Global Business Solutions, Inc.

Complete Course Catalog

TEL: 850-944-7579
TOLL FREE: 877-446-4274
FAX: 850-944-3232
www.gb-solutions.com
2400 West Michigan Avenue, Suite #4
Pensacola, FL 32526

Global Business Solutions, Inc.

IT Solutions For The Enterprise

Dear Colleague,

Thank you for the opportunity to present the variety of Enterprise training and technical services offered by our expert and professional staff at Global Business Solutions, Inc.

Global Business Solutions, Inc. has been providing Enterprise training and consulting services since 1995. We offer over 300 courses in technical and functional end-user training in the latest products and technologies. We are committed to providing effective Information Technology training and consulting – guiding our customers to personal and professional success.

We are pleased to present our current Enterprise Training and Consulting Services catalog. It includes consulting services, training tracks, and course offerings and descriptions that will assist you in planning your Enterprise training events. However, technology changes rapidly and so do your needs. If you have a training requirement or service that is not listed, please refer to our website at ***http://www.gb-solutions.com*** *or call us toll free at* ***877-446-4274****.*

Our goal is to provide each student a complete and comprehensive experience by offering customizable training led by expert instructors. Our instructors are "real-world" professionals who apply their technical background, knowledge and experience to their classroom presentation.

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We look forward to providing total customer satisfaction in our delivery of quality Enterprise training and consulting services to your company.

Sincerely,

Randy M. Ramos
President/CEO
Global Business Solutions, Inc.

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Course Offerings and Descriptions

Cisco Courses

CCN100 Introduction to Cisco Networking Technologies
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CompTIA Certification Courses

TIA100 CompTIA A+ Essentials
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TIA300 CompTIA Network+ Certification
TIA400 CompTIA iNet+ Certification
TIA500 CompTIA Server+ Certification
TIA600 CompTIA Linux+ Certification
TIA700 CompTIA Security+ Certification

Java Courses

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JAV200 Oracle Business Components for Java (BC4J)
JAV300 Java Oracle Database Connectivity (JDBC) and SQLJ
JAV400 Java Programming, SQLJ and JDBC using JDeveloper
JAV500 Introduction to Java Programming
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JAV530 Java Swing
JAV535 Introduction to Struts using WASAD
JAV550 WebSphere Studio: Server Side Development
JAV600 Object-Oriented Design Patterns
JAV605 Implement Java Design Patterns
JAV700 Java Essentials for Database Administrators

LINUX/UNIX Courses

AIX101 Introduction to AIX System Administration
AIX201 AIX System Administration I
AIX301 AIX System Administration II
LNX300 LINUX Operating System Essentials
LNX600 LINUX System Administration
LNXRH120 Red Hat Enterprise LINUX Fundamentals
LNXRH250 Red Hat Enterprise LINUX System Administration
LNXRH275 Red Hat Enterprise LINUX Network Services
LNXRH314 Red Hat Enterprise LINUX Troubleshooting
LNXRH510 Red Hat Enterprise LINUX Network Security
LNXRH550 Red Hat Enterprise LINUX Security Administration
UNX100 UNIX Fundamentals
UNX300 UNIX Advanced Tools
UNX400 UNIX KORN Shell Programming

Microsoft .NET 2.0 Development Courses

MAD2005 Programming MS SQL Server 2005 Database
MAD2100CS C# 2005: Developing Applications
MAD2100VB Visual Basic 2005: Developing Applications
MAD2150CS C# 2005: Enhancing Applications
MAD2150VB Visual Basic 2005: Enhancing Applications
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MAD2300CS ASP.NET 2.0 using C# 2005
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MAD2400VB Advanced .NET Framework 2.0 using Visual Basic 2005

MAD2500CS Windows Workflow Foundation using C# 2005
MAD2500VB Windows Workflow Foundation using Visual Basic 2005
MAD2600 Upgrading Web Development Skills to ASP.NET 2.0
MAD2700 Advanced Web Application Development using ASP.NET 2.0
MCS2734 Update Database Developer Skills to MS SQL 2005
MCS4994CS Introduction to Programming Microsoft Visual C# 2005
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Microsoft SQL Server 2005 Courses

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MAD2005R SQL Server 2005 Reporting Services
MCS2733 Update DBA Skills to MS SQL 2005
MCS2779 Implementing a Microsoft SQL Server 2005 Database

Oracle 10g Courses

DIS100 Oracle 10g Discoverer for End Users
DIS200 Oracle 10g Discoverer for Administrators
FRM100 Oracle Developer Forms I
FRM200 Oracle Developer Forms II
FRM300 Deploy Oracle Forms and Reports Web Applications
FRM901 Oracle 9i Developer Forms
FRM10g Oracle 10g Developer Forms
OAS100 Oracle 10gAS Administration
OAS400 Oracle 10gAS Portal Development
OAS500 Oracle 10gAS PL/SQL
ORA100 Understanding Oracle RDBMS
ORA200 Relational Database Design
ORA370 Oracle 10g Comprehensive SQL and PL/SQL using SQL *Plus
ORA370g Oracle 10g Queries and Reports using SQL *Plus
ORA380 Oracle 10g Comprehensive SQL using SQL *Plus
ORA400 SQL Tuning Techniques
ORA560 Oracle 10g PL/SQL Programming
ORA610 Oracle 10g Database Administration I
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XML Development Courses

XML100 XML Fundamentals
XML200 XML Advanced Concepts
XML300 XML Programming using Java
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Information Assurance Technical (AIT) Category

The functions associated with each of these technical levels are intended to be baseline DoD requirements. The DoD Components are expected to have additional requirements reflecting their operating policy and information system technical environment. The requirements of this Manual do not exempt individuals from meeting their own organization's standards and requirements.

Technical Category Description:

Personnel required to perform any technical category IA functions (one or more functions) at any level must be certified to the highest level function(s) performed. An IAT position's functional requirement(s) for a particular level establish the basis for the individual's certification requirement.

This category comprises IA Technical (IAT) Levels I, II and III.

Technical Category Functional Requirements:

The IAT category's functional requirements are cumulative. Thus, an IAT Level II or III position requires mastery of the functional requirements of the preceding levels.

IAT Category Training Requirements:

Participation in initial training (classroom, distributive, or blended) before, or immediately on, assignment of IA responsibilities. Training need not result in award of a military specialty code (e.g., Military Occupational Specialty, Navy Enlisted Classification Code, and/or Air Force Specialty Code), but must be sufficient to meet minimum certification standards.

Completion of an on the job skills practical evaluation to meet functional requirements listed in this chapter.

Completion of sustainment training/continuing education as required to maintain certification status. For planning purposes the standard is normally a minimum of 20 to 40 hours annually, or 120 hours over three years.

IAT Category Certification Requirements:

The certification program for IAT category positions must include the functions identified for that level. All IAT category personnel, whether they perform IA functions as primary or additional/embedded duty, must be certified based on the IA functions of the position.

Within six months of assignment of IA duties, all IAT personnel must achieve the appropriate IA certification unless a waiver is granted.

Individuals performing IA functions and who are DoD employees or contractors on the effective date of this Manual have up to four years to comply with the certification requirements, based on Component plans to meet the implementation milestones.

New hires' qualification periods begin the date they start in the position (i.e., they must obtain the appropriate certification within six months of being assigned IA functions).

IAT Level I certification is mandatory prior to IA Managers authorizing unsupervised privileged access for personnel performing IAT Levels I through III functions.

Designated Approving Authorities (DAAs) may waive the certification requirement under severe operational or personnel constraints. The waiver will be documented by the DAA using a memorandum for the record stating the reason for the waiver and the plan to rectify the constraint. Waivers will not extend beyond six months, must include an expiration date, and be documented in the individual IA training record. Consecutive waivers for personnel are not authorized unless certain exceptions are made. Waivers must be a management review item per reference. Uncertified IAT Level Is are not authorized to have unsupervised privileged access.

IAT category personnel must be fully trained and certified prior to deployment to a combat environment. The DAA may approve a waiver for certified IAT-I's to fill level IAT-II or IAT-III billets without attaining the appropriate certification while deployed to a combat environment. The DAA may grant an interim waiver limited to the period of the deployment. The interim waiver places an individual in a suspense status and must be time limited and include an expiration date not to exceed six months following date of return from combat status.

Personnel in technical category positions must be issued and retain an appointing letter to their IA duties including a statement of responsibilities for the system.

Personnel in technical category positions must maintain certifications, as required by the certifying provider, to retain privileged system access. Level 1 certification is required prior to being authorized unsupervised privileged access.

Personnel who are not appropriately certified within six months of assignment to a position or who fail to maintain their certification status must not be permitted privileged access. The DoD Components will develop programs to address remedial training and conditions for individuals to attain or return to certified status.

The DoD Components must document and maintain the certification status of their IAT category personnel as long as they are assigned to those duties.

To support the GIG infrastructure security requirements, certification standards apply equally to DoD civilian, military, and contractor personnel including those staffed by LN (with conditional privileged access per reference).

New contract language must specify certification requirements. Existing contracts must be modified, at an appropriate time during the phased implementation, to specify certification requirements

LNs and FNs must comply with background investigation requirements and cannot be assigned to IAT Level III positions.

In addition to the baseline IA certification requirement for their level, IATs with privileged access MUST OBTAIN APPROPRIATE COMPUTING ENVIRONMENT (CE) CERTIFICATIONS for the operating system(s) they support as required by their employing organization. This requirement ensures they can effectively apply IA requirements to their hardware and software systems.

New hire civilians and contractor personnel must agree as a “condition of employment” that they will obtain the appropriate certification for the position to be filled.

All personnel must agree to release their certification qualification(s) to the Department of Defense.

Information Assurance Technical Level I

IAT Level I personnel make the CE less vulnerable by correcting flaws and implementing IAT controls in the hardware or software installed within their operational systems.

IAT Level I Position Requirements:

- Experience: At this level, personnel have zero to four years of experience in IA technology or a related field.
- System Environment: CE.
- Knowledge: Personnel apply basic knowledge of IA concepts, practices and procedures within the CE.
- Supervision: Personnel work under supervision and typically report to a CE manager.
- Other: Actions are usually authorized and controlled by policies and established procedures.
- IA Certification & Operating System Certification: Certification must be obtained within six months of assignment to position. Certification is mandatory for unsupervised privileged access.

There are specific functional requirements associated with the IAT Level I position. Personnel performing these functions, regardless of their occupational title (e.g., system administrator, help desk technician, information system technician, mechanic, infantry, logistics, aviation mechanic, etc,) shall be identified as part of the IA workforce and must comply with the requirements.

IAT Level I Functional Requirements:

- Recognize a potential security violation, take appropriate action to report the incident as required by regulation, and mitigate any adverse impact.
- Apply instructions and pre-established guidelines to perform IA tasks within CE.
- Provide end user IA support for all CE operating systems, peripherals, and applications.
- Support, monitor, test, and troubleshoot hardware and software IA problems pertaining to their CE.
- Apply CE specific IA program requirements to identify areas of weakness.
- Apply appropriate CE access controls.
- Install and operate the IT systems in a test configuration manner that does not alter the program code or compromise security safeguards.
- Conduct tests of IA safeguards in accordance with established test plans and procedures.
- Implement and monitor IA safeguards for CE system(s) in accordance with implementation plans and standard operating procedures.
- Apply established IA security procedures and safeguards and comply with responsibilities of assignment.
- Comply with system termination procedures and incident reporting requirements related to potential CE security incidents or actual breaches.
- Implement online warnings to inform users of access rules for CE systems.
- Implement applicable patches including information assurance vulnerability alerts (IAVA), information assurance vulnerability bulletins, and technical advisories for the CE operating system(s).
- Understand and implement technical vulnerability corrections.
- Enter assets in a vulnerability management system.
- Apply system security laws and regulations relevant to the CE being supported.
- Implement DoD and component password policy.
- Implement specific IA security countermeasures.
- Obtain and maintain IA certification appropriate to position.

IAT Level I Technical Training Track

Course		Duration in Days
TIA100	CompTIA A+ Essentials……..	5
TIA200	CompTIA A+ 220-602…….....	5
TIA300	CompTIA Network+…….....	5
SSCP	System Security Certified Practitioner....	3

Information Assurance Technical Level II

IAT Level II personnel provide network environment (NE) and advanced level CE support. They pay special attention to intrusion detection, finding and fixing unprotected vulnerabilities, and ensuring that remote access points are well secured. These positions focus on threats and vulnerabilities and improve the security of systems. IAT Level II personnel have mastery of the functional requirements of the IAT Level I position.

IAT Level II Position Requirements:

- Experience: Personnel normally have three to seven years in IA technology or a related area.
- System Environment: NE and advanced CE.
- Knowledge: Mastery of the functional requirements of the IAT Level I position. Personnel apply knowledge and experience with standard IA concepts, practices and procedures within the network environment.
- Supervision: Personnel work under general supervision and typically report to the network manager.
- Other: Relies on experience and judgment to plan and accomplish goals within the NE.
- IA Certification & Operating System Certification: Certification must be obtained within six months of assignment to position.

There are specific functional requirements associated with the IAT Level II position. Personnel performing these functions, regardless of their occupational title (e.g., system administrator, help desk technician, information system technician, mechanic, infantry, logistics coordinator, etc.) shall be identified as part of the IA workforce and must comply with the requirements.

IAT Level II Functional Requirements:

- Demonstrate expertise in IAT Level I CE knowledge and skills.
- Examine potential security violations to determine if the NE policy has been breached, assess the impact, and preserve evidence.
- Support, monitor, test, and troubleshoot hardware and software IA problems pertaining to the NE.
- Recommend and schedule IA related repairs in the NE.
- Perform IA related customer support functions including installation, configuration, troubleshooting, customer assistance, and/or training, in response to customer requirements for the NE.
- Provide end user support for all IA related applications for the NE.
- Analyze patterns of non-compliance and take appropriate administrative or programmatic actions to minimize security risks and insider threats.
- Manage accounts, network rights, and access to NE systems and equipment.
- Analyze system performance for potential security problems.
- Assess the performance of IA security controls within the NE.
- Identify IA vulnerabilities resulting from a departure from the implementation plan or that were not apparent during testing.
- Provide leadership and direction to IA operations personnel.
- Configure, optimize, and test network servers, hubs, routers, and switches to ensure they comply with security policy, procedures, and technical requirements.
- Install, test, maintain, and upgrade network operating systems software and hardware to comply with IA requirements.
- Evaluate potential IA security risks and take appropriate corrective and recovery action.
- Ensure that hardware, software, data, and facility resources are archived, sanitized, or disposed of in a manner consistent with system security plans and requirements.
- Diagnose and resolve IA problems in response to customer reported incidents.
- Research, evaluate, and provide feedback on problematic IA trends and patterns in customer support requirements.
- Ensure IAT Level I personnel are properly trained and have met OJT program requirements.
- Perform system audits to assess security related factors within the NE.
- Develop and implement access control lists on routers, firewalls, and other network devices.
- Install perimeter defense systems including intrusion detection systems, firewalls, grid sensors, etc., and enhance rule sets to block sources of malicious traffic.
- Work with other privileged users to jointly solve IA problems.
- Write and maintain scripts for the NE.
- Demonstrate proficiency in applying security requirements to an operating system for the NE or CE used in their current position.
- Implement applicable patches including IAVAs, IAVBs, and TAs for their NE.
- Adhere to IS security laws and regulations to support functional operations for the NE.
- Implement response actions in reaction to security incidents.
- Support the design and execution of exercise scenarios.
- Support Security Test & Evaluations (Part of Certification and Accreditation Process).
- Obtain and maintain IA certification appropriate to position.

IAT Level II Technical Training Track

Course		Duration in Days
TIA700	CompTIA Security+…..……	5
SSCP	System Security Certified Practitioner…….	3
GSEC	GIAC Security Essential Certification……...	6
SCNP	Security Certified Network Professional……	10
	***Hardening the Infrastructure (HTI)*	
	***Network Defense and Countermeasure (NDC)*	

Information Assurance Technical Level III

IAT Level III personnel focus on the enclave environment and support, monitor, test, and troubleshoot hardware and software IA problems pertaining to the CE, NE, and enclave environments. IAT Level III personnel have mastery of the functional requirements of both the IAT Level I and Level II positions.

IAT Level III Position Requirements:

- Experience: Personnel normally have at least seven years in IA technology or a related area.
- System Environment: Enclave Environment, advanced NE, and advanced CE.
- Knowledge: Expert in all functional requirements of both IAT Level I and IAT Level II positions. Personnel apply extensive knowledge of a variety of the IA field's concepts, practices, and procedures to ensure the secure integration and operation of all enclave systems.
- Supervision: Personnel work independently to solve problems quickly and completely. May lead and direct the work of others. Typically reports to an enclave manager.
- Other: Relies on extensive experience and judgment to plan and accomplish goals for the enclave environment.
- IA Certification & Operating System Certification: Certification must be obtained within six months of assignment to position.

There are specific functional requirements associated with the IAT Level III position. Personnel performing these functions, regardless of their occupational title (e.g., system administrator, help desk technician, information system technician, aviation mechanic, infantry, logistics coordinator, etc,) shall be identified as part of the IA workforce and must comply with the requirements.

IAT Level III Functional Requirements:

- Mastery of IAT Level I and IAT Level II CE/NE knowledge and skills.
- Recommend and schedule IA related repairs within the enclave environment.
- Coordinate and ensure end user support for all enclave applications and operations.
- Lead teams to quickly and completely solve IA problems for the enclave environment.
- Formulate or provide input to the enclave's IA/IT budget.
- Plan and schedule the installation of new or modified hardware, operating systems, and software applications ensuring integration with IA security requirements for the enclave.
- Determine whether a security incident is indicative of a violation of law that requires specific legal action.
- Direct the implementation of appropriate operational structures and processes to ensure an effective enclave IA security program including boundary defense, incident detection and response, and key management.
- Provide direction to system developers regarding correction of security problems identified during testing.
- Evaluate functional operation and performance in light of test results and make recommendations regarding certification and accreditation.
- Examine enclave vulnerabilities and determine actions to mitigate them.
- Monitor and evaluate the effectiveness of enclave IA security procedures and safeguards.
- Analyze IA security incidents and patterns to determine remedial actions to correct vulnerabilities.
- Develop the enclave termination plan to ensure that IA security incidents are avoided during shutdown and long term protection of archived resources is achieved.
- Develop and apply effective vulnerability countermeasures for the enclave.
- Develop and manage IA customer service performance requirements.
- Develop IA related customer support policies, procedures, and standards.
- Write and maintain scripts required to ensure security of the enclave environment.
- Design perimeter defense systems including intrusion detection systems, firewalls, grid sensors, etc., enhance rule sets to block sources of malicious traffic, and establish a protective net of layered filters to prevent, detect and eradicate viruses.
- Schedule and perform regular and special backups on all enclave systems.
- Establish enclave logging procedures to include: important enclave events; services and proxies; log archiving facility.
- Provide OJT for IAT Level I & II DoD personnel.
- Analyze IAVAs and Information Assurance Vulnerability Bulletins for enclave impact and take or recommend appropriate action.
- Obtain and maintain IA certification appropriate to position.

IAT Level III Technical Training Track

Course		Duration in Days
SCNA	Security Certified Network Administrator…..…	10
	**Advanced Security Implementation (ASI)*	
	**Enterprise Security Solutions (ESS)*	
CISSP	Certified Information Security Professional ……..	5
CISA	Certified Information Security Auditor…… ……..	2
GSE	GIAC Security Expert……... …….	3

Information Assurance Manager (AIM) Category

The functions associated with each of these levels are intended to be baseline DoD requirements. The DoD Components are expected to have additional requirements reflecting their operating policy and information system technical environment. The requirements of this Manual do not exempt individuals from meeting their own organization's standards and requirements.

Management Category Descriptions:

This Category comprises IA Management (IAM) Levels I, II, and III, as well as the DAA function.

The levels and functional requirements in the management category are not necessarily cumulative.

IAM Category Certification Requirements:

The certification requirement for IAM category positions includes all the functions identified for that level. All management category personnel, whether they perform IA functions as primary or as an additional/embedded duty, will be certified based on the IA functional requirements of the position.

Personnel required to perform any management category IA function(s) (one or more functions) at any level must be certified to the highest level function(s) performed. An IAM position's functional requirement(s) for a particular level establish the basis for the certification requirement.

IAM positions that also perform IAT functions must also obtain the appropriate technical level certification and complete the other IAT level requirements prior to being granted unsupervised privileged access.

Within six months of assignment of IA duties, management category personnel must achieve the appropriate IA certification for their level.

DAAs may waive the certification requirement under severe operational or personnel constraints. The waiver will be documented by the DAA using a memorandum for the record stating the reason for the waiver and the plan to rectify the constraint.

Waivers will not extend beyond six months and must include an expiration date and be documented in the individual IA training record. Consecutive waivers for personnel are not authorized unless certain exceptions are made. Waivers must be a management review item.

Personnel in management category positions must maintain certifications, as required by the certification provider to retain the position.

Personnel not certified within six months of assignment of IA duties or who fail to maintain their certified status will not be permitted to carry out the responsibilities of the position. The DoD Components must develop programs to address remedial training and to establish conditions allowing management personnel to return to certified status.

If after appropriate remediation efforts, individuals not meeting certification requirements must be reassigned to other duties.

IAM category personnel must be fully trained and certified prior to deployment to a combat environment. However, the DAA may grant an interim waiver for personnel required to fill IAM II or III level billets with IAM I or IAM II certified individuals who cannot obtain the appropriate certification WHILE deployed in a combat environment. The interim waiver may be granted by the DAA for the period of deployment. The interim waiver places an individual in a suspense status and must be time limited and include an expiration date not to exceed six months following the date of return from the combat environment.

The DoD Components must document and maintain the certification status of their management category personnel as long as they are assigned to those duties.

Personnel in management category positions will retain an appointing letter assigning them IA responsibilities for their system(s). If a management category position requires IA privileged access, a statement of responsibility for the system(s) will also be executed.

In support of GIG infrastructure security requirements, certification standards apply equally to DoD civilian, military, contractor personnel, and local nationals.

New contract language must specify certification requirements. Existing contracts must be modified to specify certification requirements during the phased implementation.

LNs or FNs may be conditionally assigned to IAM Level II but may not be assigned to IAM Level III positions. They must comply with background investigation requirements.

Information Assurance Manager Level I

IAM Level I personnel are responsible for the implementation and operation of a DoD IS or system component within their CE. Incumbents ensure that IA related IS are functional and secure within the CE.

IAM Level I Position Requirements:

- Experience: This is usually an entry level management position with zero to five years of management experience.
- System Environment: CE IAM.
- Knowledge: Personnel apply knowledge of IA policy, procedures, and structure to develop, implement and maintain a secure CE.
- Supervision: For AI issues, typically reports to an IAM Level II (NE). May report to other management for other CE operational requirements.
- Other: Manages IA operations for CE system(s).
- IA Certification & Operating System Certification: Certification must be obtained within six months of assignment to position.

There are specific functional requirements associated with the IAM Level I position. Personnel performing these functions, regardless of their occupational title (e.g., ISSO, IAO, ISSM, logistics manager, pilot, infantry officer, etc.) shall be identified as part of the IA workforce and must comply with the requirements.

IAM Level I Functional Requirements:

- Use federal and organization specific published documents to manage operations of their CE system(s).
- Provide system related input on IA security requirements to be included in statements of work and other appropriate procurement documents.
- Support and administer data retention and recovery within the CE.
- Participate in the development or modification of the computer environment IA security program plans and requirements.
- Validate users' designation for IT Level I or II sensitive positions.
- Develop procedures to ensure system users are aware of their IA responsibilities before granting access to DoD information systems.
- Recognize a possible security violation and take appropriate action to report the incident, as required by directives.
- Supervise or manage protective or corrective measures when an IA incident or vulnerability is discovered.
- Ensure that system security configuration guidelines are followed.
- Ensure that IA requirements are integrated into the Continuity of Operations Plan (COOP) for that system or component.
- Ensure that IA security requirements are appropriately identified in computer environment operation procedures.
- Monitor system performance and review for compliance with IA security and privacy requirements within the computer environment.
- Ensure that IA inspections, tests, and reviews are coordinated for the CE.
- Participate in an IS risk assessment during the Certification and Accreditation process.
- Collect and maintain data needed to meet system IA reporting requirements.
- Obtain and maintain IA certification appropriate to position.

IAM Level I Technical Training Track

Course		Duration in Days
TIA700	CompTIA Security+…..……..	5
GSLC	GIAC Security Leadership Certificate.....	3
GISF	GIAC Information Security Fundamentals	6

Information Assurance Manager Level II

IAM Level II personnel are responsible for the IA program of an IS within the NE. Incumbents in these positions perform a variety of security related tasks, including the development and implementation of system information security standards and procedures. They ensure that IS are functional and secure within the NE.

IAM Level II Position Requirements:

- Experience: Personnel usually have at least five years of management experience.
- System Environment: NE IAM.
- Knowledge: Personnel apply knowledge of IA policy, procedures, and workforce structure to develop, implement and maintain a secure NE.
- Supervision: For AI issues, typically reports to an IAM Level III (Enclave) Manager or DAA. May report to other senior management for network operational requirements.
- Other: Relies on experience and judgment to plan and accomplish goals.
- IA Certification & Operating System Certification: Certification must be obtained within six months of assignment to position.

There are specific functional requirements associated with the IAM Level II position. Personnel performing these functions, regardless of their occupational title (e.g., ISSO, IAO, ISSM, logistics manager, pilot, infantry officer, etc.) shall be identified as part of the IA workforce and must comply with the requirements.

IAM Level II Functional Requirements:

- Develop, implement, and enforce policies and procedures reflecting the legislative intent of applicable laws and regulations for the NE.
- Prepare, distribute, and maintain plans, instructions, guidance, and standard operating procedures concerning the security of network system(s) operations.
- Develop NE security requirements specific to an IT acquisition for inclusion in procurement documents.
- Recommend resource allocations required to securely operate and maintain an organization's NE IA requirements.
- Participate in an IS risk assessment during the C&A process.
- Develop security requirements for hardware, software, and services acquisitions specific to NE IA security programs.
- Ensure that IA and IA enabled software, hardware, and firmware comply with appropriate NE security configuration guidelines, policies, and procedures.
- Assist in the gathering and preservation of evidence used in the prosecution of computer crimes.
- Ensure that NE IS recovery processes are monitored and that IA features and procedures are properly restored.
- Review IA security plans for the NE.
- Ensure that all IAM review items are tracked and reported.
- Identify alternative functional IA security strategies to address organizational NE security concerns.
- Ensure that IA inspections, tests, and reviews are coordinated for the NE.
- Review the selected security safeguards to determine that security concerns identified in the approved plan have been fully addressed.
- Evaluate the presence and adequacy of security measures proposed or provided in response to requirements contained in acquisition documents.
- Monitor contract performance and periodically review deliverables for conformance with contract requirements related to NE IA, security, and privacy.
- Provide leadership and direction to NE personnel by ensuring that IA security awareness, basics, literacy, and training are provided to operations personnel commensurate with their responsibilities.
- Develop and implement programs to ensure that systems, network, and data users are aware of, understand, and follow NE and IA policies and procedures.
- Advise the DAA of any changes affecting the NE IA posture.
- Conduct an NE physical security assessment and correct physical security weaknesses.
- Help prepare IA certification and accreditation documentation.
- Ensure that compliance monitoring occurs, and review results of such monitoring across the NE.
- Obtain and maintain IA certification appropriate to position.

IAM Level II Technical Training Track

Course		Duration in Days
CISSP	Certified Information Security Professional	5
GSLC	GIAC Security Leadership Certificate.....	3
CISM	Certified Information Security Manager….	2

Information Assurance Manager Level III

IAM Level III personnel are responsible for the IA program of an IS within the NE. They determine the enclaves' long term IA systems needs and acquisition requirements to accomplish operational objectives. They also develop and implement information security standards and procedures through the DoD certification and accreditation process.

IAM Level III Position Requirements:

- Experience: Personnel usually have at least ten years of management experience.
- System Environment: Enclave Environment IAM.
- Knowledge: Personnel apply knowledge of IA policy, procedures, and workforce structure to develop, implement and maintain a secure enclave environment.
- Supervision: Typically reports to a DAA for IA issues. May report to other senior managers for enclave operational requirements.
- Other: Must be a U.S. Citizen. Relies on extensive experience and judgment to plan and accomplish enclave security related goals.
- IA Certification & Operating System Certification: Certification must be obtained within six months of assignment to position.

There are specific functional requirements associated with the IAM Level III position. Personnel performing these functions, regardless of their occupational title (e.g., ISSO, IAO, ISSM, logistics manager, pilot, infantry officer, etc,) shall be identified as part of the IA workforce and must comply with the requirements.

IAM Level III Functional Requirements:

- Securely integrate and apply Department/Agency missions, organization, function, policies, and procedures within the enclave.
- Ensure that protection and detection capabilities are acquired or developed using the IS security engineering approach and are consistent with DoD Component level IA architecture.
- Ensure IAT Levels I – III, IAM Levels I and II, and anyone with privileged access performing IA functions receive the necessary initial and sustaining IA training and certification(s) to carry out their IA duties.
- Prepare or oversee the preparation of IA certification and accreditation documentation.
- Participate in an IS risk assessment during the C&A process.
- Ensure information ownership responsibilities are established for each DoD IS and implement a role based access scheme.
- Analyze, develop, approve, and issue enclave IA policies.
- Evaluate proposals to determine if proposed security solutions effectively address enclave requirements, as detailed in solicitation documents.
- Identify IT security program implications of new technologies or technology upgrades.
- Evaluate cost benefit, economic and risk analysis in decision making process.
- Interpret and/or approve security requirements relative to the capabilities of new information technologies.
- Interpret patterns of non compliance to determine their impact on levels of risk and/or overall effectiveness of the enclave's IA program.
- Analyze identified security strategies and select the best approach or practice for the enclave.
- Ensure that security related provisions of the system acquisition documents meet all identified security needs.
- Evaluate and approve development efforts to ensure that baseline security safeguards are appropriately installed.
- Evaluate the presence and adequacy of security measures proposed or provided in response to requirements contained in acquisition documents.
- Take action as needed to ensure that accepted products meet Common Criteria requirements.
- Monitor and evaluate the effectiveness of enclaves' IA security procedures and safeguards to ensure they provide the intended level of protection.
- Provide enclave IA guidance for development of the COOP.
- Ensure all IAM review items are tracked and reported.
- Advise the DAA of changes affecting the enclave's IA posture.
- Obtain and maintain IA certification appropriate to position.

IAM Level III Technical Training Track

Course		Duration in Days
CISSP	Certified Information Security Professional	5
GSLC	GIAC Security Leadership Certificate.....	3
CISM	Certified Information Security Manager….	2

Java

.NET Developer

XML Developer

Microsoft Office Professional

Course Offerings and Descriptions

AIX

AIX101 Introduction to AIX System Administration This course is designed for students who are completely new to the AIX/UNIX operating system and have no previous experience with AIX. The class covers both the basic syntax and commands of AIX and goes into some of the more commonly used systems administration topics. However, this course does not cover the depth of Administration topics covered in the AIX Systems Administration I and II courses.

AIX201 AIX System Administration I This course is designed for students already familiar with the basic command syntax of IBM's AIX/UNIX who are interested in learning the functionality of AIX at the Systems Administration level. This course provides an overview of system administration topics. Students will learn how to configure and manage a typical AIX system in a standalone environment. New systems administrators not yet conversant with AIX/UNIX should attend Introduction to AIX Systems Administration Lite course.

AIX301 AIX System Administration II This course is a follow-up to System Administration I. In this course, the student will learn how to configure and manage a typical AIX system in a standalone environment, including troubleshooting and problem determination of the boot sequence and basic performance issues.

CCN

CCN100 Introduction to Cisco Networking Technologies CCNA Basics presents important networking fundamentals using the Open Systems Interconnect (OSI) seven layer model concepts; terminology and technologies are explained and illustrated using text and graphics animation. Exercises and lab sessions reinforce the learning objectives and provide participants the opportunity to gain practical hands-on experience.

CCN200 Interconnecting Cisco Network Devices Interconnecting Cisco Network Devices (ICND) is an instructor-led course presented by Cisco Systems, Inc., training partners to their end-user customers. This five-day course focuses on using Cisco switches and Cisco routers connected in local-area networks (LANs) and wide-area networks (WANs) typically found at small to medium network sites. Upon completion of this training course, you will be able to select, connect, configure, and troubleshoot the various Cisco networking devices.

DIS100 Oracle 10g Discoverer for End Users This course gives participants hands-on experience with Oracle's Graphical User Interface (GUI) based ad hoc query and data access tool - Discoverer User Edition. Participants will learn to view, analyze and report multidimensional data using tables, spreadsheets or graphic displays.

DIS200 Oracle 10g Discoverer for Administrators This course gives participants hands-on administration experience with Oracle's Graphical User Interface (GUI) based ad hoc query and data access tool. Participants will learn to analyze, configure and setup multi-dimensional tables, spreadsheets or graphic displays.

FRM10g Oracle 10g Developer Forms This course will help participants develop skills necessary to build interactive screen-based applications using Oracle Developer Forms Tools. Participants will develop complete applications with the Graphical User Interface (GUI) development environment. Participants will also learn how to run an Oracle forms application, customize an existing form, define Oracle forms objects and event triggers, and manage record groups. Exercises and lab sessions reinforce the learning objectives and provide participants the opportunity to gain practical hands-on experience.

FRM100 Oracle Developer Forms I This course will help participants develop skills necessary to build interactive screen-based applications using Oracle Developer Forms Tools. Participants will develop complete applications with the Graphical User Interface (GUI) development environment. Participants will also learn how to run an Oracle forms application, customize an existing form, define Oracle forms objects and event triggers, and manage record groups. Exercises and lab sessions reinforce the learning objectives and provide participants the opportunity to gain practical hands-on experience.

FRM200 Oracle Developer Forms II In this follow-up course to Oracle Developer: Forms I participants learn additional techniques for developing graphical screen based applications using the Oracle Developer facilities. Participants learn to manage application files and multiple transactions across modules.

Participants will also learn how to create multiple-form applications and will practice enhancing their applications with custom menus, reports, and charts. Exercises and lab sessions reinforce the learning objectives and provide participants the opportunity to gain practical hands-on experience.

FRM300 Deploy Oracle Forms and Reports Web Applications This course will introduce participants to the Oracle Developer features for Web-enabling applications and graphical output. A discussion of the Forms Server benefits, configuration, and tuning will allow the participants to implement web applications with ease. Participants will discover the ability to deploy existing applications on the web with no modifications, and will also create an application with a form, report, and graph from scratch with the Web in mind. Participants will have ample opportunity to gain practical hands-on experience through lab exercises using secure and non-secure protocols.

ITIL

ITILV3 ITIL V3 Foundation The course enables delegates to understand how an integrated IT Service Management framework, based on ITIL best practice guidelines, can be adopted and adapted within their own organizations. To provide proven practical guidance on how to successfully introduce an integrated IT Service Management framework based on the ITIL best practice service lifecycle approach.

ITILV3BR ITIL Foundations Bridging V3 To educate delegates in changes brought about by the new ITIL v3 refresh documenting industry best practices. The course covers the new service lifecycle approach to implementing new and changed services, and outlines all changes to existing processes as well as covering the new additional processes.

JAV

JAV100 Java Programming and Oracle JDeveloper This foundations course teaches Java programming and the usage of Oracle JDeveloper. Students learn object-oriented design methods as they develop various Java Applications and Web applets. Participants will be introduced to the Java Virtual Machine (VM), compile and execute Java applications in JDeveloper and create object-oriented class structures. Exercises and lab sessions reinforce the learning objectives and provide participants the opportunity to gain practical hands-on experience.

JAV200 Oracle Business Componenets for Java (BC4J) This course teaches you how to develop Java database applications using Oracle's Business Components for Java (BC4J) and JDeveloper 9i. Participants will learn to develop, customize and deploy applications using business components. Course labs build on standard applications as participants customize their applications incorporating exception handling, custom validations and commit-cycle handling. Exercises and lab sessions reinforce the learning objectives and provide participants the opportunity to gain practical hands-on experience.

JAV300 Java Oracle Database Connectivity (JDBC) and SQLJ This course explains the standard Java interfaces that make portable object-oriented access to relational databases possible and offers a robust model for writing applications that are easy to maintain. It introduces the JDBC and RMI packages and uses them to develop multi-tier database applications. The course includes an overview of the SQL language for students that may not have as much experience working with databases. The class also presents how to issue database queries and updates through SQL and JDBC, stored procedures and other methods to improve efficiency.

JAV400 Java Programming, SQLJ and JDBC using JDeveloper This course presents an overview of the Java programming language as well as database access using SQLJ and JDBC. In order to build a solid foundation for Java Development, an introduction to object-oriented programming is also presented. All essential features of Java API are covered. The Oracle JDeveloper IDE is used throughout the course for all exercise and lab work. The Java concepts are taught with a focus on how they are implemented using JDeveloper. Exercises and lab sessions reinforce the learning objectives and provide participants the opportunity to gain practical hands-on experience.

JAV500 Introduction to Java Programming This course presents an overview of the Java programming language including applet programming as well as application development. In order to build a solid foundation for Java Development, an introduction to object-oriented programming is also presented. All major features of Java API are covered. The course is about 60% lecture and 40% hands on exercises and labs.

JAV501 Object-Oriented Programming using Java

JAV505 Intermediate Java Programming This course goes in depth in many of the topics covered in the Java Fundamentals class. Key Benefits: Provides an increased understanding of the Java programming language. Reinforces the lectures with extensive hands-on programming exercises.

JAV510 Advanced Java Programming This course presents an in-depth look at critical topics for developing distributed Java applications. Object Serialization and Remote Method Invocation (RMI) is presented as the foundation for how distribution works in all major Application Servers. CORBA is also presented as a solution for accessing non-Java components and resources. Java Database Connectivity (JDBC) is discussed for connecting to any database including Oracle, SQL Server and Cloudscape. Other topics include Security, Java Naming and Directory Interface (JNDI), Design Patterns, Java Message Service (JMS) and JUnit testing. Throughout the course, the fundamental Model, View, Controller (MVC) architecture design pattern is enforced. The course is about 60% lecture and 40% hands on exercises and labs.

JAV530 Java Swing This course gives you in-depth coverage of everything you need to know to take full advantage of Swing, providing detailed descriptions of every class and interface in the key Swing packages. It shows you how to use all of the new components, allowing you to build state-of-the-art user interfaces. It also discusses how the components implement the MVC (Model View Controller) architecture, so you can understand how the components are designed and subclass them intelligently. Finally, it shows how to create your own "look and feel". The course is about 60% lecture and 40% hands on exercises and labs.

JAV535 Introduction to Struts using WASAD **During the course, students will learn to design and develop Struts based applications. Students learn how to incorporate JSPs, servlets, EJBs and JavaBeans into their design. The hands-on component will consist of a design use case and labs illustrating how to develop web applications using the Struts framework.**

JAV550 WebSphere Studio: Server Side Development This course will integrate a combination of instructor-led discussions and interactive workshops to demonstrate the development and testing of server-side applications using J2EE component model. This course will focus on illustrating the use of the WebSphere Studio Application Developer product for developing servlets, JavaServer Pages and JavaBeans. Additionally, the role of the WebSphere Application Server Single Server edition for testing, debugging and deployment will be highlighted. Each student will learn the best practices solution for developing J2EE applications using Model-View-Controller framework and the separation of servlets, JSPs and JavaBean components.

JAV600 Object-Oriented Design Patterns This course presents examples, exercises, and challenges that enable participants to grapple with alternative approaches and discover practical subtleties in applying design pattern theory to realistic problems. You learn to enhance your practical skills and build the confidence you need to use design patterns in mission-critical applications. This course begins by teaching participants essential object-oriented concepts and their application within a practical analysis and design process. Students will learn to use the Unified Modeling Language (UML) to produce analysis and design modeling deliverables. The students will then become familiar with the five categories of patterns organization: interfaces, responsibility, construction, operations, and extensions. Each category begins with a chapter that reviews and challenges your ability to apply facilities built into Java. These introductory sections are followed by chapters that each explain a particular pattern, demonstrate the pattern in use with UML diagrams and Java code, and challenges for you to solve.

JAV605 Implement Java Design Patterns This course presents examples, exercises, and challenges that enable you to grapple with alternative approaches and discover practical subtleties in applying design pattern theory to realistic problems. You learn to enhance your practical skills and build the confidence you need to use design patterns in mission-critical applications.

In this course, the patterns are organized into five major categories: interfaces, responsibility, construction, operations, and extensions. Each category begins with a chapter that reviews and challenges your ability to apply facilities built into Java. These introductory sections are followed by chapters that each explain a particular pattern, demonstrate the pattern in use with UML diagrams and Java code, and challenges for you to solve.

JAV700 Java Essentials for Database Administrators The course begins with a high-level overview of the J2EE terminology, architecture and development environment. The course then identifies key components of the J2EE environment that are traditionally the responsibility of the database

administrator. These key areas include; entity relationships versus objects, design patterns, J2EE deployment, performance tuning, EJB usage, stored procedures, transaction services and database access. Exercises and lab sessions reinforce the learning objectives and provide participants the opportunity to gain practical hands-on experience.

LNX300 LINUX Operating Systems Essentials This course covers the essential commands and concepts s of the LINUX operating system. This course utilized the ever popular Red Hat LINUX. Participants will learn the Linux commands for editing and manipulating files, managing processes and interacting with the BASH shell. OS commands, the VI editor and files permissions are also covered. Exercises and lab sessions reinforce the learning objectives and provide participants the opportunity to gain practical hands-on experience.

LNX600 LINUX System Administration This course covers the essential concepts and day to day administration tasks of the LINUX operating system. This course utilized the ever popular Red Hat LINUX. Participants will learn to install the operating system, setup file system, partition disks, manage security, prepare for media failure, configure hardware and establish networks. Exercises and lab sessions reinforce the learning objectives and provide participants the opportunity to gain practical hands-on experience.

LNXRH120 Red Hat Enterprise LINUX Fundamentals Designed to provide the essential skills needed to be proficient with the Red Hat Linux command line. This challenging course focuses on the fundamental concepts and tools which make Red Hat Linux so powerful. Students in this course commonly span a variety of skill levels, from beginners desiring a solid foundation in Red Hat Linux to experienced users seeking to fill in gaps in their knowledge. The curriculum is designed to provide hands-on experience. Subjects focused on during this class include the Red Hat Linux filesystem and how to manipulate it; the basic Red Hat Linux notions of pipes, redirection, regular expressions, and other tools for performing complex tasks; the management of processes and jobs; vi, the standard Red Hat Linux editor; and the ability to construct shell scripts to automate routine or difficult operations. Preparatory class for Red Hat Certification (RHCT, RHCE).

LNXRH250 Red Hat Enterprise LINUX System Administration Intended for students already comfortable with working in the Red Hat Linux environment, this in-depth course helps students acquire the variety of skills needed to set up and maintain Red Hat Linux computers. The class covers subjects ranging from initial installation of Red Hat Linux to day-to-day administrative tasks such as management of user accounts and disk space, and even imparting the troubleshooting skills future system administrators will need to cope with unexpected behavior. Preparatory class for Red Hat Certification (RHCT, RHCE).

LNXRH275 Red Hat Enterprise LINUX Network Services Students interested in developing skills as network administrators find this course invaluable. Topics explored and implemented in the class include the setup and maintenance of many of the most popular network services available for Linux and Unix today, including servers for DNS, SMB (Windows networking), e-mail servers, FTP, web, and caching proxy. Special attention is paid to the concepts needed to implement these services securely, and to the trouble-shooting skills which will be necessary for real-world administration of network services. Preparatory class for Red Hat Certification (RHCE).

LNXRH314 Red Hat Enterprise LINUX Troubleshooting This course is designed to give the Linux system administrator an in-depth look at common and not so common Linux system problems. Linux system problems explored in this course are frequently encountered with the administration of Linux Systems. This course takes the approach to troubleshooting with a "break-fix" philosophy, 25% lecture, and 75% lab intensive content. Lab exercises contain a pool of over 120 simple and complex real-world troubleshooting scenarios. Lab work is flexible enough to satisfy the expectations of experienced to intermediate administrators through ranked difficulty of scenarios. Students will find the approach of this course of structure with flexibility very rewarding. Lab tasks let students choose the type of scenarios they would like to tackle, with hints, helps, and solutions to make learning very effective. Preparatory class for Red Hat Certification (RHCE).

LNXRH510 Red Hat Enterprise LINUX Network Security This course focuses on network security, and makes an excellent companion class to the Enterprise Linux Security Administration course. After a detailed discussion of the TCP/IP suite component protocols and Ethernet operation, the student practices using various tools to capture, analyze, and generate IP traffic. Students then explore the tools and techniques used to exploit protocol weaknesses and perform more advanced network attacks. After building a thorough understanding of network based attacks, course focus

shifts to the defensive solutions available. Students install, configure, and test one of the most popular and powerful NIDS solutions available. Finally, students create a Linux based router / firewall solution, including advanced functionality such as NAT, policy routing, and traffic shaping.

LNXRH550 Red Hat Enterprise LINUX Security Administration This highly technical course focuses on properly securing machines running the Linux operating systems. A broad range of general security techniques such as user/group policies, and file integrity checking are covered. Advanced security technologies are taught such as Kerberos, SELinux, and the hardening of popular applications such as Apache, databases, and email systems. At the end of the course, students have an excellent understanding of the potential security vulnerabilities -- know how to audit existing machines, and best practices how to securely deploy new Linux servers.

MAD

MAD2005 Programming a Microsoft SQL Server 2005 Database In this course, you'll learn about the features that are available in SQL Server; how to design and create a database; and how to build basic queries using Transact-SQL, the language of SQL Server. Then, you'll learn how to build effective views, stored procedures, triggers, and user-defined functions, using Transact-SQL. You'll learn about the new enhancements to the Transact-SQL programming language including improved support for error handling and hierarchical queries, and programmers can now use .NET languages like C# and Visual Basic to build database objects.

SQL Server 2005 includes a rich set of tools that go beyond the basics of querying and manipulating data. You'll learn how to take advantage of the new, user-friendly management console that integrates both authoring and administrative tasks. You'll learn how to take advantage of SQL Server's tools for analyzing and tuning your databases. You'll also learn about integration services, implementing security, and Microsoft's new Business Intelligence (BI) suite.

MAD2005A SQL Server 2005 Analysis Services In this course, you will learn how to use Microsoft SQL Server 2005 Analysis Services (SSAS) to design and implement OnLine Analytical Processing (OLAP) cubes and data mining models to support Business Intelligence (BI) solutions. This course includes concepts, procedures and practices based on real-world experience giving both the novice and experienced SQL Server 2005 developer the tools to build data warehousing and decision support system solutions. This course also provides information on end-user tools including Microsoft Excel 2003/2007 and Microsoft SQL Server 2005 Reporting Services. Implementing SSAS solutions have shown to optimize data retrieval and report generation from SQL Server.

MAD2005R SQL Server 2005 Reporting Services In this course, you will learn how to use SQL Server 2005 Reporting Services to create, execute, and manage reports. You will learn how to create tabular, matrix (cross-tab), and chart reports using Visual Studio 2005 and SQL Server 2005 Business Intelligence Studio. You'll explore creating reports with groups, expressions, conditional formatting, and parameters. The reports you create in the course will employ shared data sources, interactive sorting, and drill-down capabilities. You'll explore the deployment and printing of reports and the export of reports to PDF, Excel, and other formats. You'll gain a thorough understanding of Reporting Services security, report snapshots, subscriptions, and the use of custom assemblies. You'll also discover how to integrate reports into your ASP.NET and WinForms applications using URL access and the Reporting Services Web Service API, without requiring users to use Internet Explorer. Finally, you'll learn how to empower your users to create ad-hoc reports using Report Builder and Report Model projects.

MAD2100CS C# 2005: Developing Applications In this course you will learn how to use Visual Studio 2005 and VC# 2005 to build Windows applications to run on the .NET 2.0 platform. You will become familiar with the Windows Forms and Windows Forms controls, focusing on new Visual Studio 2005 features. You'll see how to use new .NET 2.0 features like Application events and the My namespace. Access data using ADO.NET and its DataTable, DataReader, DataAdapter, and DataSet classes. Take advantage of new Visual Studio 2005 data binding features, and explore the range of controls and components provided by Visual Studio 2005.

Build solid applications using structured exception handling, and debug your applications using new Visual Studio 2005 debugging features. Access legacy code in COM components, Win32 APIs using P/Invoke, and remote code in Web Services. Add professional-looking menus and toolbars using the new ToolStrip controls, and add unprecedented flexibility to your user interfaces using the new container controls. Deploy and maintain your application easier than ever before, taking advantage of Click-Once deployment.

MAD2100VB Visual Basic 2005: Developing Applications In this course you will learn how to use Visual Studio 2005 and Visual Basic 2005 to build Windows applications to run on the .NET 2.0 platform. You will become familiar with the Windows Forms and Windows Forms controls, focusing on new Visual Studio 2005 features. You'll see how to use new .NET 2.0 features like Application events and the My namespace. Access data using ADO.NET and its DataTable, DataReader, DataAdapter, and DataSet classes. Take advantage of new Visual Studio 2005 data binding features, and explore the range of controls and components provided by Visual Studio 2005.

Build solid applications using structured exception handling, and debug your applications using new Visual Studio 2005 debugging features. Access legacy code in COM components, Win32 APIs using P/Invoke, and remote code in Web Services. Add professional-looking menus and toolbars using the new ToolStrip controls, and add unprecedented flexibility to your user interfaces using the new container controls. Deploy and maintain your application easier than ever before, taking advantage of Click-Once deployment.

MAD2150CS C# 2005: Enhancing Applications In this course you'll learn about important development topics that aren't normally covered in a beginning Windows application programming course. Starting with saving objects to a stream using .NET Serialization and creating and displaying reports, you'll work through crucial topics such as attributes and reflection, programming XML using the XmlDocument class, and the XmlReader/XmlWriter classes, creating Windows Services, and drawing your own user interfaces using the System.Drawing namespace. You'll learn how to handle vital distribution issues, learning about application security, versioning, and deployment. You'll dig deeper into working with the most complex of Visual Studio's built-in controls, the DataGridView control, how to extend Visual Studio 2005 in a number of different ways, get started building mobile applications, and how to interact with printers and how to print documents. You're certain to find many topics here that will extend your knowledge, your capabilities, and your value as a developer.

MAD2150VB Visual Basic 2005: Enhancing Applications In this course you'll learn about important development topics that aren't normally covered in a beginning Windows application programming course. Starting with saving objects to a stream using .NET Serialization and creating and displaying reports, you'll work through crucial topics such as attributes and reflection, programming XML using the XmlDocument class, and the XmlReader/XmlWriter classes, creating Windows Services, and drawing your own user interfaces using the System.Drawing namespace. You'll learn how to handle vital distribution issues, learning about application security, versioning, and deployment. You'll dig deeper into working with the most complex of Visual Studio's built-in controls, the DataGridView control, how to extend Visual Studio 2005 in a number of different ways, get started building mobile applications, and how to interact with printers and how to print documents. You're certain to find many topics here that will extend your knowledge, your capabilities, and your value as a developer.

MAD2200CS ADO.NET 2.0 using C# 2005 In this course, learn about the features provided by ADO.NET 2.0. Learn to connect to data sources, retrieve and manipulate data, and perform data updates. Examine the various ADO.NET classes, including Connection, Command, DataReader, DataSet, DataTable, DataRelation, and more. See how to apply constraints and relationships to disconnected data. Learn how to update data, including how to handle stored procedures, parameters, and return values. Understand how to search, sort, and filter data stored in a DataSet or DataTable. Become familiar with strongly typed DataSets and learn their advantages. See how to leverage the power of XML through serialization, Diffgrams,and the XMLDataDocument object. Examine new ADO.NET features that support SQL Server 2005 technologies, including asynchronous commands, Multiple Active Result Sets, bulk inserts, and more.

MAD2200VB ADO.NET 2.0 using Visual Basic 2005 In this course, learn about the features provided by ADO.NET 2.0. Learn to connect to data sources, retrieve and manipulate data, and perform data updates. Examine the various ADO.NET classes, including Connection, Command, DataReader, DataSet, DataTable, DataRelation, and more. See how to apply constraints and relationships to disconnected data. Learn how to update data, including how to handle stored procedures, parameters, and return values. Understand how to search, sort, and filter data stored in a DataSet or DataTable. Become familiar with strongly typed DataSets and learn their advantages. See how to leverage the power of XML through serialization, Diffgrams, and the XMLDataDocument object. Examine new ADO.NET features that support SQL Server 2005 technologies, including asynchronous commands, Multiple Active Result Sets, bulk inserts, and more.

MAD2300CS ASP.NET 2.0 using C# 2005 In this course, you'll learn how to use Visual Studio 2005

and C# 2005 to build ASP.NET 2.0 Web pages and XML Web services. You'll gain an understanding of the new architecture behind ASP.NET 2.0 and how to use the new server controls. You'll learn to create consistent web sites using Master Pages, to improve performance with output caching, add membership features, configure and deploy ASP.NET applications, to authenticate users and limit their access to resources, direct users using new Site Navigation tools and to handle multi-user data access conflicts.

MAD2300VB ASP.NET 2.0 using Visual Basic In this course, you'll learn how to use Visual Studio 2005 and Visual Basic 2005 to build ASP.NET 2.0 Web pages and XML Web services. You'll gain an understanding of the new architecture behind ASP.NET 2.0 and how to use the new server controls. You'll learn to create consistent web sites using Master Pages, to improve performance with output caching, add membership features, configure and deploy ASP.NET applications, to authenticate users and limit their access to resources, direct users using new Site Navigation tools and to handle multi-user data access conflicts.

MAD2400CS Advanced .NET Framework 2.0 using C# 2005 Learn about System.Configuration namespace to embed configuration management into your .NET applications. See how to post events to the Windows Event log and manage Windows processes using the System.Diagnostics namespace. Take advantage of the new .NET 2.0 security features in the System.Security namespace. Prevent tampering using the AccessControl and Authentication classes. Protect your data using the Cryptography classes. Control access to your applications using the Permissions and Policy classes. Learn about implementing service processes and application domains in your .NET applications using the System and ServiceProcess namespaces. You'll see how to take advantage of multi-threading to create fast and efficient processes through the Threading namespace. You'll learn how to internationalize your .NET application by using the globalization classes. Enhance your user interface with the System.Drawing and System.Text namespaces.

MAD2400VB Advanced .NET Framework 2.0 using Visual Basic 2005 Learn about System.Configuration namespace to embed configuration management into your .NET applications. See how to post events to the Windows Event log and manage Windows processes using the System.Diagnostics namespace. Take advantage of the new .NET 2.0 security features in the System.Security namespace. Prevent tampering using the AccessControl and Authentication classes. Protect your data using the Cryptography classes. Control access to your applications using the Permissions and Policy classes. Learn about implementing service processes and application domains in your .NET applications using the System and ServiceProcess namespaces. You'll see how to take advantage of multi-threading to create fast and efficient processes through the Threading namespace. You'll learn how to internationalize your .NET application by using the globalization classes. Enhance your user interface with the System.Drawing and System.Text namespaces.

MAD2500CS Windows Workflow Foundation using Visual C# 2005 Microsoft has provided the Windows Workflow Foundation, a set of assemblies based on the .NET Framework 2.0 (as part of the .NET Framework 3.0), along with a full-featured workflow designer built on top of Visual Studio 2005. Windows Workflow Foundation makes it easy to create applications that follow a flow, or react to events and move from state to state. By providing a visual interface for designing the applications, and by binding code activities directly to the design of the application, Windows Workflow Foundation makes it easier than ever to create and maintain complex business applications.

MAD2500VB Windows Workflow Foundation using Visual Basic 2005 Microsoft has provided the Windows Workflow Foundation, a set of assemblies based on the .NET Framework 2.0 (as part of the .NET Framework 3.0), along with a full-featured workflow designer built on top of Visual Studio 2005. Windows Workflow Foundation makes it easy to create applications that follow a flow, or react to events and move from state to state. By providing a visual interface for designing the applications, and by binding code activities directly to the design of the application, Windows Workflow Foundation makes it easier than ever to create and maintain complex business applications.

MAD2600 Upgrading Web Development Skills to ASP.NET 2.0 This course will teach ASP.NET 1.0 and 1.1 developers how to implement the ASP.NET 2.0 features. This course is taught using Visual Studio 2005 to create Web Applications designed to run under ASP.NET 2.0. Exercises and examples will be provided in C#.

MAD2700 Advanced Web Applications Development using ASP.NET 2.0

MCS

MCS2733 Update Database Administration Skills to Microsoft SQL 2005 This course provides students with the knowledge and skills to upgrade their skills to SQL Server 2005 so that they can support, configure, and maintain enterprise SQL Server 2005 databases and servers. This course is intended for experienced database administrators and database developers who are responsible for the supporting, configuring, and maintaining enterprise SQL Server 2005 databases and servers.

MCS2734 Update Database Developer Skills to MS SQL 2005 This course provides students with the knowledge and skills to upgrade their skills to SQL Server 2005 so that they can design, build, query, and develop enterprise SQL Server 2005 databases and servers. This course is intended for experienced database administrators and database developers who are responsible for the design, building, querying and development of enterprise SQL Server 2005 databases and servers.

MCS2779 Implementing a Microsoft SQL Server 2005 Database This course provides students with product knowledge and skills needed to implement a Microsoft SQL Server 2005 database. The course focuses on teaching individuals how to use SQL Server 2005 product features and tools related to implementing a database. This course is intended for IT Professionals wanting to become skilled on SQL Server 2005 product features and technologies for implementing a database.

MCS4994CS Introduction to Programming Microsoft Visual C# 2005 The goal of this course is to provide students with the knowledge and skills they need to develop Visual C# 2005 applications for the Microsoft .NET 2.0 platform. The course focuses on C# program structure, language syntax, and implementation details. This course enables introductory-level developers who are not familiar with the Microsoft .NET 2.0 Framework or Microsoft Visual Studio 2005 to gain familiarity with the Visual Studio 2005 development environment.

MCS4994VB Introduction to Programming Microsoft Visual Basic 2005 The goal of this course is to provide students with the knowledge and skills they need to develop Visual Basic 2005 applications for the Microsoft .NET 2.0 platform. The course focuses on Visual Basic program structure, language syntax, and implementation details. This course enables introductory-level developers who are not familiar with the Microsoft .NET 2.0 Framework or Microsoft Visual Studio 2005 to gain familiarity with the Visual Studio 2005 development environment.

OAS

OAS100 Oracle 10gAS Administration This course begins with an in-depth architectural discussion of the Oracle 10g Application Server product and the application architectures which are based upon this product. Thereafter, one learns the tasks for basic administration of this environment.

OAS400 Oracle 10gAS Portal Development This course provides students with a comprehensive overview of the Oracle10g Application Server development and deployment capabilities of the Oracle10gAS Portal Framework, an environment that provides the infrastructure to create portals. Participants learn to create portlets using Java, JSPs, and servlets by applying the Oracle10gAS Portal Developer Kit Java API. They also learn about enabling and implementing the different portlet display modes. The course also covers how to make portlets customizable to enable end user personalization, applying security to portlets, and different approaches of portal caching. Exercises and lab sessions reinforce the learning objectives and provide participants the opportunity to gain practical hands-on experience.

OAS500 Oracle 10gAS PL/SQL Participants are introduced to the development and deployment capabilities of the Oracle10gAS Portal Framework, an environment that provides the infrastructure to create enterprise portals. Students learn to create portlet providers and portlets by applying the PL/SQL API. Students learn to use the Portal Developer Kit (PDK), which contains sample portlets and guides for portlet development. They will also learn the APIs that enable the portal framework services Exercises and lab sessions reinforce the learning objectives and provide participants the opportunity to gain practical hands-on experience.

ORA

ORA10gNF Oracle 10g New Features for Administrators The course provides participants with a comprehensive overview of the new features and enhancements of Oracle10g – the database for grid computing. Features no longer supported will be identified and explained benefiting those impacted by an Oracle10g upgrade. Learn how to use Oracle Database 10g new features to increase database availability, to

simplify database performance monitoring and tuning through the use of Oracle Database 10g Advisors, and to offer simplified database manageability. This course also identifies security improvements and development platform changes. Expert Led demonstrations, exercises and hands-on lab sessions reinforce the learning objectives.

ORA100 Understanding Oracle RDBMS This high-level course helps participants understand the components that comprise the Oracle Relational Database Management System (RDBMS). RDBMS concepts and database administration responsibilities are also covered. Topics in this course are: understanding relational databases, Oracle architecture, Oracle products, DBA responsibilities, and SQL.

ORA200 Relational Database Design This course helps participants learn an effective approach to developing a relational database. Topics in this course are: defining user requirements, developing an entity-relationship (ER) diagram and mapping your logical database model to a physical database design. Exercises and lab sessions reinforce the learning objectives and provide participants the opportunity to gain practical hands-on experience. A hands-on modeling workshop is facilitated on the third day. This workshop provides participants the opportunity to model a real world database application.

ORA370 Oracle 10g Comprehensive SQL and PL/SQL using SQL *Plus This course is designed for IT professionals who will be working in an Oracle application development environment. Participants have the opportunity to develop comprehensive SQL and PL/SQL queries using various objects within Oracle's object relational databases. Participants will develop queries using feature enhancements of the SQL standards. Topics in this course: SQL commands, natural joins, outer joins, case expressions, ROLLUP, procedural constructs, and cursor processing. Exercises and lab sessions reinforce the learning objectives and provide participants the opportunity to gain practical hands-on experience.

ORA370g Oracle 10g SQL Queries and Reports using SQL *Plus

ORA380 Oracle 10g Comprehensive SQL using SQL *Plus This is a comprehensive course covering SQL and Oracle's interactive query tool. The essential concepts of object and relational databases are also discussed. Develop skills necessary to effectively interact with an Oracle10g database. Participants will develop queries using feature enhancements of the ANSI standards. Topics in this course: ANSI SQL commands, natural joins, case expressions, ROLLUP, and advanced query techniques. Exercises and lab sessions reinforce the learning objectives and provide participants the opportunity to gain practical hands-on experience. This course also prepares students for the Oracle Certification Exam 1Z0-007.

ORA400 SQL Tuning Techniques This course helps participants learn effective application tuning techniques for optimizing performance in the Oracle server environment. Topics in this course are: troubleshooting application performance, utilizing Oracle supplied diagnostic utilities, and creating physical structures to improve application performance. Exercises and lab sessions reinforce the learning objectives and provide participants the opportunity to gain practical hands-on experience.

ORA560 Oracle 10g PL/SQL Programming Create database level applications. This class is applicable to Oracle8i, Oracle9i and Oracle Database 10g users. Participants will code procedural constructs including control statements, loops and cursors, create PL/SQL object constructs such as stored database procedures, functions, packages, and database triggers. Participants will develop techniques to enforce business rules within the database and perform value based auditing. Exercises and lab sessions reinforce the learning objectives and provide participants the opportunity to gain practical hands-on experience. This course prepares the student for Oracle Certification.

ORA610 Oracle 10g Database Administration I The course provides foundation skills in database administration for the Oracle professional. Students develop skills to effectively install, configure and maintain an Oracle10g Relational Database Management System. Students gain an understanding of the Oracle architectural framework and how the components perform and work together. Students configure and start up the Oracle instance and memory components and create the Oracle database repository. Students create physical and logical database objects, utilize Oracle Enterprise Manager and the integrated Oracle Data Dictionary to monitor and maintain the Oracle10g environment. Secure access to the Oracle10g objects with privileges, roles and profiles and configure the back and recovery components. Exercises and lab sessions reinforce the learning objectives and provide participants the opportunity to gain practical hands-on experience.

ORA620 Oracle 10g Database Administration II Plan and implement an effective database backup and recovery strategy using Recovery Manager (RMAN). Develop a strategy to support 24-hour operations. Develop a recovery plan to minimize down time. Recover the database, using RMAN, SQL, and Flashback technology. Use Oracle10g tools to monitor troubleshoot and tune database performance. Students will gain hands-on experience using Oracle10g technologies, such as Resource Manager, Scheduler, and Automatic Storage Management (ASM). Exercises and lab sessions reinforce the learning objectives and provide participants the opportunity to gain practical hands-on experience.

TIA

TIA100 CompTIA A+ Essentials This course validates knowledge of basic computer hardware and operating systems, covering skills such as installation, building, upgrading, repairing, configuring, troubleshooting, optimizing, diagnosing and preventive maintenance, with additional elements of security and soft skills.

TIA200 CompTIA A+ 220-602 This course is targeted for individuals who work or intend to work in a mobile or corporate technical environment with a high level of face-to-face client interaction.

TIA300 CompTIA Network+ Students will learn the skills and knowledge to help prepare them to take the CompTIA Network+ certification exam.

TIA400 CompTIA iNet+ This is a hands-on course that helps prepare you for CompTIA's Core Technologies exam #IK0-001.

TIA500 CompTIA Server+ Server+ Certification is a hands-on instruction book that provides you with the skills and knowledge to help you prepare for the CompTIA Server+ certification exam.

TIA600 CompTIA Linux+ This course is aimed at Linux Professionals with six months of experience with the Linux operating system. It covers basic installation, operating, and troubleshooting services for the Linux operating system and hardware on workstations and servers. Basic system administration tasks are also covered.

TIA700 CompTIA Security+ Security+™ CompTIA Certification is the primary course you will need to take if your job responsibilities include securing network services, network devices, and network traffic. It is also the main course you will take to prepare for the CompTIA Security+ examination (exam number SY0-101). In this course, you'll build on your knowledge and professional experience with computer hardware, operating systems, and networks as you acquire the specific skills required to implement basic security services on any type of computer network.

UNX

UNX100 UNIX Fundamentals This course provides a comprehensive introduction to the full range of UNIX user commands and utilities. Students will develop shell programming and vi editing skills. Exercises and lab sessions reinforce the learning objectives and provide participants the opportunity to gain practical hands-on experience.

UNX300 UNIX Advanced Tools In this course, students develop more advanced skills in using UNIX tools. Users increase their productivity in UNIX by learning how to create powerful korn shell scripts for processing text, managing files, and performing other complex tasks. Use of the UNIX sed and awk utilities is also discussed as well as an introduction to PERL programming. Exercises and lab sessions reinforce the learning objectives and provide participants the opportunity to gain practical hands-on experience.

UNX400 UNIX KORN Shell Programming Students learn to read, write, and debug KORN shell scripts. Students learn how to use pipes, filters, I/O redirection, variable substitution, meta-characters, script tracing and debugging. Exercises and lab sessions reinforce the learning objectives and provide participants the opportunity to gain practical hands-on experience.

XML

XML100 XML Fundamentals In this course you will learn fundamentals necessary to use XML on the Web or in data processing applications. Through lecture and hands-on lab exercises, you will learn the essentials of data interoperability using XML, write well-formed XML documents, enforce document validity, use XSLT and stylesheets to transform XML documents, and get an introduction to XML programming APIs in languages such as Java and Perl. Exercises and lab sessions reinforce the learning objectives and provide participants the opportunity to gain practical hands-on experience.

XML200 XML Advanced Concepts In this course you will learn advanced features of XML. Through lecture and hands-on lab exercises, you will become fluent in several XML standards and applications. Exercises and lab sessions reinforce the learning objectives and provide participants the opportunity to gain practical hands-on experience.

XML300 XML Programming using Java In this course, Java programmers will learn the basics of XML form and syntax. They will use Java to implement XML web applications, as well as learning how to use XML to pass data between distributed Java applications. Emphasis is placed on writing well-formed and valid XML, parsing techniques and converting Legacy data with XML. Java and XML share many features that are ideal for building Web-based enterprise applications, such as platform-independence, extensibility, reusability, global language (Unicode) support, and both are based on industry standards. Together Java and XML allow enterprises to simplify and lower cost of information sharing and data exchange. This course shows you how to put the two together, building real-world applications in which both the code and the data are truly portable. Exercises and lab sessions reinforce the learning objectives and provide participants the opportunity to gain practical hands-on experience.

XSLFO

XSLFO100 XSLFO This course introduces the eXtensible Stylesheet Language, or XSL, also known as XSL with Formatting Objects or XSLFO, to distinguish it clearly from XSLT. XSLFO provides the ultimate, standards-based solution to producing print and other presentation documents from XML information. This course teaches XSL with a focus on producing PDFs, using Apache FOP as the formatting engine. Exercises and lab sessions reinforce the learning objectives and provide participants the opportunity to gain practical hands-on experience.

XSLT

XSLT300 XSLT In this two-day course you will use the features of XSLT and XPath to develop stylesheets that convert XML documents to other XML, HTML, or text. You will use elements and functions to create stylesheet templates and match them with parts of your source document. Exercises and lab sessions reinforce the learning objectives and provide participants the opportunity to gain practical hands-on experience.