI) that can be achieved. The briefing is best presented on-site but may also be delivered virtually. Your instructor will be an expert in delivering model based improvement programs.

Course Attribute	Course Details
Course Content	- Overview of process improvement principles and concepts - Depiction of typical costs for starting up and maintaining an organizational infrastructure for continuous process improvement - Depiction of typical ROI expected from implementing a process improvement program - Discussion of typical schedules and risks in process improvement programs
Material Provided	- Presentation slides - Reference materials
Course Duration	½ day. Duration is tailorable from 2 hours to 1 full day - This class is available in client site forums and virtually
Prerequisites	None
Who Will Benefit	- Executives who need to decide on and leverage improvement program investments - Managers responsible for implementing process improvement programs
Logistics Requirements	- LCD projector and screen - Flip charts - Classroom for 20 participants and 1 instructor

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Executives need solid information before committing resources to improvement or innovation strategies. ISD offers executive briefings that answer your questions about the characteristics, costs, benefits, and risks of technology adoption or process improvement activities.

Our executive briefings give you the foundational information you need to sponsor focused efforts that yield measurable improvements in systems and software acquisition, product development and maintenance, or service delivery and management.   These interactive presentations are designed to help the organization identify risks and alternative solutions relevant to adopting advanced technology-based solutions and implementing process improvement programs.

This executive briefing helps senior management, line managers, and process group members understand how CMMI® practices support and improve on agile methods being implemented by organizations. Our executive briefings are modular and can be tailored to meet specific needs.

Course Attribute	Course Details
Course Content	• Understanding how CMMI® and Agile work together to deliver quality products. • Mapping CMMI® practices against standard Agile activities. • Applying other CMMI® practices to improve and leverage your Agile methods.
Material Provided	• Presentation materials • Reference materials
Course Duration	• 2-4 hours • This class is typically delivered on site to clients but can also be done publicly and virtually.
Prerequisites	• None
Who Will Benefit	• Executives and line managers who want to understand how CMMI® practices can improve their Agile implementation. • Process Group members who need to understand CMMI® practices to improve, create, or revise existing Agile method-based processes.
Logistics Requirements	• LCD projector and screen • Flip charts • Classroom for up to 20 participants and 1 instructor

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Executives need solid information before committing resources to improvement or innovation strategies. ISD offers executive briefings that answer your questions about the characteristics, costs, benefits, and risks of technology adoption or process improvement activities.

The ISO/IEC/IEEE 15288:2015 standard (ISO 15288) was released as a joint effort. ISO 15288 "establishes a common framework of process descriptions for describing the life cycle of systems created by humans." It defines a set of processes and associated terminology from an engineering viewpoint. It is similar to CMMI® for Development in terms of organizational scope and product development perspective. The NDIA Multi-Model Working Group established an approved mapping between ISO 15288 and ISO 15288.1 and CMMI®-DEV V1.3 to facilitate transition for organizations already invested in and familiar with CMMI®. ISD was a core member of this working group.

This briefing helps executives understand the purpose of this new standard, and what to expect as client organizations begin to adopt it and potentially levy it on suppliers. Our Executive Briefings are modular and can be tailored to meet specific sponsor needs.

Course Attribute	Course Details
Course Content	- Overview of the ISO 15288 and ISO 15288.1 structure and content - Comparison and mapping overview of ISO 15288 and CMMI®-DEV - Transition guidance and recommendations
Material Provided	- Presentation materials - Reference materials
Course Duration	2-4 hours - This class is typically delivered on site to clients but can also be done virtually
Prerequisites	None
Who Will Benefit	Industry and government executives and managers who need to understand benefits and risks associated with transitioning to this new ISO standard applicable to engineering and product development.
Logistics Requirements	- LCD projector and screen - Flip charts - Classroom for up to 20 participants and 1 instructor

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Seminars

High Maturity Seminar

Appraisal Wizard® Seminar

Appraisal Preparation Seminar

Implementing Process Improvement Seminar

Reference Model Seminar

Systems and Software Engineering – System Lifecycle Processes: ISO/IEC/IEEE 15288:2015 Seminar

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The High Maturity Seminar builds participants' knowledge necessary for leading organizations through successful implementation of Maturity Level 4 and 5. Foundational organizational elements supporting evolution of high maturity practices and key attributes of high maturity organizations are explained in addition to a detailed walkthrough of high maturity practices. Participant provided data is used wherever possible to illustrate concepts.

This seminar assumes foundational Maturity Level 2 and 3 knowledge. Given the current maturity of the organization and the skills of the process group members, the High Maturity Seminar should include individuals involved in process improvement or definition who need to expand their knowledge level of high maturity practices. Participants learn about the components needed to build a successful High Maturity process improvement program. Exercises focus on building skills to identify and manage high maturity implementation issues, barriers, and risks.

Course Attribute	Course Details
Course Content	• CMMI® structure review • Level 3 building blocks to higher maturity • Walk though of Level 4 and 5 practices • Group Exercises
Material Provided	• Participant's notebook • Reference and exercise material
Course Duration	• 1 day • This class is available in public and client site forums
Prerequisites	• Knowledge of foundational Maturity Level 2 and 3 practices • Knowledge or experience with appraisal methods is helpful
Who Will Benefit	• Project personnel implementing high maturity practices • Prospective Appraisal team members • Process group and action team members responsible for defining high maturity practices
Logistics Requirements	• LCD projector and screen and Flip charts • Classroom for 20 participants and 1 instructor • Desktops or laptops set up with AW licenses installed.

Appraisal Wizard™ is a comprehensive process compliance tool for facilitating the collection, analysis, and reporting of process and quality assurance, appraisal, and compliance data. The purpose of this seminar is to help users understand Appraisal Wizard™ features and practical implementation guidance for using the tool. Learning is enhanced through hands-on experiential learning for the most commonly used tool features.

The seminar is conducted using explanations and illustrations of tool features, providing step by step guidance and examples, and allowing the participants to practice the steps using the tool with simulated appraisal data. This approach gives participants the knowledge and skills needed to use the tool during many different types of appraisals, and to support objective evidence data collection, management, and reporting leading up to your events.

Seminar material can be tailored to meet your specific needs and objectives. We recommend adding one day of ISD consulting with this seminar to provide expert tool setup and configuration recommendations to best support your specific implementation after purchase.

Course Attribute	Course Details
Course Content	- Product Overview - Appraisal Planning - Preparation - Data Collection - Ratings - Graphing and Reporting - Appraisal Wizard® Utilities
Material Provided	Participant's notebook
Course Duration	- One day. This course is tailorable - This class is typically delivered on client sites but may also be done in pubic settings
Prerequisites	- Class provided after tool purchase and installation - No prior knowledge or experience with appraisal tools is needed - Knowledge or experience with appraisal methods and data collection needs are helpful
Who Will Benefit	- Process and Quality Assurance specialists performing internal compliance activities - Appraisal team members - Individuals involved in collecting and providing evidence for an appraisal
Logistics Requirements	- LCD projector and screen and Flip charts - Classroom for 20 participants and 1 instructor - Desktops or laptops set up with AW licenses installed.

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The Appraisal Preparation Seminar provides practical guidance for improving the efficiency and effectiveness of your organization's appraisal preparation activities. This course explains evidence types and requirements, and how to determine how much objective evidence is required to support a successful appraisal. We discuss typical model interpretation issues and institutionalization guidelines. We propose a technique for validating the collected data to ensure it demonstrates your best capability. We explain our appraisal life cycle model and how it relates to the data collected. We provide techniques, guidelines, work instructions, and checklists for ensuring your data collection effort is successful the first time.

Our instructors are Certified Lead Appraisers who have deep model and appraisal knowledge and experience; all are Lead Appraisers, usually in multiple methods, and against multiple reference models. As a course participant you will receive the foundational knowledge to enable you to

- Understand the importance and benefit of using a well-defined data collection process
- Comprehend the appraisal life cycle and the relationship of the reference model to the appraisal process.
- Understand practical approaches to collecting, organizing and evaluating evidence.

The direct benefit of this course is to ensure your organization is ready to succeed in an objective appraisal, reducing preparation costs while simultaneously mitigating appraisal risk.

Course Attribute	Course Details
Course Content	- Appraisal life cycle model overview - Understanding objective evidence needs - Data collection and validation techniques - Practice interpretations and institutionalization rules and guidelines
Material Provided	- Presentation hard copy and exercise materials - Reference materials (i.e., checklists, guidelines, frequently asked questions, etc.)
Course Duration	1 day - Lectures, demonstrations, and class exercises - This class is available in public and client site forums
Prerequisites	There are no prerequisites. Reference model and appraisal process knowledge is helpful.
Who Will Benefit	- Practitioners and managers preparing their organization for a process appraisal - Individuals designated as team members for a model-based appraisal. - Process group members who are responsible for leading process appraisal preparation activities
Logistics Requirements	- LCD projector and screen and Flip charts - Classroom for 20 participants and 1 instructor - ISD will use its tool, Appraisal Wizard®, to demonstrate concepts and techniques presented.

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The Implementing Process Improvement Seminar provides foundational knowledge about process improvement principles and concepts. We discuss factors that enable or inhibit success in achieving program objectives.

Our instructors are Certified Lead Appraisers and consultants who have deep model and appraisal knowledge and experience; all are Lead Appraisers, usually in multiple methods, and using multiple reference models.

The benefit of this seminar is to ensure your organization is aware of the roles, responsibilities, costs, and risks in implementing a process improvement program prior to establishing formal objectives, schedules, and resources.

Course Attribute	Course Details
Course Content	• Process improvement principles and concepts • Improvement program life cycle model overview • Costs and benefits of process improvement • Risk in process improvement programs • Process Group operations
Material Provided	• Presentation hard copy and exercise materials • Reference materials (i.e., checklists, guidelines, frequently asked questions, etc.)
Course Duration	• 1 day • Lectures, demonstrations, and class exercises • This class is available in public and client site forums
Prerequisites	• There are no prerequisites. Reference model and appraisal process knowledge is helpful.
Who Will Benefit	• Management needing information about process improvement programs • Practitioners who will be involved in process action teams • Process group members who are responsible for leading improvement programs
Logistics Requirements	• LCD projector and screen and Flip charts • Classroom for 20 participants and 1 instructor

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Our reference model seminars are tailored short courses targeted at specific model content desired by end users and sponsors. These are not official ISACA/CMMI Institute licensed courses. This means there is much more flexibility in the course content and exercises. And they are delivered at a more cost-effective price point over a shorter duration. Many people in the organization may need knowledge and awareness of the target model but do not need the official course that is required for assessment team members.

Some of the reference models that can be delivered in this format include: CMMI V3.0, Data Management Maturity Model (DMM), ISO 15288, and ISD's Integrated System Framework (ISF).

The purpose of these seminars are to provide foundational knowledge about a target reference model leading to establishment of a process improvement program, or as a first step in the enabling phase of such a program.

Our instructors are Certified Lead Appraisers and consultants who have deep model and appraisal knowledge and experience; all are Lead Appraisers, usually in multiple methods, and against multiple reference models, or Certified Instructors in the target reference model.

Course Attribute	Course Details
Course Content	• Process improvement principles and concepts • Costs and benefits of model-based process improvement • Model overview and structure • Process area or functional area detailed walk through
Material Provided	• Presentation hard copy and exercise materials • Reference materials (i.e., checklists, guidelines, frequently asked questions, etc.)
Course Duration	• 1 day • Lectures, demonstrations, and class exercises • This class is available in public and client site forums
Prerequisites	• None
Who Will Benefit	• Project managers needing information about a target reference model • Practitioners who will be involved in process action teams or pilot projects • Process group members who are responsible for leading improvement programs but will not be on formal benchmarking assessment teams
Logistics Requirements	• LCD projector and screen and Flip charts • Classroom for 20 participants and 1 instructor

SYSTEMS AND SOFTWARE ENGINEERING – SYSTEM LIFECYCLE PROCESSES: ISO/IEC/IEEE 15288:2015 SEMINAR

The ISO/IEC/IEEE 15288:2015 standard (ISO 15288) was released as a joint effort. ISO 15288 "establishes a common framework of process descriptions for describing the life cycle of systems created by humans." It defines a set of processes and associated terminology from an engineering viewpoint. It is similar to CMMI® for Development in terms of organizational scope and product development perspective. The National Defense Industrial Association (NDIA) Multi-Model Working Group established an approved mapping between ISO 15288 and ISO 15288.1 and CMMI®-DEV V1.3 to facilitate transition for organizations already invested in and familiar with CMMI®. ISD is a core member of this working group.

This seminar provides managers and practitioners with a solid foundation for understanding this new standard, and what to expect as client organizations begin to adopt it and potentially levy it on suppliers. Our seminars are modular and can be tailored to meet specific sponsor needs.

Course Attribute	Course Details
Course Content	• Overview of the ISO 15288 and ISO 15288.1 structure and content • Comparison and mapping overview of ISO 15288 and CMMI®-DEV • Detailed walk through of each process/functional area • Transition guidance and recommendations
Material Provided	• Presentation materials • Reference materials
Course Duration	• 1 or 2 days, tailorable • This class can be delivered on site to clients or delivered in one of our public settings
Prerequisites	• None
Who Will Benefit	• Managers who need to transition to this new ISO standard applicable to engineering and product development. • Process Group members who need to identify gaps in existing processes and define new or revised compliant processes. • Practitioners interested in this new system lifecycle process standard.
Logistics Requirements	• LCD projector and screen • Flip charts • Classroom for up to 20 participants and 1 instructor

Training

Event Specific Appraisal Training

Appraisal Method Training (AMT)

CMMI V3.0 Team Training

Foundations of Capability

Building Development Excellence

Building Service Excellence

Building Organizational Capability (BOC)

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This ½ day event specific method training class prepares appraisal team members to participate in the appraisal process. It is unique and cost effective for teams whose members have been trained previously on other appraisals. As required by the CMMI 3.0 method, the Lead Appraiser must deliver team training as part of preparations for performing a CMMI® compliant Benchmark. This course assumes that the participants have all received training in CMMI® and before attending this course. It is highly tailored to team building and refresher topics to ensure the appraisal team, whose members may have been trained at different times in the past, have a common foundation for working together on a specific event.

ISD's Appraisal Wizard® tool will be used to review appraisal techniques to be used on this appraisal. Appraisal Wizard® may also be used for the various interim appraisals conducted to establish a baseline for incrementally building the appraisal database and reduce risk in executing the formal Benchmark. This course focuses refresher topics, including the appraisal and data collection plans, evidence rules, rating rules, team building and team norms, and the automated tooling techniques to be used.

This course is delivered using tailored CMMI Institute licensed course materials and is augmented with ISD specific material and is with your event specific appraisal assets. It is delivered by a Certified Lead Appraiser.

Course Attribute	Course Details
Course Content	• Review the Appraisal and Data Collection Plans; • Review the evidence rules and the state of evidence entering this appraisal; • Review data consolidation rules; • Review rating rules; • Review and finalize team norms and operating guidelines; • Review data processing techniques using automated tooling.
Material Provided	• Presentation and exercise materials • Reference Material
Course Duration	• 1/2 day • This class is presented in client site forums
Prerequisites	• Participants must verify completion of the CMMI Institute Introduction to CMMI® course. • Participants must verify completion of prior SCAMPI^{SM} or CMMI V2.0 or ISD's Comprehensive Appraisal Method (CAM) method team training.
Who Will Benefit	• Appraisal team members (including team alternates) assigned to perform a specific appraisal event.
Logistics Requirements	• LCD projector and screen • Flip charts • Classroom for 10 participants and 1 instructor • Can be delivered virtually

COMPREHENSIVE APPRAISAL METHOD (CAM) TRAINING

Comprehensive Appraisal Method (CAM) training prepares participants to be appraisal team members or help support preparations for a model-based appraisal. The focus is appraisal team techniques and methods. ISD's CAM is a foundational method that can be used with any reference model, standard, or framework. The course provides fundamental appraisal concepts needed for an individual to perform as an effective team member. We use a guided case study to simulate actual appraisal activities. The interactive simulation uses our Appraisal Wizard™ tool to further facilitate the learning experience.

The course objectives include preparing students to effectively participate as team members, understand how to support the appraisal plan goals and objectives, know how to obtain appropriate objective evidence, perform evidence review, interviewing, observation writing, data consolidation, team consensus, ratings, and reporting.

Course Attribute	Course Details
Course Content	- Appraisal Framework and Team Concepts - Developing Critical Skills - CAM Overview - Planning and Preparing for an Appraisal - Developing and Using the Appraisal Plan - Practicing Interviewing and Document Review Techniques - Analyzing and Validating Data - Opening, Preliminary, and Final Findings Presentations - Recording Observations and Validating Data - Performing Rating Rules and Rating Process, and Generating Findings - Preparing and Delivering Findings Presentations - Documenting and Reporting Appraisal Results - Tailoring CAM for Different Applications
Material Provided	- Training and Reference materials - Exercises and Case Study materials - Comprehensive Appraisal Method (CAM) technical report - Fundamental Appraisal Concepts paper - Fact-Inference-Judgement paper
Course Duration	2, 3 days, or up to 5 days. 3 days is the standard delivery. - This course can be delivered on site or in public forums
Prerequisites	- Reference model knowledge will be confirmed prior to admittance. - A knowledge pretest must be completed as part of the registration process.
Who Will Benefit	- Practitioners and managers in services, systems and software engineering, acquisition, and quality improvement - Individuals designated as team members for a Model-Based appraisal - Process group members who are responsible for leading process improvement programs
Logistics Requirements	- LCD projector and screen and Flip charts - Computers/laptops for students for use of Appraisal Wizard™ - Classroom for up to 15 participants and 1 instructor

CMMI V3.0 TEAM TRAINING

CMMI V3.0 team training prepares participants to perform as team members using the official benchmarking method. The objective is to prepare students to effectively participate as team members. This includes understanding appraisal planning, reviewing documents, interviewing people, recording and consolidating data, and documenting and reporting appraisal results.

This course uses lectures, exercises, and a guided case study that simulates an actual appraisal. It is highly interactive and is delivered in a team-based environment. This format helps participants develop appropriate skills and confidence in applying their skills. Students use our automated tool, Appraisal Wizard™, to further facilitate the learning experience. Participants receive read-ahead material and there are homework assignments.

This course is delivered by a Certified Lead Appraiser using ISACA licensed course materials, augmented with ISD materials.

Course Attribute	Course Details
Course Content	- Understanding the Appraisal Framework; - Learning about the method - Planning and Preparing for your Appraisal; - Reviewing Documents; - Practicing Interviewing Skills and Techniques; - Analyzing and Validating Data; - Preparing and Delivering Findings Presentations; - Performing the Rating Rules and Process; - Documenting Appraisal Results.
Material Provided	- Presentation hard copy and exercise materials - Reference Material
Course Duration	2 or 3 days (tailorable) - This class is typically presented on a client site but can also be delivered in public forums
Prerequisites	Participants must validate that they have attended CMMI V2.0 Foundations of Capability and at least one Building Excellence class.
Who Will Benefit	Prospective appraisal team members (including team alternates)
Logistics Requirements	- LCD projector and screen - Flip charts - Classroom for up to 15 participants and 1 instructor - Can be delivered virtually

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FOUNDATIONS OF CAPABILITY

Capability Maturity Model Integration (CMMI®) V3.0 provides best practices for improving your organization's ability to develop products. This course explains the model content and structure, and how to use it to improve organizational processes. Understanding the CMMI® helps your organization establish improvement priorities, guide improvement implementation, and appraise your organizational maturity or process capability.

This course is a prerequisite for being on a CMMI Benchmark appraisal. The course is delivered using ISACA/CMMI Institute licensed course materials and Certified instructors who have the depth of knowledge and experience to relate the models to the real world. We also augment the course with our own materials.

As a course participant you will receive the foundational knowledge to enable you to:
- Understand the importance and benefit of using and improving defined processes
- Comprehend the architecture and content of the CMMI® models
- Understand how CMMI helps an organization improve their performance

Course Attribute	Course Details
Course Content	- Overview of CMMI® components and model-based process improvement concepts - Benefits of CMMI® implementation and comparison with other models - Structure of the model and details of each Process Area in the model - Process area relationships and institutionalization practices
Material Provided	- CMMI model PDF and online Model Viewer access for 30 days - Presentation hard copy and exercise materials - ISD augmented material - One credit towards the CMMI Associate exam
Course Duration	2 days - Presented in both public and client site forums
Prerequisites	Reading homework is required.
Who Will Benefit	- This is an introductory course, and there are no prerequisites, some knowledge of systems or software engineering, quality management, and basic management principles is helpful. - Practitioners and managers in systems and software engineering, development, and quality improvement - Individuals designated for a CMMI appraisal - Process group members who are responsible for leading process improvement programs
Logistics Requirements	- LCD projector and screen and Flip charts - Classroom for 20 participants and 1 instructor - Limit of 15 participants for virtual delivery

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BUILDING DEVELOPMENT OR SERVICE EXCELLENCE

Capability Maturity Model Integrated (CMMI®) Building Development and Building Service Excellence courses cover product development and service delivery. CMMI is a process improvement framework that build on industry best practices. To help organizations set performance improvement goals and priorities, provide guidance for quality processes, and provide a benchmark for appraising current processes.

These one-day supplements to Foundations of Capability discuss the practice areas that are unique to either the Development or Service domains. This course is a prerequisite for being a lead appraiser, team leader, or team member on a Benchmark appraisal using either the CMMI V3.0 Development or Services Benchmark Model Views. It is only for individuals who have already completed the Foundations of Capability course. This course is delivered using ISACA/CMMI Institute licensed materials by Certified instructors; augmented with ISD material.

As a course participant you will receive the foundational knowledge to enable you to:
- Describe the unique elements of either the Development or Services model views

Course Attribute	Course Details
Course Content	- Development or Services Overview - Walkthrough of Development or Services Unique Practice Areas - Walkthrough of Development or Services Specific Practices
Material Provided	- CMMI V3.0 PDF and online model viewer access for 30 days. - Presentation hard copy and exercise materials
Course Duration	1 day - The course is composed of lectures and class exercises - This class is presented in both public and client site forums
Prerequisites	Foundations of Capability course is a prerequisite to attending
Who Will Benefit	- Product developers/service providers, and process implementers - Candidate CMMI instructors and lead appraisers - Individuals designated as team members for a CMMI appraisal - People who have development or services knowledge and are interested in the other domain
Logistics Requirements	- LCD projector and screen and Flip charts - Classroom for 20 participants and 1 instructor - Limit of 15 participants for virtual delivery

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Capability Maturity Model Integrated (CMMI®) Building Organizational Capability (BOC) course covers all of the domains within the CMMI framework. Including product development and service delivery, supplier management, safety and security, data management and people management. CMMI is a process improvement framework that is built on industry best practices. To help organizations set performance improvement goals and priorities, provide guidance for quality processes, and provide a benchmark for appraising current processes.

BOC is a 4 day course that supplements to Foundations of Capability course, discussing all the model domains. This course is a prerequisite for being a lead appraiser, team leader, or team member on a Benchmark appraisal using any the CMMI V3.0 Benchmark Model Views (e.g., if SAM is included in scope). It is only for individuals who have already completed the Foundations of Capability course. This course is delivered using ISACA/CMMI Institute licensed materials by Certified instructors; augmented with ISD material.

As a course participant you will receive the foundational knowledge to enable you to:
- Describe the unique elements of either the Development or Services model views

Course Attribute	Course Details
Course Content	- Model Domain Overviews - Walkthrough of Domain Specific Practice Areas - Walkthrough of Domain Specific Practices
Material Provided	- CMMI V3.0 PDF and online model viewer access for 30 days. - Presentation hard copy and exercise materials
Course Duration	1 day - The course is composed of lectures and class exercises. - This class is presented in both public and client site forums.
Prerequisites	Foundations of Capability course is a prerequisite to attending
Who Will Benefit	- Product developers/service providers, and process implementers. - Candidate CMMI instructors and lead appraisers. - Individuals designated as team members for a CMMI appraisal. - People who have development or services knowledge and are interested in the other domains.
Logistics Requirements	- LCD projector and screen and Flip charts - Classroom for 20 participants and 1 instructor - Limit of 15 participants for online delivery

High Maturity Concepts is a ISACA/CMMI Institute officially licensed one-day course. It is foundational knowledge about high maturity activities that serves as an introduction to these advanced concepts. It is required for all prospective high maturity appraisal team members. Participant provided data is used wherever possible to illustrate concepts.

This seminar assumes foundational Level 2 and 3 knowledge. CMMI V3.0 Foundations and one of the Building Excellence courses are prerequisites to attending this course. Participants learn about the components needed to build a successful High Maturity process improvement program. Exercises focus on understanding high maturity concepts and discussion of existing processes and tools that may support evolution to perform these activities.

Course Attribute	Course Details
Course Content	• CMMI® structure review • Building blocks to higher maturity • High Maturity foundational concepts and techniques • Group Exercises
Material Provided	• Participant's notebook • Reference and exercise material
Course Duration	• 1 day • This class is available in public and client site forums
Prerequisites	• Knowledge of foundational Maturity Level 2 and 3 practices • Knowledge or experience with appraisal methods is helpful • CMMI Foundations of Capability • One of the Building Excellence classes, or • CMMI V2.0 Upgrade (for prior trained students)
Who Will Benefit	• Project personnel implementing high maturity practices • Required for prospective Appraisal Team Members • Process group and process action team members responsible for defining high maturity practices
Logistics Requirements	• LCD projector and screen and Flip charts or equivalent electronic delivery mechanisms • Classroom for up to 20 participants and 1 instructor including Desktops or laptops. • Access to the CMMI Institute Online Model Viewer • Limit of 15 participants in virtual delivery

Workshops

Measurement Workshop

High Maturity Workshop

Process Group Workshop

Quality Assurance Workshop

Tailoring Workshop

Process Definition Workshop

Managing Organizational Change Workshop

Technology Transition Workshop

Integrated System Diagnostics

This Measurement Workshop prepares participants to initiate and lead measurement activities that are consistent with the organization's process improvement program using the Goal-Driven Measurement method. This class uses tailored Software Engineering Institute (SEI) licensed materials augmented with ISD material. Workshop participants

- translate business goals into concrete operational statements with a measurement focus,
- identify indicators that are directly related to meeting these goals, and
- develop a measurement specification for gathering, analyzing, and reporting measurement data and analysis results.

Goal-Driven Measurement provides a structured approach to defining and implementing measurements that ensures your measurement program is aligned with organizational business processes and objectives. This class will be presented by a Certified Instructor and is augmented by ISD material. Participants will produce draft measurement assets that can be used in subsequent improvement activities. Using the techniques in this class directly supports satisfying measurement practices in Maturity Levels 2-3 of the CMMI® or similar reference models.

Course Attribute	Course Details
Course Content	• Understand the Goal/Question/Metric (GQM) paradigm; • Identify business goals and sub-goals; • Identify measurable attributes; • Identify indicators (graphs, charts, etc.) and the data elements necessary to support the indicators; • Identify the actions needed to implement defined measures; • Prepare a draft measurement specification or plan.
Material Provided	Materials are tailored and augmented from SEI licensed materials: • Goal Driven Measurement Guidebook (includes templates) • Participant's notebook • Reference and sample materials
Course Duration	• 2 or 3 days. Duration is tailorable. • This class is available in public and client site forums
Prerequisites	• Participants should have knowledge of the organization's business goals and existing processes. • Prior training in a reference model such as CMMI® is extremely helpful and strongly recommended.
Who Will Benefit	• Practitioners, managers and technical staff who need to learn how to identify, define, and use measures to manage projects and improve products • Process and measurement group members chartered with defining organizational standard measures
Logistics Requirements	• LCD projector and screen • Flip charts and markers • Classroom for 15 participants and 1 instructor • Students should bring available existing information related to organizational business goals and measurement assets that can be used or modified during class exercises.

PROCESS GROUP WORKSHOP

The Process Group (PG) Workshop helps participants develop the strategies, plans, and policies to initiate or sustain an effective process improvement program. ISD teaches you to effectively charter and operate a Process Group. We define the roles and responsibilities of a Process Group as well as the policies, procedures, training and other resources necessary to implement an effective process improvement program. We provide focused guidance if your PG has encountered obstacles and needs revitalization. We will discuss the Organization Standard Process, the Organization Process Asset Library, and the Metrics Database in relation to the daily project and work group implementation activities and review various alternative implementation strategies for these core organizational assets.

We'll prepare you for success by helping you identify risks and obstacles and discussing how to mitigate them. You'll walk away armed with the draft planning documents necessary to begin or step up your process improvement effort including the Process Group Charter, the Strategic Process Improvement Plan, and the Communications Plan.

Course Attribute	Course Details
Course Content	• Process Improvement Overview; • Process Infrastructure and Process Management concepts; • Reference Models and Improvement Frameworks; • Managing Process Improvement; • Defining process group roles and responsibilities, and policies and procedures; • Evaluation of improvement areas; • Identifying risks, obstacles and associated mitigation techniques; • Developing a Charter, Strategic Process Improvement Plan and Communications Plan; • Establishing and maintaining appropriate levels of sponsorship.
Material Provided	• Participant's notebook • Reference material
Course Duration	• 2, 3, or 5 days. Duration is tailorable based on participant background and objectives. • This class is available in public and client site forums
Prerequisites	• None
Who Will Benefit	• Members of the Process Group and other practitioners involved in process improvement
Logistics Requirements	• LCD projector and screen • Flip charts • Classroom for 15 participants and 1 instructor

Integrated System Diagnostics

QUALITY ASSURANCE WORKSHOP

This workshop helps participants gain an in-depth understanding of Quality Assurance (QA) in order to create an effective organizational QA approach. This workshop provides an orientation of QA concepts and activities presented with a management flavor. The course content will equip managers with the know how to plan and document quality activities, understand the necessity of management commitment, understand the difference and need for both product and process QA, and how to verify the implementation of quality activities and use their results. The techniques presented are compatible with CMMI® and ISO 9001 and proven successful in both commercial and government organizations. Some concepts explored include how the position of the QA function in the organization affects its independence and effectiveness, and how the quality of a system is highly influenced by the quality of the process used to develop and maintain it. ISD instructors bring decades of process improvement, quality management, and project management experience to offer practical advice to attendees.

After attending this course the participants will be able to:
- Understand what is required to make Quality Assurance (QA) effective
- Describe the functions performed by the QA team
- Understand "your" QA role and responsibilities
- Describe QA functions, and where they should be applied during the project or work life cycle
- Define and apply a QA plan for individual projects or work groups
- Use measurements of process quality

Course Attribute	Course Details
Course Content	• Why QA? • QA Roles • QA Plan • QA and the Project/Work Group Life Cycle • QA and the CMMI®
Material Provided	• Participant's notebook • Reference material
Course Duration	• 2 or 3 days. Duration is tailorable depending on audience and depth of coverage • This class is typically delivered in client forums but can also be available in public forums
Prerequisites	• Participants should have a general awareness of process and quality management concepts • Participants should have awareness of their organization's current quality management practices • Training in quality assurance concepts from models such as CMMI® is strongly recommended.
Who Will Benefit	• Quality assurance personnel • Process Group members • Project/Work Group Managers
Logistics Requirements	• LCD projector and screen and 1 Flip chart for each 3 participants • Classroom for up to 15 participants

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TAILORING WORKSHOP

This workshop helps you to tailor the CMMI® or other reference model to fit your organizational needs and how to tailor a standard organization process for project needs. Tailoring the target model and your standard process is crucial to ensure that the organization's practices are appropriate for the environment in which they will be implemented. Tailoring is an essential step for managers to define processes for project use. Tailoring ensures that the organization's local environment, culture, and types of work are incorporated into the process. Tailoring is an essential activity and is a key process requirement in CMMI® Maturity Level 3. Deliverables include workshop materials, and a key outcome is a draft tailored CMMI® and/or tailored elements of your standard process. Draft tailoring guidelines, criteria, and draft adjusted processes for distinct product lines or types of work are typical outcomes.

As a course participant you will receive the foundational knowledge to enable you to
- Understand the importance and benefits of tailoring processes from a defined standard
- Practice fundamental approaches by applying tailoring concepts in your environment

Course Attribute	Course Details
Course Content	• CMMI® components refresher and Maturity Level 3 building blocks review • Tailoring Overview • Tailoring to the Environment and Tailoring Based on Process Attributes • Defining Tailoring Choice Sets • Tailoring Practices • Tailoring Measurements • Establishing a Tailoring "Project"
Material Provided	• Presentation and exercise materials • Reference and sample materials
Course Duration	• 2 or 3 days. Course duration is tailorable. • This class is typically delivered in client site forums
Prerequisites	• Homework may be required for the first two days of the workshop. • Introduction to CMMI® training or equivalent • Familiarity with target projects and standard processes which will be subject to tailoring
Who Will Benefit	• Practitioners and managers responsible for tailoring processes • Process designers responsible for defining organizational standard processes • Process group members responsible for leading process improvement programs
Logistics Requirements	• LCD projector and screen and Flip charts and markers • Classroom for 15 participants and 1 instructor • This is an asset building workshop. Organizations are expected to provide current processes for use in workshop exercises.

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PROCESS DEFINITION WORKSHOP

This workshop provides a method for analyzing process needs and techniques for documenting processes in a usable and effective format. Participants learn how to define processes using Context Diagrams, Data Flow Diagrams, and Role Activity Diagrams. They also learn to analyze defined processes for required inputs and outputs, missing elements, and inefficient work flow. Draft processes are rapidly documented using the proven ETVX and IDEF0 process definition techniques. Participants perform hands-on exercises of two types: they learn by defining or refining their own processes and identifying solutions for their organizations' problems, and they also use a case study and examples provided during the workshop.

Documenting effective standard processes is crucial to ensure that the organization's desired practices are adopted uniformly and applied consistently by users. Performing these activities supports implementing CMMI® practices at Maturity Level 3. Deliverables include workshop materials, and key outcomes are draft standard processes for targeted areas.

As a workshop participant you will receive the foundational knowledge to enable you to
- Analyze existing processes or new process needs.
- Define and document processes using formal process definition techniques
- Practice fundamental skills by applying these techniques to your environment

Course Attribute	Course Details
Course Content	• Foundations of process definition, process improvement and organizational change management • Understanding process architecture and components • Process analysis techniques • Process definition techniques • Documenting targeted processes using these techniques
Material Provided	• Presentation and exercise materials • Reference and sample materials
Course Duration	• 2, 3, or 5 days. Course duration is tailorable. • This class is typically delivered in client site forums
Prerequisites	• Homework may be required during the workshop to support workshop exercises. • Familiarity with your target projects and current processes which need to be defined
Who Will Benefit	• Practitioners and managers responsible for applying standard processes • Process designers responsible for defining organizational standard processes • Process group members responsible for leading process improvement programs
Logistics Requirements	• LCD projector and screen and Flip charts and markers • Classroom for 15 participants and 1 instructor • This is an asset building workshop. Organizations are expected to provide current processes for use in workshop exercises.

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MANAGING ORGANIZATIONAL CHANGE WORKSHOP

This workshop provides methods for managing complex organizational change efforts. Draft processes to support the change management program are rapidly documented using the proven ETVX and IDEF0 process definition techniques. Participants perform hands-on exercises of two types: they learn by defining or refining their own processes for change management, and identifying solutions for their organizations' problems, and they also use a case study and examples provided during the workshop.

Performing these activities supports implementing some CMMI® practices at Maturity Level 3 and Maturity Level 5. Deliverables include workshop materials, and key outcomes are draft standard processes for change management related areas.

As a workshop participant you will receive the foundational knowledge to enable you to
- Understand organizational change management principles
- Analyze your organization's readiness for change
- Define roles and responsibilities for a change program
- Analyze existing processes or new process needs for managing change.
- Define and document change management processes using formal process definition techniques

Course Attribute	Course Details
Course Content	• Foundations of organizational change management • Understanding the existing organizational readiness for change • Building and sustaining infrastructure for managing change • Process piloting and deployment • Measuring change effectiveness
Material Provided	• Presentation and exercise materials • Reference and sample materials
Course Duration	• 2, 3, or 5 days. Course duration is tailorable. • This class is typically delivered in client site forums
Prerequisites	• Homework may be required during the workshop to support workshop exercises. • Familiarity with your target projects and current processes which need to be defined
Who Will Benefit	• Practitioners and managers responsible for deploying standard processes • Process change agents responsible for managing standard processes • Process group members responsible for leading process improvement programs
Logistics Requirements	• LCD projector and screen and Flip charts and markers • Classroom for 15 participants and 1 instructor • This is an asset building workshop. Organizations are expected to provide current processes for use in workshop exercises.

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TECHNOLOGY TRANSITION WORKSHOP

This workshop provides methods for managing complex technology change efforts. Draft processes to support the technology change program are rapidly documented using the proven ETVX and IDEF0 process definition techniques. Participants perform hands-on exercises of two types: they learn by defining or refining their own processes for change management, and identifying solutions for their organizations' problems, and they also use a case study and examples provided during the workshop.

Performing these activities supports implementing several CMMI® practices at Maturity Level 3 and at Maturity Level 5. Deliverables include workshop materials, and key outcomes are draft standard processes for applicable areas.

As a workshop participant you will receive the foundational knowledge to enable you to
- Understand technology change management principles
- Analyze your organization's readiness for change
- Understand the technology adoption curve
- Define roles and responsibilities for a technology change program
- Analyze existing processes or new process needs for managing technological change.
- Define and document technological change management processes using formal process definition techniques

Course Attribute	Course Details
Course Content	- Foundations of technological change, adoption, and transition - Understanding the interaction between people, process, and tools - Analyzing the current environment and readiness for change - Process piloting and deployment and transition techniques - Documenting processes for using these techniques
Material Provided	- Presentation and exercise materials - Reference and sample materials
Course Duration	2, 3, or 5 days. Course duration is tailorable. - This class is typically delivered in client site forums
Prerequisites	- Homework may be required during the workshop to support workshop exercises. - Familiarity with your target projects and current processes which need to be defined
Who Will Benefit	- Practitioners and managers responsible for implementing new technology - Personnel responsible for acquiring and deploying new technology - Process group members responsible for leading technology change management programs
Logistics Requirements	- LCD projector and screen and Flip charts and markers - Classroom for 15 participants and 1 instructor - This is an asset building workshop. Organizations are expected to provide current processes for use in workshop exercises.

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ABOUT ISD

Your full service performance and process improvement provider.

We deliver integrated performance improvement to organizations worldwide.

ISD is a full service model-based process improvement consulting company, dedicated to helping companies achieve their process improvement goals in the most effective and efficient manner. ISD delivers integrated improvement programs including consulting, training, appraisals, and tools.