

SECURITY

UNIX OOA&D

AJAX

Best Practices

Software Engineering

Mainframe

Web Services

**Trivera Technologies**  
**Worldwide Collaborative**  
**Education Services**

Training | Mentoring | Courseware  
 Classroom | Online | Custom

XHTML-CSS

SOA Java EE

J2EE

XML WEB 2.0 .Net

Test Driven Development

Agile Java

DB2

IBM WebSphere

Spring

Hibernate



*Trivera Technologies*  
 is a 100% Female-Owned  
 Small Business Concern



## Trivera Technologies LLC, Worldwide

Training | Mentoring | Courseware

Trivera Technologies LLC is a worldwide provider of **IT education and training, structured mentoring programs, custom courseware design & licensing and specialized consulting services**. Our extensive team of subject matter experts, experienced instructors and courseware designers brings years of practical programming experience into every classroom and custom project.

Visit our site for information about our newly released **JavaEE Developer's Boot Camp** or our **Defensive Coding & Development Security Tracks, SOA Suites or Advanced JavaEE topics** - intense, integrated training programs complete with hands-on labs, comprehensive seminars and intense mentoring and project development, combined to provide your staff with a proven foundation in advanced development.

Our goal is to make *you* a success in the classroom. Whether you're a manager arranging training for your company, a trainer or training firm using our courseware materials at your valued client site, or a student attending a course presented by one of our experts, **our core mission is to develop and deliver exactly what you need to achieve your goals**, held to the highest industry quality standards, with complete support and assistance before, during and after your event.

### A Sample of our Course Offerings includes....

We offer introductory through advanced level training in all of the topics listed below, as well as many other learning tracks listed on our website. All courses are fully customizable to suit your unique requirements, and can be presented live in your classroom, virtually for private delivery for your team, or in public training courses available around the globe.

### Object Oriented Essentials Track (for Java or .Net)

- Object-Oriented Analysis & Design using UML
- Core Design Patterns & Frameworks
- Gathering User Requirements using Use Cases
- Test Driven Development & Agile Topics

### Java 5, Java 6 & JavaEE Essentials Track

- Basic & Advanced Java Topics
- Writing Graphical User Interfaces
- Servlets, JSPs & Custom Tags
- J2EE / JavaEE Design Patterns
- J2EE / JavaEE Architecture
- J2EE / JavaEE Component Development & Design
- Mastering Spring; Mastering Hibernate
- Spring & Hibernate Integration
- Struts 2.0
- EJB & EJB 3.0 Topics
- AJAX & AJAX Integration Topics (Struts, JSF etc)
- Maven, Tapestry & More
- Java & JavaEE Certification Training

### XML, Web Services & SOA Track

- XML Fundamentals
- Mastering XML, XSL and Java
- XML for Java Developers
- Advanced XML/XSL, XSLT & Integration Topics
- Core & Advanced Web Services for J2EE Developers
- SOA (Services-Oriented Architecture) for Managers
- SOA Analysis & Design & More

### Best Defense: Security Training Suite

- Java & J2EE Security Topics
- Web Services Security
- Defensive Coding: Best Practices

### Specialty Software Topics

- IBM WebSphere IBM RAD7 Training
- Enterprise Development using Eclipse
- TomCat & JBoss Administration Topics
- WebSphere Application Server Administration
- BEA WebLogic Administration
- Eclipse, MyEclipse, Eclipse WTP Training & More

### Programming Suite

- Perl
- Python
- C & C++ Classes & More

### Web 2.0 & Web Development Suite

- AJAX
- Cold Fusion
- HTML & XHTML
- PHP & More

### .Net Developer Suite

- Core .Net Curriculum for .Net 2.0
- MCTS .Net Curriculum
- .Net Certification Training

### Software Development, Business Analysis & Testing

- Software Engineering
- Project Management
- Business Analysis Training
- ITIL & More

**Please contact us for our complete current course list & outlines, course roadmaps, public training schedule, individual course details and outlines or courseware licensing information.**

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Educate. Collaborate. Accelerate!



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*Trivera Technologies is a 100% Female-Owned  
Small Business Concern, with GSA Schedule GS-35F-0188T  
Please contact us for details and pricing.*

## Trivera Technologies Curriculum Overview (v5.5\_20080519)

Each topic below represents a tab in this worksheet. Please click on the Track Title(s) below to see the course listings under each track.

### 1. AppDev: Object-Oriented Application Development Topics

- Object Oriented Essentials
- Java Essentials
- Advanced Java
- J2EE & JavaEE - Basic to Intermediate
- Advanced J2EE
- Java & J2EE Security Topics

### 2. Service-Oriented Architecture & Web Services

- SOA, SOAD, BPEL, and more
- Web Services
- Web Service Integration Topics - J2EE, SOA, XML and more
- SOA & Web Services Security

### 3. Web Development - XML, XHTML, HTML, JavaScript & More

- XML Topics - Basic through Advanced
- XML, XSL, XSLT, Xpath, JAXP and more
- AJAX - Basic through Advanced
- AJAX Integration Topics - XML, J2EE, JSF, Struts and more
- HTML; XHTML & CSS; JavaScript
- PHP Topics

### 4. .Net Development Suite

- Essentials .Net Topics
- Advanced .Net Programming
- MCTS
- .Net 2.0 and .Net 3.0

### 5. Best Defense Security Training Series

- Security Seminars - Language Neutral
- Security Seminars - Java, J2EE, .Net and More
- Web Application Security Seminars
- Secure Application Programming Classes - Java, .Net and more
- Secure Web Application Courses - J2EE, .Net and more
- SOA Security
- Web Services Security

### 6. \*\*Development Software & Application Server Tools Training

- IBM WebSphere Application Server Development & Administration
- IBM Rational Application Developer 6 and 7 (RAD 6 and RAD 7)
- IBM Rational Rose and ClearCase
- BEA WebLogic 8.1, 9. x and 10 - Development & Administration
- Oracle JDeveloper
- Eclipse, MyEclipse & Eclipse WTP
- Apache TomCat & Apache Web Server

\*\* Please note that the Development Software tab represents tools-specific training courses and workshops. All Application Development courses in the Java, J2EE, JavaEE, Web Services and XML tracks can be run using a variety of IDEs and tools. Please see those course tabs for details.

### 7. Other Programming Topics

- C++ Programming
- Perl Programming
- Python Programming

### 8. O/S Training

- Linux Training
- UNIX Training
- Windows Training

### 9. MainFrame & DB2 Training

- COBOL
- DB2 Training
- IMV, MVS, JCL, Assembler
- MainFrame Tools & Utilities
- MainFrame for Web Developers

### 10. Software Engineering Topics

- Software Engineering & Testing
- Test Driven Development & Agile Programming

### 11. Business Analysis Training

### Trivera Technologies OO and Java / J2EE - JavaEE Programming Topics

Please note that all development, Java and J2EE courses may be presented using your IDE, Application Server and platform of choice. Most courses are currently offered using the latest editions of IBM Rational Application Developer (RAD 6, RAD7); BEA WebLogic; JBoss; TomCat; Eclipse / MyEclipse; Eclipse WTP, Oracle JDeveloper; Borland JBuilderX and more. Please contact us for details.

#### Object-Oriented Foundation Suite

Course ID	#of Days	Level	Course Title (** See bottom of list for notes about tools)
TT1000	1	1	IMPACT Series: Understanding Object-Oriented Analysis & Design - A Technical Overview
TT1100	3	1	Core Object-Oriented Analysis & Design Using UML
TT1120	5	1	Object-Oriented Analysis & Design Using UML
TT1130	5	1	Object-Oriented Analysis & Design Using UML 2.0
TT1160	3	1	OO, RUP and J2EE Overview
TT1200	3	1+	Core Object-Oriented Design Patterns in C++ and/or Java
TT1211	4	1+	Core Object-Oriented Design Patterns in C++ and/or Java (with Extended Projects)
TT1250	5	1+	Object-Oriented Design Patterns and Best Practices in C++ and/or Java
TT1260	5	1+	Object-Oriented Design Patterns and Best Practices in .Net
TTR1300	4	1+	Gathering and Documenting Requirements Through Use Cases
TT1310	5	1+	Analysis & Design Using UML & Use Cases
TT1400	5	2	Mastering Advanced Object-Oriented Design Patterns in .Net (C#)
TT1900	5+	1	Immersion Boot Camp (Custom): Object Oriented Boot Camp for Developers
TTI0106	5	1+	Rational Rose: Design using UML (with Rational Rose)
TTI0107	5	1+	Rational Rose: Analysis & Design using UML with Rational Rose

#### Java Essentials Development Suite

Course ID	#of Days	Level	Course Title (** See bottom of list for notes about tools)
TT2000	1	1	IMPACT Series: Understanding Java - A Technical Overview
TT2100-5	5	1	Java Programming Fundamentals for OO Developers (Java 5)
TT2100-6	5	1	Java Programming Fundamentals for OO Developers (Java 6)
TT2101	3	1	Core Java Programming Fundamentals (Java 5 or Java 6)
TT2120-5	5	1	Java 5 Programming Fundamentals for Developers New to OO (C, COBOL, Mainframe, 4GL)
TT2120-6	5	1	Java 6 Programming Fundamentals for Developers New to OO (C, COBOL, Mainframe, 4GL)
TT5140	5	1	Java 5 Programming Essentials for Server-Side (J2EE) OO-Experienced Developers (C++, etc)
TT5145	5	1	Java 5 Programming Essentials for Server-Side (J2EE) Developers New to OO (C, COBOL, 4GL, etc)
TT2140	2	1+	Transitioning to Java 5
TT2141	2	1+	Transitioning to Java 6
TT2200	2	1+	Mastering JDBC
TT2220	3	1+	Implementing User Interfaces in Java (Java Foundation Classes)
TT2900	5+	1+	Immersion Program (Custom): Java Developer's Boot Camp
TT8000	1	1	Security Suite: IMPACT Overview: Understanding Application Security
TT8100-J	2	1+	Security Suite: Secure Java Application Development Seminar
TT8200-J	3	1+	Security Suite: Secure Java Coding
TT8205-J	4	2	Security Suite: Secure Java Coding - Lifecycle

#### Test Driven Development Suite

Course ID	#of Days	Level	Course Title (** See bottom of list for notes about tools)
TTR1515	1	1	IMPACT Series: Agile Development Essentials - A Technical Overview
TTR1615	1	1	IMPACT Series: SCM and Continuous Integration - A Technical Overview
TTR311	4	1	Adopting Agile Software Development Practices
TTR313	2	1	Implementing Test Driven Development
TT3500	4	2	Mastering Test Driven Development Using JUnit
TT3510	2.5	1	Core Test Driven Development using JUnit (Level1)
TT3520	2.5	2	Advanced Test Driven Development (Level 2)

#### Advanced Java Development Suite

Course ID	#of Days	Level	Course Title (** See bottom of list for notes about tools)
TT3100	4	2	Advanced Java 5 Programming
TT3110	2	2	Java 5 Performance Tuning
TT3200	4	2	Mastering Hibernate
TT3300	5	2	Mastering the Spring Framework
TT3301	1	1+	Introduction to the Spring Framework

TT3302	2	2	Intermediate Spring Development
TT3303	2	2	Advanced Spring Development
TT3309	5	2	BOOT CAMP: Mastering the Spring Framework Boot Camp (integrated TT3301, TT3302 & TT3303)
TT3400	5	2	Integrating Hibernate and Spring (Hibernate emphasis)
TT3405	5	2	Integrating Spring and Hibernate (Spring emphasis)
TT3410	5	2	Integrating Spring and ibatis (Spring emphasis)
TT3800	1	1+	Working with Maven

**Enterprise Java Edition (J2EE - JavaEE) Development Suite**

Course ID	#of Days	Level	Course Title (** See bottom of list for notes about tools)
TT5000	1	1	IMPACT Series: Understanding J2EE - A Technical Overview
TT5010	2	1	IMPACT Series: Understanding Java & J2EE - A Technical Overview (Lecture / Lab Demos)
TT5015	3	1	IMPACT Series: Understanding Java & J2EE - A Technical Overview (Hands-On High-Level Labs)
TT5020	1	1	IMPACT Series: J2EE vs. .Net - A Technical Overview
TT5030	1	1	IMPACT Series: Understanding EJBs - A Technical Overview
TT5100	5	1+	Building J2EE Web Applications using Servlets, JSPs, JDBC, Security and More
TT5120	5	2	The J2EE Developer's Boot Camp (Servlets, JSPs, EJBs, JDBC, XML & More)
TT5140	5	1	Java 5 Programming Fundamentals for Server-Side, OO-Experienced Developers (C++, etc)
TT5145	5	1	Java 5 Programming Fundamentals for Server-Side (J2EE) Developers New to OO (C, COBOL, 4GL)
TT5160	3	1+	Core J2EE Web Application Development using Servlets and JSPs
TT5200	3	1+	Core EJB 2.1 Development
TT5240	4	2	Mastering EJB 2.1 Application Development (with Advanced Topics)
TT5260	3	2+	Transitioning to EJB 3.0
TT5265	4	2	Mastering EJB 3.0 Applications
TT5300	5	2	Developing J2EE Component Compliant Applications (FJ-310)
TT5500	5+	1+	Immersion Program (Custom): Intermediate J2EE Developer's Boot Camp

**\*\* See below for Suggested J2EE Security Suite Topics**

**Advanced Enterprise Java Edition (J2EE - JavaEE) Development Suite**

Course ID	#of Days	Level	Course Title (** See bottom of list for notes about tools)
TT6000	1	1+	IMPACT Series: Understanding Struts - A Technical Overview
TT6002	1	1+	IMPACT Series: Understanding Struts 2.0 - A Technical Overview
TT6010	1	2	IMPACT Series: Understanding J2EE Design Patterns - A Technical Overview
TT6100	5	2+	Advanced J2EE Topics (Shale, Ajax, Hibernate, JSF and more)
TT6200	3	1+	Fast track to Core Struts 1.x Development
TT6202	3	2	Fast Track to Core Struts 2.0 Development
TT6212	3	2	Transitioning to Struts 2.0
TT6240	5	2	Mastering Struts 1.2 Developer's Workshop
TT6242	5	2	Mastering Struts 2.0 Developer's Workshop
TT6260	5	1+	Developing J2EE Web Applications using Servlets/JSPs, Tags & Struts
TT6262	5	1+	Developing J2EE Web Applications using Servlets/JSPs, Tags & Struts 2
TT4255	5	2	Web Development: Integrating Ajax and Struts (with Advanced Ajax Topics)
TT6300	3	1+	Core JavaServer Faces (JSF)
TT6301	4	1+	Mastering JavaServer Faces (JSF)
TT6320	5	2	Integrating JavaServer Faces (JSF) and Struts
TT6340	5	2	Integrating JavaServer Faces (JSF) and Ajax
TT6360	5	2	Integrating JavaServer Faces (JSF) and Hibernate
TT6380	5	2	Integrating JavaServer Faces (JSF) , Hibernate, and Spring
TT6400	5	2	Integrating JavaServer Pages (JSPs) and Custom Tag Libraries
TT6500	5	2	Mastering J2EE Design Patterns
TT6600	4	2	Architecting and Designing J2EE Applications
TT8000	1	1	Security Suite: IMPACT Overview: Understanding Application Security
TT8020	1	1	Security Suite: IMPACT Overview: Understanding Web Application Security
TT8120-J	2	1+	Security Suite: Secure J2EE Web Application Development Seminar
TT8320-J	3	2	Security Suite: Securing J2EE Web Applications
TT8325-J	4	2	Security Suite: Securing J2EE / Java EE Web Applications - Lifecycle

### Sun Certification Exam Preparation Courses

Course ID	#of Days	Level	Course Title (** See bottom of list for notes about tools)
TT3600	2	1	Sun Certified Java 1.4 Programmer Exam Preparation
TT3605	2	1	Sun Certified Java 5 Programmer Exam Preparation (310-355)

### COURSE FORMAT / STYLE OVERVIEW

**COURSE SERIES:** There are classes that come from across various suites that share certain characteristics. They are labeled with a capitalized prefix.

**IMPACT Overview Series:** These courses are technical overviews that are usually a single day and target project stakeholders that need to understand the basic technology, where it fits in the bigger picture, what some of the advantages are for the technology, and, of course, what some of the risk areas are. These classes consist of lectures, demos, and discussions. There are not hands-on coding exercises in these topics, but they often include demos or case studies.

**CORE / FUNDAMENTALS COURSES:** These courses intend to provide basic coverage of the targeted programming topic in a short, rapid fashion. These are three days in length and all have a coding orientation and programming labs. Some courses have significant prerequisites (in terms of coding skills and knowledge) but all provide a practical jumpstart for developers.

**SECURITY SERIES:** These courses are of varying lengths, but all share the common theme of security and secure coding. All of the courses have a coding orientation and programming labs.

**IMMERSION / BOOT CAMPS:** These courses intend to provide an extended, in-depth coverage of the associated topic. They are more than 5 days in length and are highly customizable. Trivera will provide an initial, suggested outline for the immersion course which can be modified to target those topics and areas on which the client would like to focus.

## Service Oriented Architecture (SOA) & Web Services Suite

Course ID	#of Days	Level	Course Title (** See bottom of list for notes about tools)
TT7000	1	1	IMPACT Series: Understanding SOA - A Technical Overview
TT7005	1	1	IMPACT Series: Understanding Web Services - A Technical Overview
TT7010	0.5	1	SOA Management Seminar (4 hours)
TT7015	0.5	1	SOA Leadership (2 hours)
TT7020	1	1	SOA Processes
TT7030	2	2	SOA Governance and Infrastructure
TT7100	4	2	Service Oriented Architectures Analysis and Design
TT7110	3	2	Service Oriented Architectures Analysis
TT7115	3	2	SOA Architectures
TT7120	3	2	Business Process Modeling (BPEL)
TT7125	3	2	Business Process Modeling (BPML)
TT7150	5	2	Mastering SOA and J2EE Web Services
TT7300	3	1+	Core Web Services for J2EE Developers
TT7301	4	1+	SOA and Web Services for J2EE Developers
TT7340	5	1+	Integrating J2EE, SOA and J2EE Web Services
TT7360	5	1+	Integrating XML, SOA and J2EE Web Services
TT4400	5	2	Integrating XML, Web Services and SOA
TT4410	5	2	Integrating XML, Web Services & Ajax
TT8020	1	1	Security Series: Best Defense Seminar: Understanding Web Application Security
TT8500-J	4	2	Security Series: Securing J2EE Web Services
TT8150	2	2	Security Series: SOA Security
TT8500-J	4	2+	Securing J2EE Web Services
TT8500-N	4	2+	Securing .Net Web Services

## Web Development Suite - Web 2.0, XML, Ajax and More

### Internet Architectures, XML, Ajax and More

Course ID	#of Days	Level	Course Title (** See bottom of list for notes about tools)
TT4000	1	1	IMPACT Series: Understanding Internet Architectures
TT4005	1	1	IMPACT Series: Understanding XML - A Technical Overview
TT7005	1	1	IMPACT Series: Understanding Web Services - A Technical Overview
TT4200	3	1+	Web Development Series: Core Ajax (Language Neutral)
TT4200-J	3	1+	Web Development Series: Core Ajax for Java Developers
TT4200-N	3	1+	Web Development Series: Core Ajax for .Net Developers
TT4205	2	2	Web Development : Advanced Ajax
TT4210	5	1+	Web Development: Mastering Ajax (with Advanced Topics)
TT4250	5	2	Web Development: Integrating Ajax and J2EE
TT4255	5	2	Web Development: Integrating Ajax and Struts (with Advanced Ajax Topics)
TT4260	5	2	Web Development: Integrating Ajax and .Net
TT4300	3	1	Core XML Fundamentals (XML, Schema, XPath, and XSLT)
TT4305	3	1	Core XML/XSLT with ACORD
TT4340	3	2	Advanced XML and XSLT
TT4360	3	2	XML and Java: Processing XML using Java (JAXP)
TT4380	5	1+	XML for Java Programmers: Mastering XML, XSLT and XSL using Java (JAXP)
TT4400	5	2	Integrating XML, Web Services and SOA (Lecture/Demo)
TT4410	5	2	Integrating XML, Web Services & Ajax
TT4500	2	1+	Core XML for the Server-Side / Enterprise
TT4510	2	1+	Core XML for COBOL
TT7360	5	1+	Integrating XML, SOA and J2EE Web Services
TT4900	5	1+	BOOT CAMP: Web Developer's Boot Camp (Custom)
TT8020	1	1	Security Suite: IMPACT Overview: Understanding Web Application Security
TT8120	2	1+	Security Suite: Secure Web Application Development Seminar (Language Neutral)

### HTML, XHTML, CSS & JavaScript

Course ID	#of Days	Level	Course Title (** See bottom of list for notes about tools)
TTU0000	2	1	HTML Fundamentals
TTU0010	2	1	CSS Fundamentals
TTU0250	2	1	XHTML & CSS Best Practices
TTU0260	1	1+	Using XHTML and HTML Tags
TTU0100	3	1	Introduction to JavaScript
TTU0110	2	2	Advanced JavaScript and Dynamic HTML (DHTML)
TTA1020	5	1+	Mastering JavaScript

### PHP Programming

Course ID	#of Days	Level	Course Title (** See bottom of list for notes about tools)
TTU0300	2	1	PHP Fundamentals
TTU0310	3	2	Intermediate PHP
TTU0320	3	2+	Mastering Advanced PHP
TTU0330	5	2+	Dynamic Web Page Development using PHP and MySQL

## .Net Essentials Suite

### Core .Net Suite

Course ID	# days	Course Title
TTO402	1	.NET Overview (.NET 1.1)
TTO402	1	.NET Overview .NET 2.0
TTO410	5	Object-Oriented Programming in C# (.NET 1.1)
TTO410	5	Object-Oriented Programming in C# .NET 2.0
TTO411	2	C# Essentials (.NET 1.1)
TTO411	2	C# Essentials .NET 2.0
TTO412	3	.NET Framework Using C# (.NET 1.1)
TTO412	3	.NET Framework Using C# .NET 2.0
TTO413	3	ADO.NET Using C# (.NET 1.1)
TTO413	3	ADO.NET Using C# .NET 2.0
TTO414	4	XML Programming Using C# and .NET (.NET 1.1)
TTO414	4	XML Programming Using C# and .NET .NET 2.0
TTO415	4	Windows Forms Using C# (.NET 1.1)
TTO415	5	Windows Forms Using C# .NET 2.0
TTO416	4	ASP.NET Using C# (.NET 1.1)
TTO416	5	ASP.NET Using C# .NET 2.0
TTO418	4	Web Services Using C# and ASP.NET (.NET 1.1)
TTO418	4	Web Services Using C# and ASP.NET .NET 2.0
TTO420	5	Object-Oriented Programming in VB.NET (.NET 1.1)
TTO420	5	Object-Oriented Programming in Visual Basic .NET 2.0
TTO421	2	VB.NET Essentials (.NET 1.1)
TTO421	2	Visual Basic Essentials .NET 2.0
TTO422	3	.NET Framework Using VB.NET (.NET 1.1)
TTO422	3	.NET Framework Using Visual Basic .NET 2.0
TTO423	3	ADO.NET Using VB.NET (.NET 1.1)
TTO423	3	ADO.NET Using VB.NET .NET 2.0
TTO424	4	XML Programming Using VB.NET (.NET 1.1)
TTO424	4	XML Programming Using Visual Basic and .NET .NET 2.0
TTO425	4	Windows Forms Using VB.NET (.NET 1.1)
TTO425	5	Windows Forms Using Visual Basic .NET 2.0
TTO426	4	ASP.NET Using VB.NET (.NET 1.1)
TTO426	5	ASP.NET Using Visual Basic .NET 2.0
TTO428	4	Web Services Using VB.NET and ASP.NET (.NET 1.1)
TTO428	4	Web Services Using Visual Basic and ASP.NET .NET 2.0
TTO431	2	C++/CLI Essentials .NET 2.0
TTO432	3	.NET Framework Using C++/CLI .NET 2.0

### MCTS .Net Suite

Course ID	# days	Course Title
TTOCS5	5	.NET Framework Foundations Using C# .NET 2.0
TTOCS11	5	Windows Clients Using C# .NET 2.0
TTOCS12	3	ADO.NET for Windows Applications Using C# .NET 2.0
TTOCS13	3	XML for Windows Applications Using C# .NET 2.0
TTOCS21	5	Web Clients Using C# and ASP.NET .NET 2.0
TTOCS22	3	ADO.NET for Web Applications Using C# .NET 2.0
TTOCS23	3	XML for Web Applications Using C# .NET 2.0
TTOCS31	4	.NET Distributed Applications Using C# .NET 2.0

## Other .Net Courses

Course ID	# days	Course Title
TTO405	1	Test-Driven Development Using NUnit .NET 2.0
TTO413C2	3	ADO.NET Using Oracle and C# .NET 2.0
TTO443	5	Oracle Applications Using ADO.NET and C# .NET 2.0
TTO461	2	New Features in .NET 2.0 Using C# .NET 2.0
TTO463	3	Windows Presentation .NET 3.0
TTO471	2	New Features in .NET 2.0 Using VB.NET .NET 2.0

## Best Defense: Secure Programming & Design Suite

### Best Defense Seminars Series

Course ID	#of Days	Level	Course Title (** See bottom of list for notes about tools)
TT8000	1	1	Understanding Application Security
TT8020	1	1	Understanding Web Application Security
TT8100	2	1	Secure Application Development Seminar (Language Neutral Edition)
TT8100-J	2	1+	Secure Java Application Development Seminar
TT8100-N	2	1+	Secure .Net Application Development Seminar
TT8120	2	1+	Secure Web Application Development Seminar (Language Neutral Edition)
TT8120-J	2	1+	Secure J2EE Web Application Development Seminar
TT8120-N	2	1+	Secure .Net Web Application Development Seminar

### Best Defense Secure Programming Series (Hands-On)

TT8150	2	2	Best Defense: SOA Security
TT8200-J	3	1+	Secure Java Coding
TT8200-N	3	1+	Secure .Net Coding
TT8205-J	4	2	Secure Java Coding - Lifecycle
TT8205-N	4	2	Secure .Net Coding - Lifecycle
TT8320-J	3	2	Securing J2EE Web Applications
TT8320-N	3	2	Securing .Net Web Applications
TT8325-J	4	2	Securing J2EE Web Applications - Lifecycle
TT8325-N	4	2	Securing .Net Web Applications -Lifecycle
TT8500	4	2	Securing Web Services (Language Neutral Edition)
TT8500-J	4	2	Securing J2EE Web Services
TT8500-N	4	2	Securing .Net Web Services
TT8600	3	2	Secure Software Design

**Product Specific Training**

**IBM WebSphere / Rational Application Developer (RAD6 or RAD7) Courses**

Course ID	#of Days	Level	Course Title (available in RAD6 or RAD7)
TT9000-W	1	1	IMPACT Overview: Understanding WebSphere (WAS 6.0/6.1)
TT9010-W51	4	2	ADMIN: IBM WebSphere 5.0 OR 5.1 Administration (Network Deployment Edition)
TT9020-W6	5	2	ADMIN: IBM WebSphere Application Server 6.0 Administration (Network Deployment Edition)
TT9021-W6	3	2	ADMIN: Transitioning to IBM WebSphere Application Server 6.0
TT9022-W61	5	2	ADMIN: IBM WebSphere Application Server 6.1 Administration (Network Deployment Edition)
TT9023-W61	1	2	ADMIN: Transitioning to IBM WebSphere Application Server 6.1
TT9025-W61	3	2	ADMIN: IBM WebSphere Application Server v6.1 Performance & Tuning
TT9027-W61	4	2	ADMIN: IBM WebSphere Application Server v6.1 Application Administration
TT9050-R	3	1+	Core IBM Rational Application Developer (RAD 6/RAD 7)
TT9055-R6	3	2	Transitioning from WSAD 5.1.2 to IBM RAD 6.x
TT9055-R7	3	2	Transitioning from WSAD 5.1.2 to IBM RAD 7.x
TT9056-R7	3	2	Transitioning from IBM RAD 6 to IBM RAD 7.x
TT9060-R	5	1+	Core Java Programming using IBM Rational Application Developer (RAD6 or RAD7 )
TT9070-R	5	1+	Developing J2EE Web Applications using RAD (Serv/JSP, EJB,JNDI, JDBC & More) (Intermediate RAD, Software-Centric Skills)
TT9075-R	5	2	Enterprise Java Application Development using RAD (Int RAD 6/7 Skills) J2EE, EJB, Web Svs & more
TT3200-R	5	1+	Mastering Hibernate using Rational Application Developer (RAD6 or RAD7 )
TT4200-R	3	2	Core Ajax Development using RAD6 or RAD7
TT4410-R	5	2	Integrating XML, Web Services & Ajax using RAD6 or RAD7
TT5100-R	5	1+	J2EE Web Application Development using IBM RAD 6/7 (Basic Level - Technology Centric)

\*\*\*Note that most technology-centric (Java-J2EE-JavaEE-WebSvs) courses can be taught using RAD 6 or RAD 7. Please see the Application Development Tracks (OO, Java, J2EE, JavaEE), Web Services / SOA Tracks or Web Development (XML, XJAX et al) for options.

**IBM Rational Courses**

Course ID	#of Days	Level	Course Title (** See bottom of list for notes about tools)
TTI0104	1	1	Introduction to Rational Rose
TTI0106	1+	3	Design using UML (with Rational Rose)
TTI0107	1+	5	Analysis & Design using UML and Rational Rose
TTI0108	2	2	Introduction to ClearCase
TTI0109	1+	1	Introduction to Requisite Pro
TTI0111	2	1/2 day	Introduction to SoDA

**BEA WebLogic Courses**

Course ID	#of Days	Level	Course Title (** See bottom of list for notes about tools)
TT9100-B	1	1	IMPACT Overview: Understanding WebLogic
TT9110-B81	3	2	ADMIN: Core BEA WebLogic 8.1 Administration
TT9110-B9	3	2	ADMIN: Core BEA WebLogic 9.x Administration
TT9120-B81	5	2	ADMIN: Mastering BEA WebLogic Application Server v8.1 Administration (with Advanced Topics)

### BEA WebLogic Courses

Course ID	#of Days	Level	Course Title (** See bottom of list for notes about tools)
TT9120-B9	5	2	ADMIN: Mastering BEA WebLogic Application Server v9.2 Administration (with Advanced Topics)
TT9140-B81	2	2	Auditing and Securing BEA WebLogic Application Server 8.1
TT9145-B819	5	2	ADMIN: BEA WebLogic Application Server Administration for 8.1/9 Combo (with Advanced Topics)
TT9150-B81	3	3	ADMIN: Advanced BEA WebLogic 8.1 Administration
TT9170-B81	5	2	Advanced J2EE & EJB Development using BEA WebLogic Application Server 8.1

\*\*\*Note that most technology-centric (Java-J2EE-JavaEE-WebSvs) courses can be taught using BEA WebLogic 8.1, 9.2 or 10. Please see the Application Development Tracks (OO, Java, J2EE, JavaEE), Web Services / SOA Tracks or Web Development (XML, XJAX et al) for options.

### Oracle/JDeveloper Courses

Course ID	#of Days	Level	Course Title (** See bottom of list for notes about tools)
TT9470-JX	5	1+	Developing J2EE Web Applications using Oracle/JDeveloper (Serv/JSP, EJB,JNDI, JDBC & More)
TT3200-JX	5	1+	Mastering Hibernate using Rational Application Developer (JDeveloper)
TT4200-JX	3	2	Core Ajax Development using JDeveloper
TT4410-JX	5	2	Integrating XML, Web Services & Ajax using JDeveloper
TT5100-JX	5	1+	Mastering J2EE Web Applications using JDeveloper (Basic Level - Technology Centric)

\*\*\*Note that most technology-centric (Java-J2EE-JavaEE-WebSvs) courses can be taught using JDeveloper and Oracle. Please see the Application Development Tracks (OO, Java, J2EE, JavaEE), Web Services / SOA Tracks or Web Development (XML, XJAX et al) for options.

### Apache/JBoss Server Courses

Course ID	#of Days	Level	Course Title
TTE9510-A	3	2	ADMIN: Core Apache WebServer Administration
TTE9510-TC	3	2	ADMIN: Core Apache TomCat Administration

### Eclipse and the Web Tools Project (WTP) Courses

Course ID	#of Days	Level	Course Title (** See bottom of list for notes about tools)
TT9250-E	3	1+	Core Eclipse 3.2
TT9270-E	5	1+	Enterprise Application Development using Eclipse & the Web Tools Project
TT9275-E	3	1+	Core Struts Development using Eclipse & the Web Tools Project
TT3200-JX	5	1+	Mastering Hibernate using Rational Application Developer (Eclipse & the Web Tools Project)
TT4200-JX	3	2	Core Ajax Development using Eclipse & the Web Tools Project
TT4410-JX	5	2	Integrating XML, Web Services & Ajax using Eclipse & the Web Tools Project
TT5100-JX	5	1+	Mastering J2EE Web Applications using Eclipse WTP (Basic Level - Technology Centric)

\*\*\*Note that most technology-centric (Java-J2EE-JavaEE-WebSvs) courses can be taught using an open source combination of Eclipse WTP and either Tomcat or JBoss. Please see the Application Development Tracks (OO, Java, J2EE, JavaEE), Web Services / SOA Tracks or Web Development (XML, XJAX et al) for options.

## MyEclipse Courses

Course ID	#of Days	Level	Course Title (** See bottom of list for notes about tools)
TT3200-M	5	1+	Mastering Hibernate using Rational Application Developer (MyEclipse)
TT4200-M	3	2	Core Ajax Development using MyEclipse
TT4410-M	5	2	Integrating XML, Web Services & Ajax using MyEclipse
TT5100-M	5	1+	Mastering J2EE Web Applications using MyEclipse (Basic Level - Technology Centric)

.... **\*\*\*Note that most technology-centric (Java-J2EE-JavaEE-WebSvs) courses can be taught using a combination of MyEclipse and either Tomcat or JBoss. Please see the Application Development Tracks (OO, Java, J2EE, JavaEE), Web Services / SOA Tracks or Web Development (XML, XJAX et al) for options.**



## Other Programming Topics

### C++ Programming Training

Course ID	# days	Course Title
TTO142	5	Visual C++ Windows Programming for C Programmers
TTO153	5	C++ Programming for Non-C Programmers
TTO154	3	The C++ Standard Template Library
TTO156	5	C++ Programming for C Programmers
TTO157	5	Advanced C++ Programming
TTO160	5	C++ Intensive for Non-C Programmers
TTO431	2	C++/CLI Essentials
TTO432	3	.NET Framework Using C++/CLI

### COM and COM+ (for C++ Programmers) Training

Course ID	# days	Course Title
TTO120	3	COM Programming Fundamentals Using ATL
TTO123	5	Programming COM and DCOM Using ATL
TTO125	5	Programming COM and ActiveX Using ATL
TTO127	5	Programming COM and OLE Using MFC
TTO129	3	COM+ Programming Using Visual C++

### Perl & Python Topics

Course ID	# days	Course Title
TTEP100	3	Introduction to Perl Scripting
TTEP101	5	Mastering Perl Programming
TTEY101	3	Introduction to Python



## O/S Training - UNIX, Linux & Windows

### Linux Training

Course ID	# days	Course Title
TTEL101	3	Intro to Linux
TTEL301	5	Linux System Administration
TTEL302	2	DNS and DHCP Administration
TTEL303	1	Secure Shell Administration
TTEL304	2	Linux Network Security with iptables
TTEL305	1	Pluggable Authentication Modules Administration
TTEL306	3	Apache Web Server Administration
TTEL307	1	SAMBA Administration
TTEL308	1	Ksh to Bash Migration
TTEL309	4	Intermediate Linux & Bash Shell Scripting
TTEL310	1	Linux Anti-Spam Tools

### Unix Topics

Course ID	# days	Course Title
TTCU100	3	Introduction to UNIX
TTEU201	4	Intermediate Unix & Korn Shell Scripting
TTEU205	2	Advanced Shell Scripting
TTEU301	5	Unix System Administration
TTEU401	2	awk programming
TTEU501	1	vi text editor
TTEU601	3	Unix sendmail Administration
TTEU602	1	Unix procmail Administration
TTEU703	3	Advanced Unix Network Services

### Windows and MFC Training

Course ID	# days	Course Title
TTO134	5	NT Programming for C Programmers
TTO142	5	Visual C++ Windows Programming for C Programmers
TTO145	5	MFC Windows Programming for C++ Programmers
TTO146	5	Advanced Windows Programming Using Visual C++

## MainFrame Topics

**NOTE: The Mainframe courses are available for onsite training only - not for US-based courseware licensing.**

### CICS, DB2, IMS, TSO

Course ID	#of Days	Level	Course Title (** See bottom of list for notes about tools)
TTCM100	2	1	ANSI SQL: Introduction
TTCM110	5	3	CICS: Advanced
TTCM115	5	1	CICS/TS Programming (Formerly called CICS/ESA Programming)
TTCM200	25+	1	Boot Camp: COBOL Entry Level Programming
TTCM201	5-8 days	1	COBOL for Programmers
TTCM202	2	2	COBOL II Differences
TTCM203	3	2	COBOL II/370/390 Debugging
TTCM300	2	1	Data Modeling
TTCM301	3	2	DB2 Design and Tuning
TTCM302	5	2	DB2/SQL Version 8 and 9 Application Development
TTCM303	5	3	Advanced DB2/SQL Application Programming
TTCM304	5	2	DB2 UDB Database Administration
TTCM305	1-2 days	1	DB2 UDB Fundamentals
TTCM400	5	2	IMS Database Application Development (IMS DB)
TTCM401	1-2 days	1	IMS Fundamentals
TTCM402	3	2	IMS MFS (Message Formatting Service)
TTCM403	3	2	IMS Transaction Manager Programming - IMS TM Programming
TTCM404	3	2	IMS TM Programming (Formerly called IMS DC)
TTCM405	5	2	ISPF Dialog Developer (Formerly called TSO ISPF Dialog Manager)
TTCM500	5	2	JCL (z/OS MVS JCL)
TTCM510	5	2	z/OS MVS JCL
TTCM600	1	1	MVS/ESA and OS/390 Overview
TTCM610	3-4 days	2	MVS/TSO REXX
TTCM700	5	1	Introduction to PL/I Programming
TTCM710	5	2	Intermediate/Advanced PL/I Programming
TTCM800	3	2	QMF Workshop
TTCM810	2	3	Advanced SQL
TTCM820	3	2	TSO CLIST Programming
TTCM830	5	2	TSO ISPF Dialog Manager (Currently called ISPF Dialog Developer)
TTCM840	4	2	TSO/ISPF PDF
TTCM850	2	2	VSAM COBOL Programming
TTCM860	3	2	VSAM/IDCAMS Utility

### MainFrame Topics: CICS Tools & Utilities Training

Course ID	#of Days	Level	Course Title (** See bottom of list for notes about tools)
TTCT900	1		Abend-AID/FX for CICS
TTCT910	1		Abend-AID TSO
TTCT920	1		CompareX
TTCT930	1		File-AID for IMS
TTCT940	3		File-AID MVS 8.9
TTCT960	2-3 days		XPEDITER/CICS Debugging Version 8.2 and 8.0
TTCT970	2		Xpediter for DB2
TTCT980	1-2 days		Xpediter/TSO

### MainFrame Topics for Web Developers

Course ID	#of Days	Level	Course Title (** See bottom of list for notes about tools)
TTCT950	1		Mainframe Fundamentals for Distributed and Web Programmers

## Business Analysis Training

<b>Course ID</b>	<b>#of Days</b>	<b>Level</b>	<b>Course Title (** See bottom of list for notes about tools)</b>
TTRB101	2	no pre-req	Communications and Networking for Business Professionals
TTRB102	3	no pre-req	IT Overview for Business Professionals
TTRB103	4	1	The Roles, Responsibilities and Processes of the Business Analyst
TTRB104	2	1	Management of Technology
TTRB106	2	2	Supporting FrontLine Customer Relations Managers Role
TTRB107	2	1	FrontLine Customer Relations
TTRB108	3	3	Analyzing and Documenting Business Processes
TTRB109	3	3	Advanced Business Analysis
TTRB115	2	2+	Advanced Requirements Elicitation Techniques
TTRB116	2	3	Advanced Methods of Analysis
TTRB132	3	3	Managing IT Risks
TTRB155	4	1	Effective Business Communications and Negotiations
TTRB157	2	1	Influence Skills
TTRB302	4	1	Developing Quality Requirements
TTRB303	4	1	Defining Requirements with UML Use Cases
TTRB306	2-4 days	1	Effective Software Testing Methods
TTRB326	3	2+	Writing Functional Requirements with Structured Use Case Descriptions
TTRB327	1	2	Structured Use Case Descriptions Workshop
TTRB328	2	2	Successful Acceptance Testing

## Software Engineering & Testing Suite

### Software Engineering Suite

Course ID	# days	Level	Course Title
TTRS300	4	1+	Approaches to Software Engineering
TTRS301	4	1+	Approaches to Software Development
TTRS302	4	1+	Developing Quality Requirements
TTRS1300	4	1	Gathering & Defining User Requirements with UML Use Cases
TTRS304	2	1+	Requirements Management
TTRS305	4	1+	Software Configuration Management
TTR1615	1	1	IMPACT Series: SCM and Continuous Integration - A Technical Overview
TTRS306	4	1+	Effective Software Testing Methods
TTRS328	2	1+	Successful Acceptance Testing
TTRS308	4	1+	Software Quality Assurance
TTRS309	3	1	Software Project Management
TTRS310	2	1	Software Project Estimation
TTRS312	4	1	Introduction to the Capability Maturity Model (CMMI) Framework
TTRS314	2	1+	Software Inspection Methods
TTRS950	4	1	Code Complete
TTRS318	4	1	Understanding and Using the Unified Process
TTRS319	2	2	Project Retrospectives
TTRS320	4	1	Creating the Systems Architecture
TTRS321	2	1+	Understanding Model Driven Architecture
TTRS323	3	1+	Managing Mid-Sized Software Projects
TTRS324	4	1+	Building a Quality Software Architecture
TTRS329	4	2	<a href="#">Rapid Application Development: Prototyping for Results</a>
TTRS330	2	1+	<a href="#">Using DOORS 7.1 for Requirement Management</a>
TTRS332	5	1+	<a href="#">Systems Engineering &amp; Systems Engineering Management</a>
TTRS900	4	2	Solutions and Responsibilities in Software Security
TTRS338	2	2	Joint Application Development (JAD) Best Practices
TTRS340	2	1+	Joint Application Requirements (JAR)

### Agile Development

Course ID	#of Days	Level	Course Title (** See bottom of list for notes about tools)
TTR1515	1	1	IMPACT Series: Agile Development Essentials - A Technical Overview
TTRS311	4	1	Adopting Agile Software Development Practices

### Test Driven Development Suite

Course ID	#of Days	Level	Course Title (** See bottom of list for notes about tools)
TTRS339	2	1	Implementing Test Driven Development
TT3500	4	2	Mastering Test Driven Development Using JUnit
TT3510	2.5	1	Core Test Driven Development using JUnit (Level1)
TT3520	2.5	2	Advanced Test Driven Development (Level 2)