



Lansing Community College
Business & Community Institute
September-December, 2009

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| Course | CITP 229: Java Level 1 |
| Credits | 2 |
| Clock Hrs | 40 |
| Textbook Title: | Introduction to Java Programming, Comprehensive Version, 7/E <i>Note:</i> This textbook is also used for Java Level 2 and Level 3 courses |
| Description: | This course covers basic programming concepts using the Java Programming language. It features object-oriented programming methodology and elements provided by the Java language. During the course, participants will review sound programming practices and learn accepted Java programming procedures. Participants will create and modify simple Java applications. |
| Course Content | <ul style="list-style-type: none"> ▪ Introduction to Computers, Programs, and Java ▪ Elementary Programming ▪ Selections ▪ Loops ▪ Methods ▪ Arrays ▪ Objects and Classes ▪ Strings and Text I/O ▪ Thinking in Objects ▪ Inheritance and Polymorphism ▪ Abstract Classes and Interfaces ▪ Object-Oriented Design and Patterns ▪ GUI Basics ▪ Graphics ▪ Event-Driven Programming ▪ Creating User Interfaces ▪ Applets and Multimedia ▪ Exception Handling |
| Technology Requirements: | <p>Participants are expected to have Internet access (through Microsoft Internet Explorer v7 or Firefox v2 or 3) and be registered at least two weeks prior to the start date within the Lansing Community College system. LCC's registration process provides access to the online part of the program through LCC's Angel Course Management system.</p> <p>The Angel Course Management system will be used to handle all communication online addressed within the course (email, discussion groups, assignments, questions / concerns). Specific guidelines for Angel access will be provided the first day of class.</p> |
| Industry Certification(s) | n/a |

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| Course | CITA 229: Microsoft Project |
| Credits | 2 |
| Clock Hrs | 40 |
| Textbook Title: | New Perspectives on Microsoft® Office Project 2007 <i>Supplemental text (optional): Microsoft Project 2007—Level 1 and Level 2</i> |
| Description: | Participants will learn to work effectively with Microsoft Project's features such as scheduling, work with project tasks and critical path, manage project resources, work with calendars and resources, and track project progress. This hands-on program is also aimed at increasing the participant's confidence and knowledge in working with resource pools, managing future tasks, consolidating projects, working with importing and exporting data to/from other applications, and modifying the Microsoft Project environment. |
| Course Content | <ul style="list-style-type: none"> ▪ The Project Management Process and Microsoft Project ▪ Learning Project Basics ▪ Create and Manage a Project ▪ Building a Project Plan ▪ Creating a Project Plan File and Calendar ▪ Adding and Organizing Tasks ▪ Scheduling the Project by Linking Tasks ▪ Listing the Resources You Need ▪ Assigning Resources to Tasks ▪ Enhancing Task and Resource Information ▪ Finalizing and Launching a Project ▪ Reviewing and Adjusting the Plan ▪ Setting the Baseline and Tracking Work ▪ Reviewing and Sharing Results ▪ Using and Printing Views ▪ Reporting Project Information ▪ Other Ways to Share and Communicate ▪ Enhancing Control with Resource Pools and Master Projects ▪ Slight Differences between Windows Versions ▪ Special Situations |
| Technology Requirements: | <p>Participants are expected to have Internet access (through Microsoft Internet Explorer v7 or Firefox v2 or 3) and be registered at least two weeks prior to the start date within the Lansing Community College system. LCC's registration process provides access to the online part of the program through LCC's Angel Course Management system.</p> <p>The Angel Course Management system will be used to handle all communication online addressed within the course (email, discussion groups, assignments, questions / concerns). Specific guidelines for Angel access will be provided the first day of class.</p> |
| Industry Certification(s) | Microsoft Office Project 2007, Managing Projects 70-632 |

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| Course | CITP 229: .NET using ASP |
| Credits | 2 |
| Clock Hrs | 40 |
| Textbook Title: | Microsoft ASP.NET Fast & Easy Web Development |
| Description: | This course provides instruction in building web sites using Microsoft ASP.NET. Participants will learn how to create dynamic, flexible, and interactive web pages as well as develop an individual website. |
| Course Content | <ul style="list-style-type: none"> ▪ Introducing the .NET Initiative ▪ Installing and Configuring Visual Studio.NET ▪ Exploring the New Features of ASP.NET ▪ Visual Basic.NET Basics ▪ Beginning with a Simple ASP.NET Application ▪ Adding Server Controls to a Web Form ▪ Accepting Information Using Web Forms ▪ SQL Server Basics ▪ Getting Started with ADO.NET ▪ Managing Data for ASP.NET Applications ▪ Displaying Data Using Data Binding Server Controls ▪ Creating a User Control in ASP.NET ▪ Creating a Composite Control in ASP.NET ▪ Getting Started with ASP.NET Web Services ▪ Building ASP.NET Web Services ▪ Building Mobile Web Applications ▪ Managing State in ASP.NET Applications ▪ Caching in ASP.NET Applications ▪ Tracing ASP.NET ▪ Debugging ASP.NET Applications ▪ Handling Exceptions in ASP.NET Applications ▪ Securing ASP.NET Applications ▪ Deploying ASP.NET Applications ▪ Keyboard Shortcuts in Visual Studio.NET ▪ Developing ASP.NET Applications in Visual C# ▪ Migrating from ASP 3.0 to ASP.NET ▪ Online Resources for ASP.NET |
| Technology Requirements: | <p>Participants are expected to have Internet access (through Microsoft Internet Explorer v7 or Firefox v2 or 3) and be registered at least two weeks prior to the start date within the Lansing Community College system. LCC's registration process provides access to the online part of the program through LCC's Angel Course Management system.</p> <p>The Angel Course Management system will be used to handle all communication online addressed within the course (email, discussion groups, assignments, questions / concerns). Specific guidelines for Angel access will be provided the first day of class.</p> |
| Industry Certification(s) | <p>MCTS: Microsoft Visual Studio 2008 70-536 <i>Note: .NET using Visual Basic also needs to be completed to take the exam.</i></p> |

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| Course | CITP 229: .NET using Visual Basic |
| Credits | 2 |
| Clock Hrs | 40 |
| Textbook Title: | Visual Basic 2005 By Practice |
| Description: | This comprehensive course explores programming concepts through the use of the Visual Basic .NET programming environment. Participants learn to develop business applications by designing and creating a user interface and writing the necessary procedures. Participants also learn and use logic development tools and object-oriented programming terminology and techniques. |
| Course Content | <ul style="list-style-type: none"> ▪ Introduction to Programming in Visual Basic ▪ Getting to Know Visual Studio 2005 ▪ Writing Programs ▪ More Controls ▪ Calculations, Constants, Variables, Conditions, and Data Types ▪ Selection Structures ▪ ComboBox, ListBox, MenuStrip, ToolStrip, Subprocedures, and Functions ▪ Repetition Structures ▪ Object-Oriented Programming ▪ Arrays and Collections ▪ Multiple-Form Environments ▪ Introduction to Printing, Graphics, Shapes, and More ▪ Files, Tables, and Databases ▪ Web Forms |
| Technology Requirements: | <p>Participants are expected to have Internet access (through Microsoft Internet Explorer v7 or Firefox v2 or 3) and be registered at least two weeks prior to the start date within the Lansing Community College system. LCC's registration process provides access to the online part of the program through LCC's Angel Course Management system.</p> <p>The Angel Course Management system will be used to handle all communication online addressed within the course (email, discussion groups, assignments, questions / concerns). Specific guidelines for Angel access will be provided the first day of class.</p> |
| Industry Certification(s) | <p>MCTS: Microsoft Visual Studio 2008 70-536 <i>Note: .NET using ASP also needs to be completed to take the exam.</i></p> |

Course **CITP 229: Object-oriented Programming**

Credits 2

Clock Hrs 40

Textbook Title: The Object-Oriented Thought Process, 3/E

Description: This course will prepare participants for programming with object-oriented programming languages. Object-oriented programming (OOP) is the foundation of modern programming languages, including C++, Java, C#, and Visual Basic .NET. By designing with objects rather than treating the code and data as separate entities, OOP allows objects to fully utilize other objects' services as well as inherit their functionality. OOP promotes code portability and reuse.

Course Content

- Introduction to Object-Oriented Concepts
- How to Think in Terms of Objects
- Advanced Object-Oriented Concepts
- The Anatomy of a Class
- Class Design Guidelines
- Designing with Objects
- Mastering Inheritance and Composition
- Frameworks and Reuse: Designing with Interfaces and Abstract Classes
- Building Objects
- Creating Object Models with UML
- Objects and Portable Data: XML
- Persistent Objects: Serialization and Relational Databases
- Objects and the Internet
- Objects and Client/Server Applications
- Design Patterns

Technology Requirements: Participants are expected to have Internet access (through Microsoft Internet Explorer v7 or Firefox v2 or 3) and be registered at least two weeks prior to the start date within the Lansing Community College system. LCC's registration process provides access to the online part of the program through LCC's Angel Course Management system.

The Angel Course Management system will be used to handle all communication online addressed within the course (email, discussion groups, assignments, questions / concerns). Specific guidelines for Angel access will be provided the first day of class.

Industry Certification(s) Master Basic Examination I10-001

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| Course | CITF 229: Basic Project Management Principles |
| Credits | 2 |
| Clock Hrs | 40 |
| Textbook Title: | Information Technology Project Management, 5th Edition — or — A Guide to the Project Management Body of Knowledge, 4rd Edition (<i>check with instructor</i>) |
| Description: | This course provides a comprehensive guide to project management as applied to information technology projects. It covers basic concepts such as project scope, planning, execution, and closure. Participants will develop project plans, track progress, manage ambiguity and risks, and make changes to the plan — working individually as well as part of a team. “Real world” examples of project issues viewed from a professional's standpoint will enable them to apply many of these principles on the job. |
| Course Content | <ul style="list-style-type: none"> ▪ Introduction to Project Management ▪ The Project Management and Information Technology Context ▪ The Project Management Process Groups: A Case Study ▪ Project Integration Management ▪ Project Scope Management ▪ Project Time Management ▪ Project Cost Management ▪ Project Quality Management ▪ Project Human Resource Management ▪ Project Communications Management ▪ Project Risk Management ▪ Project Procurement Management |
| Technology Requirements: | <p>Participants are expected to have Internet access (through Microsoft Internet Explorer v7 or Firefox v2 or 3) and be registered at least two weeks prior to the start date within the Lansing Community College system. LCC’s registration process provides access to the online part of the program through LCC’s Angel Course Management system.</p> <p>The Angel Course Management system will be used to handle all communication online addressed within the course (email, discussion groups, assignments, questions / concerns). Specific guidelines for Angel access will be provided the first day of class.</p> <p>Participants will also be using Microsoft Project in order to work with project plans for the course.</p> |
| Industry Certification(s) | JK0-013 |

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| Course | CITW 229: XML Basics |
| Credits | 2 |
| Clock Hrs | 40 |
| Textbook Title: | New Perspectives on XML, 2nd Edition — Comprehensive, Course Technology, 2007. |
| Description: | This course gives an overview of the essential concepts of XML. We will cover how to create an XML document, work with namespaces, validate an XML document and work with schemas, then move on to use cascading style sheets, XSLT and XPath. Questions and examples from students will help ground the material in real situations that make it more valuable. |
| Prerequisite: | Experience with the XHTML or HTML languages can be helpful but is not required. |
| Course Content | <ul style="list-style-type: none"> ▪ Creating an XML Document ▪ Working with Namespaces ▪ Validating an XML Document ▪ Working with Schemas ▪ Working with Cascading Style Sheets ▪ Working with XSLT and XPath ▪ Creating a Computational Style Sheet ▪ Creating Element Groups ▪ Using XML as a Data Source ▪ Working with the Document Object Model |
| Technology Requirements | <p>You will need a basic text editor, the current version of Microsoft Internet Explorer, Mozilla Firefox, or Apple Safari Web browsers, and an XML validator.</p> <p>Participants are expected to have Internet access (through Microsoft Internet Explorer v7 or Firefox v2 or 3) and be registered at least two weeks prior to the start date within the Lansing Community College system. LCC's registration process provides access to the online part of the program through LCC's Angel Course Management system.</p> <p>The Angel Course Management system will be used to handle all communication online addressed within the course (email, discussion groups, assignments, questions / concerns). Specific guidelines for Angel access will be provided the first day of class.</p> |
| Industry Certification(s) | I10-001 |