

ENTERPRISE ARCHITECTURE

Enterprise architecture courses are now available for on-site delivery!

Enterprise architecture (EA) is a blueprint for modernization. Our new EA curriculum is designed to equip both current and prospective enterprise architects, as well as interested technologists and line of business specialists, with the requisite knowledge and skills to implement a viable, cost effective enterprise architecture within their organizations. Participants will gain the requisite knowledge and skills to serve as effective "change agents" for enhancing intra- and interagency communications, streamlining business processes, eliminating duplication of services and facilitating data sharing for effective decision making across the enterprise and government at large.

Specific requirements for achieving a score of "green" relative to OMB's specified capability areas for "completion, use and results," as outlined in the Federal Enterprise Architecture Program EA Assessment Framework 2.0, are emphasized throughout the program.

To inquire about offering enterprise architecture or any other courses at your agency, please call our IT training consultants at (202) 314-3600 or e-mail appliedtech@grad.usda.gov.

Introduction to **Enterprise Architecture**



ENTR7000T

This course provides an introduction to and overview of enterprise architecture. Architecture frameworks and approaches will be reviewed, in conjunction with legislative and regulatory requirements, including those published by OMB's Federal Enterprise Architecture Program Management Office (FEA-PMO).

What You Will Learn

- What "enterprise architecture" is all about
- Why "enterprise architecture" is important EA roles and responsibilities within a fed-
- The importance of effectively communicat-
- ing an "enterprise architecture" to agency executives, management and general personnel for organizational buy-in

Who Should Attend

All those interested in learning about enterprise architecture, including aspiring and existing enterprise architects; CPIC coordinators; program/project managers; and IT, program, planning and budget specialists.

Course Objectives

Upon completion of this course you will be able to:

- Explain the relationship of EA to strategic planning, capital planning and investment control (CPIC), IT security, configuration management and system development life cycles (SDLC)
- Understand the requirements for "Getting to Green" vis-à-vis the Federal Enterprise Architecture Program EA Assessment Framework 2.0
- Implement an agency enterprise architecture, including an "as-is" and "to-be" architecture and a transition plan for migrating from existing to targeted states
- Comprehend the taxonomy and use of applying different architectural frameworks and approaches
- Apply underlying principles governing the application of federal enterprise architecture reference models

3 Days | 1.8 CEU | Tuition \$1,095

July 18-20, 2006 Washington, DC October 31 – November 2, 2006 Washington, DC March 21-23, 2007 Washington, DC June 11-13, 2007 Washington, DC

Implementing an Enterprise Architecture



ENTR7001T

In this course, participants will learn how to provide business value to their agency; meet associated needs; and how to address Federal Enterprise Architecture Program EA Assessment Framework 2.0 requirements for "getting to green" relative to "completion, use and results."

What You Will Learn:

- The importance of an EA tool in the development and maintenance of an agency EA
- Considerations in selecting a particular tool and an approach for modeling your agency's EA
- How to develop an architecture structured to your agency's mission, organization, and culture
- Techniques and approaches for documenting your agency's "as-is" architecture
- Techniques and approaches for developing your agency's "to-be" architecture
- Assessment techniques used to identify gaps between your baseline and targeted architecture
- How to develop a transition and sequencing plan for migrating from the current to the "to-be" state
- How to link your agency's "as-is" and "tobe" architectures to FEA reference models
- To effectively leverage CPIC to "achieve results"
- The role of standards development and configuration management in EA implementations
- Techniques for developing business-oriented, data-oriented, and service-oriented architectural models
- Cases that analyze where service-oriented architectures can be effectively leveraged to facilitate data sharing and interoperability between systems

Who Should Attend

Anyone interested in learning about enterprise architecture and who wants to explore an approach to enterprise architecture which directly addresses the business of their organization and facilitates organizational participation in the development of the same. This audience would include: aspiring and existing enterprise, solutions and technical architects; CPIC coordinators; program/project managers; and IT, program, planning and budget specialists.

Course Objectives:

Upon completion of this course you will be able to:

- Develop an EA governance process that viably addresses your agency's mission and business requirements, and results in the "completion" and "use" of your EA with documented "results" to improve the effectiveness of your agency
- Choose an EA approach that best addresses your agency's desired strategic outcome
- Select and implement an architectural framework and tool for documenting your agency's EA
- Effectively work with the business in developing an agency's targeted enterprise architecture, and associated transition and sequencing plan
- Create and implement an EA strategy that effectively addresses Federal Enterprise Architecture Program EA Assessment Framework 2.0 requirements
- Develop a "to-be" architecture by: (1) assessing the effectiveness your agency's "as-is" architecture vis-à-vis its mission and strategic objectives, (2) identifying duplication in services and the collection of data, (3) inventorying best practices, and (4) surveying emerging technologies and markets
- Reconcile a sub-entity's EA to an agencylevel and/or federal EA
- Leverage techniques to facilitate effective communication and use of your EA

Prerequisite: Introduction to Enterprise Architecture (ENTR7000T).

3 days | 1.8 CEU | Tuition \$1,095

Schedule.

August 23-25, 2006 Washington, DC November 28-30, 2006 Washington, DC February 12-14, 2007 Washington, DC May 2-4, 2007 Washington, DC

EA Organization and **Governance**



ENTR8000T

In this course, EA governance will be presented as a powerful tool for modernization and change management and discussed in the context of the organization. EA governance provides the umbrella framework under which business process reviews, standards development, organizational modernization, capital planning and investment control (CPIC), and configuration and change management take place. EA governance guides, facilitates, sustains and institutionalizes these processes within continuously viable, agile organizations.

What You Will Learn

- Techniques for forming, socializing and harmonizing EA governance bodies and teams within the context of your organization
- Requirements to manage the business of your organization within the context of its EA and "to-be" architecture goals

Who Should Attend

Anyone interested in learning about enterprise architecture and who wants to explore an approach to enterprise architecture which directly addresses the business of their organization and facilitates organizational participation in the development of the same. This audience would include: aspiring and existing enterprise, solutions and technical architects; CPIC coordinators; program/project managers; and IT, program, planning and budget specialists.

Course Objectives

Upon completion of this course you will be able to:

- Pattern your EA governance structure to best address the business orientation and culture of your organization
- Establish EA governance policies and procedures which address all Federal Enterprise Architecture Program EA Assessment Framework 2.0 requirements for the same

Prerequisites: Implementing an Enterprise Architecture (ENTR7001T).

2 days | 1.2 CEU | Tuition \$875

Schedule

September 19-20, 2006 Washington, DC January 25-26, 2007 Washington, DC June 11-12, 2007 Washington, DC

Service-Oriented Architectures -Components and **Services**



ENTR8001T

This course provides a general overview of the application and use of service-oriented architectures (SOA) in the context of EA. The identification, scope and reuse of services (and components) will be addressed not only in this context but also relative to business processes and data.

What You Will Learn

- The benefits of implementing a service-oriented architecture; i.e., data sharing, system interoperability, and reductions in both direct and indirect costs
- Background, history, and definition of service-oriented architectures and how they can be effectively applied in your enterprise
- Approaches for developing "as-is" and "tobe" service architectures, and associated transition plans for migrating from the current to targeted state
- How best to scope services for re-use not only across the enterprise but across agencies as a "service provider"
- How NARA has defined record "service" requirements for potential incorporation in vendor software applications
- The rationale behind "Core.gov" and resulting benefits of its use across government

Who Should Attend

Enterprise, solutions and technical architects, and program/project managers with an understanding of enterprise architecture and associated FEA requirements.

Course Objectives

Upon completion of this course you will be able to:

- · Identify and scope services (and components) for reuse across the enterprise
- Effectively leverage the FEA Service Component Reference Model (SRM) to develop a targeted architecture within your organization
- Link services to business processes appropriately
- Evaluate the feasibility of introducing and implementing a service-oriented architecture into your environment
- Understand how UML, IDEFO and BPMN can be used to identify services and associated requirements

Prerequisite: Implementing an Enterprise Architecture (ENTR7001T).

2 days | 1.2 CEU | Tuition: \$875

October 4-5, 2006 Washington, DC February 27-28, 2007 Washington, DC July 9-10, 2007 Washington, DC

Performance Reference Models and Linkage to Strategic Plans



ENTR9000T

This course will address FEA Performance Reference Model (PRM) requirements vis-à-vis mission and business results, customer results, processes and technology. PRM linkages to agency strategic plans and performance objectives will be addressed, as will differences between outcomes versus out-

What You Will Learn:

- Differences between outcomes versus outputs, and associated metrics
- Examples of common objective quantitative measures used to monitor performance
- Approaches to link FEA PRM indicators/metrics to agency strategic performance plans, business processes, systems and assets for portfolio management
- Approaches for identifying key business process data inputs and outputs for performance metrics
- Strategies to mine data from existing agency databases and link to your agency's EA model to provide for executive dashboarding

Who Should Attend:

Enterprise, solutions and technical architects; strategic planners and budget specialists; IS and technical managers; and database managers and administrators having an understanding of enterprise architecture and associated FEA requirements.

Upon completion of this course you will be able to:

- Identify objective quantitative (and qualitative) FEA PRM performance metrics to address mission and business results, customer results, processes and technology
- Link PRM performance metrics to agency strategic plans and OMB Exhibit 300 business cases to monitor project implementation and conduct post implementation
- Link performance metrics to business processes and portfolio assets for trend analysis and planning

Prerequisites: Implementing an Enterprise Architecture (ENTR7001T), Enterprise Architecture and Governance (ENTR8000T) and Service-Oriented Architectures - Components and Services (ENTR8001T).

2 days | 1.2 CEU | Tuition: \$875

November 16-17, 2006 Washington, DC April 10-11, 2007 Washington, DC

The Key to Managing IT Services

Information Technology Infrastructure Library (ITIL®)

ITIL is the most widely accepted approach to IT service management in the world. It provides a cohesive set of best practices drawn from the public and private sectors internationally and is supported by a comprehensive qualifications scheme, accredited training organizations, and implementation and assessment tools. The best practice processes promoted in ITIL support are supported by the British Standards Institution's Standard for IT Service Management (BS15000).

For more information, visit: http://www.itil.co.uk

Technical Architectures



ENTR8002T

This course addresses FEA Technical Reference Model (TRM) requirements and associated relationships with the Open Systems Interconnection (OSI) Reference Model. The development of technical standards and specifications, to include security standards, is addressed, and configuration management is discussed in the context of organizational compliance with selected standards.

What You Will Learn

- The benefits to be derived from employing a technical reference model in your agency
- How to inventory IT assets, both hardware and software, across the enterprise
- The taxonomy of the FEA TRM
- Approaches for developing "As-Is" and "To-Be" technical architectures, and associated transition plans for migrating from the current to targeted technical state
- The concept of security trust profiles and how they can best be leveraged within your organization
- Considerations for effectively integrating security standards throughout all layers of your architecture in concert with guidance set forth in the FEA-PMO FEA Security and Privacy Profile

Who Should Attend

Enterprise, solutions and technical architects, and IS and technical managers having an understanding of enterprise architecture and associated FEA requirements.

Course Objectives

Upon completion of this course you will be able to:

- Create enterprisewide technical standards consistent with requirements specified in the FEA TRM
- Develop associated security standards in concert with requirements specified in OMB Circular A-130
- Link technical standards and specifications to identified agency FEA SRM service components
- Link technical standards and specifications to agency IT portfolios and assets
- Incorporate standards requirements in procurement clauses to better ensure consistent configuration management across the enterprise
- Monitor agency compliance with specified technical standards via configuration management
- Work closely with IT security and program components in developing an enterprisewide security trust model within which security standards are specified for implementation within specified boundaries

Prerequisites: Implementing an Enterprise Architecture (ENTR7001T), Enterprise Architecture and Governance (ENTR8000T), and Service-Oriented Architectures – Components and Services (ENTR8001T).

2 days | 1.2 CEU | Tuition \$875

Schedule:

October 17-18, 2006..... Washington, DC February 21-22, 2007.... Washington, DC June 27-28, 2007..... Washington, DC

Data Architectures



ENTR8003T

This course explores the concept and value of metadata registries using the FEA Data Reference Model (DRM) and ISO/IEC 11179, and how best to implement effective data sharing across and among enterprises for performance monitoring and real-time decision making.

What You Will Learn

- The structure of data vis-à-vis ISO/IEC 11179, the Dublin Core Metadata Initiative (DCMI), Version 1.1, and the FEA DRM
- Approaches for developing "As-Is" and "To-Be" data architectures and associated transition plans for migrating from the current to targeted state
- Concepts of knowledge asset management and decision making and how these concepts can be leveraged vis-à-vis data
- How to identify key data elements for collecting metrics on agency performance

Who Should Attend

Enterprise, solutions and technical architects; IS and technical managers; and database managers and administrators having an understanding of enterprise architecture and associated FEA requirements.

Course Objectives

Upon completion of this course you will be able to:

- Identify critical agency data objects and key attributes using business process modeling notation (BPMN) and/or IDEFO
- Categorize key agency data in accordance with the FEA DRM
- Address requirements for securing and protecting classified and/or sensitive but unclassified (SBU) security and privacy related data

Prerequisites: Implementing an Enterprise Architecture (ENTR7001T), Enterprise Architecture and Governance (ENTR8000T) and Service-Oriented Architectures – Components and Services (ENTR8001T).

2 days | 1.2 CEU | Tuition: \$875

Schedule:

December 6-7, 2006 Washington, DC July 23-24, 2007 Washington, DC

Like what you see? There's more where this came from.

Call us at (888) 744-GRAD for additional catalogs, or visit www.grad.usda.gov/request.

EA and **Business** Modeling - Concepts and Practices

ENTR9001T

In this course, participants will learn how to capture EA content employing different modeling notations. Three primary process/object modeling notations will be explored along with the pros and cons associated with each. EA modeling tools will additionally be explored and assessed relative to each of these modeling notations. The importance of involving business leader participation in visualization and development of an agency's EA model will be highlighted throughout this

What You Will Learn:

- The concepts of Unified Modeling Language (UML), Integration Definition for Function Modeling (IDEFO) and Business Process Modeling Notation (BPMN) and the circumstances under which each is best employed
- Circumstances under which these modeling notations can best be employed to capture and reflect your agency's EA content
- The importance of "purpose-based" modeling and the criticality of business leader involvement in the development of the
- Approaches for leveraging EA models for knowledge management and executive dash boarding

Who Should Attend:

Enterprise, solutions and technical architects; business partners, and technologists having an understanding of enterprise architecture and associated FEA requirements.

Course Objectives:

Upon completion of this course you will be able to:

- Distinguish the differences and circumstances under which UML, IDEFO, and BPMN are best employed
- Employ these modeling techniques to capture and reflect your agency's EA
- Incorporate EA modeling into the development and maintenance of your agency's EA governance process

Prerequisites: Implementing an Enterprise Architecture (ENTR7001T), Enterprise Architecture and Governance (ENTR8000T) and Service-Oriented Architectures – Components and Services (ENTR8001T).

2 days | 1.2 CEU | Tuition: \$875

January 11-12,	2007	Washington,	DC
May 8-9, 2007		Washington,	DC

Facilitating EA Communication and Buy-In



ENTR9003T

This course will address strategies for communicating an agency's EA and cultivating the agency's business ownership of the same.

What You Will Learn

- Different strategies for communicating an agency's EA to business participants
- The role of an EA tool in "selling" an agency's EA and engaging the business
- Strategies for eliciting EA participation in the business of the agency

Who Should Attend

Enterprise architects, business partners and technologists with a general understanding of enterprise architecture and associated FEA requirements.

Course Objectives

Upon completion of this course you will be able to:

- Create a common vision of solutions to build consensus among divergent stakeholders
- Evaluate, select and implement the most effective communication strategies to elicit your agency's buy-in of its EA
- Select and develop the most effective representation of your agency's EA for addressing its requirements
- Incorporate change management strategies and techniques into EA transition plans and governance processes
- Develop an EA communications strategy and plan

Prerequisites: Implementing an Enterprise Architecture (ENTR7001T), Enterprise Architecture and Governance (ENTR8000T) and Service-Oriented Architectures – Components and Services (ENTR8001T).

1 day | 0.6 CEU | Tuition: \$495

Schedule:

November 8, 2006 Washingto	on, DC
February 28, 2007 Washingto	on, DC
June 4, 2007 Washingto	on, DC

Now at the Graduate School, USDA



CompTIA® Certification **Training**

The Graduate School offers CompTIA® Certification training to help you achieve some of the leading industry wide, vendor-neutral certifications!

CompTIA A+

This training prepares you for certification as an entrylevel PC technician. A+ certification provides the perfect entry into an IT career.

CompTIA Network+

The international industry credential that validates the knowledge of network professionals with at least nine months of experience. A+ Certification or equivalent knowledge is a prerequisite.

Learn in our state-of-the-art classrooms or train online with instructor support via Blackboard.

Applied Enterprise NEW **Architecture: Affecting Strategic** Change

ENTR9002T

This course is designed to engage participants in an applied, problem-solving group exercise to develop a working enterprise architecture that can be effectively leveraged to support the business of an agency. In addition to developing "as-is" and "to-be" architectures, and associated transition and sequencing plans, participants will develop accompanying EA communications and governance strategies to facilitate the development and maintenance of the EA. Change management issues will be addressed in conjunction with resource realignment strategies during the development of group project.

- How to determine the scope of an architec-
- How to determine the information needed to populate your chosen enterprise architecture framework
- How to select an EA toolset
- · How to incorporate EA into agency decisionmaking processes; (CPIC, configuration management, system development life cycle)
- How to maintain an EA (data collection, refresh, change control)
- How to develop a communications strategy
- How to develop performance metrics
- The role of the architectural compliance process (governance)
- Practices and methods of using architecture as a strategic tool to resolve business problems; i.e., the value of EA
- The role of the architect in leading change and introducing sustainable solutions

Who Should Attend:

Practicing enterprise and solutions architects, business partners and technologists with a general understanding of enterprise architecture and associated FEA require-

Course Objectives:

Upon completion of this course you will be able to:

- Create an actionable EA program
- Leverage an EA to demonstrate a return on investment for proposed business solutions
- Understand the role of the architect in leading change and introducing sustainable solutions
- Demonstrate compliance with federal man-

Prerequisites: Implementing an Enterprise Architecture (ENTR7001T), Enterprise Architecture and Governance (ENTR8000T), and Service-Oriented Architectures – Components and Services (ENTR8001T), and any 3 certificate elective courses.

3 days | 1.8 CEU | Tuition: \$1,095

March 5-7, 2007..... Washington, DC June 6-8, 2007 Washington, DC

Location, Location, Location



The Graduate School is conveniently located in Capital Gallery at 600 Maryland Avenue S.W. near the L'Enfant Plaza Metro station. 7th Street and Maryland Avenue exit. You can reach us via the Yellow, Green, Orange or Blue lines. Parking is available in the building and in nearby garages.



Certificate of Accomplishment in Enterprise Architecture

ENTR9100T

Enterprise Architecture is a blueprint for modernization. The Certificate of Accomplishment in Enterprise Architecture (EA) is designed to equip both current and prospective enterprise architects, as well as interested technologists and line of business specialists, with the reguisite knowledge and skills to implement a viable cost effective enterprise architecture within their organization.

Participants will gain the requisite knowledge and skills to serve as effective "change agents" for enhancing intra- and inter-agency communications, streamlining business processes and eliminating duplication of services, and facilitating data sharing for effective decision making across the enterprise and across government at large. Specific requirements for achieving a score of "Green" relative to OMB's specified capability areas for "Completion, Use and Results" as outlined in the "Federal Enterprise Architecture Program EA Assessment Framework 2.0," are emphasized throughout the program.

Introduction to Enterprise Architecture (ENTR7000T) is designed to provide participants with an overview of enterprise architecture and all current OMB/FEA requirements. While all participants are encouraged to take this class, it is required only for participants with less than one year of hands-on experience in enterprise architecture. Required courses must be taken prior to elective courses, and Implementing an Enterprise Architecture (ENTR7001T) is a prerequisite to all other required courses. The sequence in which remaining elective courses are taken is left to the discretion of the individual. However, participants electing to take Applied Enterprise Architecture: Affecting Strategic Change (ENTR9002T) are encouraged to take this course last. Participants have three years to complete the program.

(Required if less than one year of experience in the practice of federal enterprise architecture):

Introduction to Enterprise Architecture | ENTR7000T | 1.8 CEU

Required Courses

(Complete 3 courses):

Implementing an Enterprise Architecture | ENTR7001T | 1.8 CEU

Enterprise Architecture Organization and Governance ENTR8000T | 1.2 CEU

Service-Oriented Architectures (Components amd Services) ENTR8001T | 1.2 CEU

(Select 4 courses):

Performance Reference Models and Linkage to Strategic Plans ENTR9000T | 1.2 CEU

Technical Architectures | ENTR8002T | 1.2 CEU

Data Architectures | ENTR8003T | 1.2 CEU

EA and Business Modeling - Concepts and Practices ENTR9001T | 1.2 CEU

Facilitating EA Communication and Buy-In | ENTR9003T | .6 CEU

Applied Enterprise Architecture: Affecting Strategic Change ENTR9002T | 1.8 CEU

FROM THE EXECUTIVE DIRECTOR

The Graduate School, USDA has provided training solutions for the federal workforce for 85 years, and information technology (IT) training for more than 25 years. Our customers now include employees from state and local governments, as well as government contractors and private individuals. We continue to evaluate and refine our IT programs to meet your training needs and to provide the best possible education on new technology and software. We continually strive to be the training choice of all government professionals.

FY07 promises to be a particularly auspicious year for the School, as governments embrace new technologies and management systems—this year's catalog features new programs in enterprise architecture (EA), geographic information systems (GIS), information technology infrastructure library (ITIL) and authorized Cisco training. If any of these subjects are new to



you, please take a few moments to review the introductory courses in each sequence to learn how they can benefit you. We continue to offer comprehensive programs in databases, Internet, Microsoft Office, network and operating systems, security and more. You will also find a variety of distance education options throughout this year's catalog.

Certifications and advanced degrees continue to be high priorities for IT professionals, and the School can help you achieve both. A+, Network+, CCNA® and MCDST are a sampling of the certifications for which we provide training. As a sponsored organization of Tech 2000, Inc., the Graduate School is a Cisco Authorized Training Center. Network security professionals can work toward a Masters in Network Security with our educational partner, Capitol College of Maryland. In addition, we continue to offer numerous IT certificate programs to give you a complete skill set in a desired specialty. Please contact our IT training consultants at appliedtech@grad.usda.gov or (202) 314-3600 to discuss how best to meet your educational goals.

Jerry Ice, Ed.D. Executive Director



Registration Form

Participant Name**					
-	Last	First	Middle		
ID Information**					
	Social Security Number or Date of Birth (Require	Position or Title			
Mailing Address**					
Preference Home or Office	Street		Suite/Floor/Apt #		
	City	State	Zip		
Telephone**					
	Home Phone (Include Area Code)	Daytime Number (Include Area Code)			
	E-Mail Address	Fax Number			
Course Information 1*	*				
	Course Code	Course Title			
	Course Date	Location	Tuition		
Course Information 2					
	Course Code	Course Title			
	Course Date	Location	Tuition		
Method of Payment**					
	Card Company	Account Number	Expiration Date		
(MasterCard, Visa,	Cardholder's Name (as it appears on the card)	Cardholder's Telephone Number			
American Express, Diners Club)	Cardholder's E-Mail Address				
How did you first hear about this course? o Printed catalog	Check Number	Amount	Deferred Account Number		
E-Mail Training Officer	Employer/Agency Name				
BrochureFriend/ColleagueAdvertisement	Mailing Address/Billing Address	PO # **(required if being billed)			
AdvertisementConferenceGraduate School, USDA	Is a receipt required?	Y N			
Web site Another Web site	Is an invoice required? (If yes, provide billing address and PO #**)				
• Other	**Required Information				

Name of Person Completing Form

Date

2nd Participant Information

mormation				
	Last	First	Middle	
	Social Security Number or Date	Social Security Number or Date of Birth (Required)		
	Street Address	City	State/Zip	
	Home Phone	Daytime Phone	E-Mail Address	
3rd Participant				
Information				
	Last	First	Middle	
	Social Security Number or Date of Birth (Required)		Position or Title	
	Street Address	City	State/Zip	
	Home Phone	Daytime Phone	E-Mail Address	
4th Participant Information				
	Last	First	Middle	
	Social Security Number or Date of Birth (Required)		Position or Title	
	Street Address	City	State/Zip	
	Home Phone	Daytime Phone	E-Mail Address	
5th Participant Information				
	Last	First	Middle	
	Social Security Number or Date of Birth (Required)		Position or Title	
	Street Address	City	State/Zip	
	Home Phone	Daytime Phone	E-Mail Address	