WBIT 1100 Introduction to Information Technology

Course Details

Course Information: WBIT 1100 - Undergraduate, 3 credits (semester)
Subject Area: Computer and Information Sciences, General
Enrollment: 20

Special Attendance Requirements

All of the class sessions are delivered via technology. The course does not require students to travel to a classroom for instruction; however, it might require students to travel to a site to take exams.

Method of Course Instruction

The course is delivered primarily through *Internet*

Course Description

This course is an introductory course in information technology. Topics include foundations in hardware, software, data and an overview of the use of information technology in organizations. Topics include structured programming techniques, systems development, database design and networking, with an emphasis on appropriate business ethics, interpersonal skills and team building.

Course Prerequisites

None

Learning Objectives

Upon completion of this course the student should be able to:

1. Define the academic discipline of Information Technology and contrast it with other computing related academic disciplines, such as Computer Engineering, Computer Science and Information Systems.
2. Demonstrate an understanding of the impact of information technology on individuals, organizations, and society.
3. Describe the major components of information technology applications: Hardware, computer networks, software, data, processes, and people.
4. Describe the different components of a computer network.
5. Demonstrate an understanding of different types of networks.
6. Define "Software Engineering".

7. Demonstrate an understanding of the importance of algorithms in the development of IT applications.
8. Create object-oriented designs for simple applications.
9. Discuss the role of databases in IT applications.
10. Demonstrate an understanding of the basic techniques for designing, construction and manipulating databases, and retrieving data from them.
11. Conduct a group project to research the impact of Information Technology in a selected area.

Admissions and Registration Information

Student **must** be admitted to the institution to enroll in this course. The admission process **can** be handled via the Web. Students **can** register for this course via the Web.

Estimated Tuition and Fees

Electronic Rate
$USD 873.00

WBIT 1310 Programming and Problem Solving I

Course Details

Course Information: WBIT 1310 - Undergraduate, 3 credits (semester)
Subject Area: Computer and Information Sciences, General
Enrollment: 20

Special Attendance Requirements

All of the class sessions are delivered via technology. The course does not require students to travel to a classroom for instruction; however, it might require students to travel to a site to take exams.

Method of Course Instruction

The course is delivered primarily through *Internet*

Course Description

This course helps students to develop basic problem-solving skills using the Java programming language. Students are introduced to fundamentals of Java programming language with emphasis on primitive data types, control structures, methods, arrays, classes, objects, abstraction, inheritance and polymorphism. Students learn basic techniques of good programming style, design, coding, debugging, and documentation. Students are able to create programs to solve basic practical problems.

Course Prerequisites

C or better in an Area A mathematics course and in WBIT 1100 Introduction to Information Technology.

Learning Objectives

1. Upon successful completion of this course, students will be able to:
2. Use an IDE (Integrated Development Environment) to construct Java programs.
3. Define and appropriately use Java data types, variables, and methods.
4. Utilize appropriate control structures.
5. Recognize the basic characteristics of event-driven, GUI programming.
6. Explain and apply basic concepts of object-oriented programming.
7. Test and debug simple programs in Java.
8. Utilize good coding styles and conventions.

Admissions and Registration Information

Student **must** be admitted to the institution to enroll in this course. The admission process **can** be handled via the Web. Students **can** register for this course via the Web.

Estimated Tuition and Fees

Electronic Rate
$USD 873.00

WBIT 2000 The Enterprise and IT

Course Details

Course Information:	WBIT 2000 - Undergraduate, 3 credits (semester)
Subject Area:	Computer and Information Sciences, General
Enrollment:	20

Special Attendance Requirements

All of the class sessions are delivered via technology. The course does not require students to travel to a classroom for instruction; however, it might require students to travel to a site to take exams.

Method of Course Instruction

The course is delivered primarily through *Internet*

Course Description

This course will look at the structure and management of an information technology infrastructure. From the management aspect the course will touch on principles and practices of managing both people and technology to support an organization. The course will emphasize how to make an information technology infrastructure effective, efficient, and productive. The management of hardware, software, data, networks and other supporting IT functions will be studied.

Course Prerequisites

none

Learning Objectives

Upon completion of this course the student should be able to:

1. Discuss the value, roles, and goals of IT as a part of the corporate infrastructure.
2. Discuss ways in which IT might be used to gain competitive advantage.
3. Discuss the main roles and functions of computer operations management.
4. Explain the impact of capacity and availability management for systems.
5. Discuss the role of service level agreements.
6. Identify challenges to information technology budgets and discuss strategies for addressing these challenges.

7. Describe the role of teams in information technology projects and evaluate team effectiveness.
8. Identify common ethical issues surrounding the use of technology in organizations and analyze strategies for addressing these issues.
9. Explain how telecommunications policies and regulations affect the application of information technology.

Admissions and Registration Information

Student **must** be admitted to the institution to enroll in this course. The admission process **can** be handled via the Web. Students **can** register for this course via the Web.

Estimated Tuition and Fees

Electronic Rate
$USD 873.00

WBIT 2300 Discrete Math for IT

Course Details

Course Information: WBIT 2300 - Undergraduate, 3 credits (semester)
Subject Area: Computer and Information Sciences, General
Enrollment: 20

Special Attendance Requirements

All of the class sessions are delivered via technology. The course does not require students to travel to a classroom for instruction; however, it might require students to travel to a site to take exams.

Method of Course Instruction

The course is delivered primarily through *Internet*

Course Description

Discrete (as opposed to continuous) mathematics is of direct importance to the fields of Computer Science and Information Technology. This branch of mathematics includes studying areas such as set theory, logic, relations, graph theory, and analysis of algorithms. This course is intended to provide students with an understanding of these areas and their use in the fields of Computer Science and Information Technology.

Course Prerequisites

Pre-calculus, Survey of Calculus, Finite Mathematics, or equivalent.

Learning Objectives

After completion of this course the student should be able to:

1. Explain the importance of Discrete Mathematics in Computer Science and Information Technology.
2. Demonstrate an understanding of propositional and first-order predicate logic.
3. Demonstrate an understanding of sets, relations, and functions.
4. Demonstrate an understanding of Boolean algebra.
5. Use matrices to represent relationships.
6. Outline the basic structure and give examples of each proof technique.
7. Explain the difference between induction, recursion, and iteration.
8. Demonstrate an understanding of simple algorithms using iteration and recursion.
9. Demonstrate an understanding of trees and graphs.

Admissions and Registration Information

Student **must** be admitted to the institution to enroll in this course. The admission process **can** be handled via the Web. Students **can** register for this course via the Web.

Estimated Tuition and Fees

Electronic Rate
$USD 873.00

WBIT 2311 Programming and Problem Solving II

Course Details

Course Information: WBIT 2311 - Undergraduate, 3 credits (semester)
Subject Area: Computer and Information Sciences, General
Enrollment: 20

Special Attendance Requirements

All of the class sessions are delivered via technology. The course does not require students to travel to a classroom for instruction; however, it might require students to travel to a site to take exams.

Method of Course Instruction

The course is delivered primarily through *Internet*

Course Description

The emphasis of this course is on advanced programming techniques in Java including GUI's, software reuse through component libraries, recursion, event-driven programming, database processing, file processing, and exception handling. Students are able to create event-driven, graphical programs or text-based programs solving practical problems incorporating databases and external files.

Course Prerequisites

WBIT 1310 Programming and Problem Solving I, WBIT 2300 Discrete Math for IT.

Learning Objectives

Upon completion of this course the student should be able to:

1. Implement event-driven GUI programs in Java.
2. Use Java’s exception handling mechanism.
3. Write simple multithreaded programs.
4. Use Java to access external information (databases and files).
5. Use Java collections framework.
6. Test and debug Java programs.
7. Build well engineered and maintainable Java programs to meet business and organizational needs.

Admissions and Registration Information

Student **must** be admitted to the institution to enroll in this course. The admission process **can** be handled via the Web. Students **can** register for this course via the Web.

Estimated Tuition and Fees

Electronic Rate
$USD 873.00

WBIT 3010 Technical Communication

Course Details

Course Information: WBIT 3010 - Undergraduate, 3 credits (semester)
Subject Area: Computer and Information Sciences, General
Enrollment: 20

Special Attendance Requirements

All of the class sessions are delivered via technology. The course does not require students to travel to a classroom for instruction; however, it might require students to travel to a site to take exams.

Method of Course Instruction

The course is delivered primarily through *Internet*

Course Description

This course covers workplace communication at the intermediate level. Topics include audience analysis, research proposal and report writing, document and visual design, editing and presentation design.

Course Prerequisites

English 1102

Learning Objectives

At the completion of this course the student should be able to:

1. Use the basic communication formats common to the Information Technology profession/field.
2. Analyze the audience, purpose, and context of a variety of technical communication situations.
3. Apply the analysis to the creation of a communication message in the appropriate format.
4. Plan, compose and revise documents.
5. Write in a style that is clear and concise.
6. Design and/or redesign documents for the appropriate audience.
7. Demonstrate where and how to insert graphics effectively.
8. Collect and use data from the appropriate media effectively.

9. Incorporate editorial changes and user feedback.
10. Demonstrate the ability to give an oral presentation.
11. Collaborate with others on the creation of documents.
12. Reflect on cultural and/or ethical issues as appropriate in technical communication.

Admissions and Registration Information

Student **must** be admitted to the institution to enroll in this course. The admission process **can** be handled via the Web. Students **can** register for this course via the Web.

Estimated Tuition and Fees

Electronic Rate

$USD 873.00

WBIT 3110 Systems Analysis and Design

Course Details

Course Information: WBIT 3110 - Undergraduate, 3 credits (semester)
Subject Area: Computer and Information Sciences, General
Enrollment: 20

Special Attendance Requirements

All of the class sessions are delivered via technology. The course does not require students to travel to a classroom for instruction; however, it might require students to travel to a site to take exams.

Method of Course Instruction

The course is delivered primarily through *Internet*

Course Description

This course introduces the fundamental principles of the design and analysis of IT applications. In this course, students will learn to apply the tools and techniques commonly used by systems analysts to build and document IT applications. Classical and structured tools for describing data flow, data structure, process flow, file design, input and output design, and program specification will be studied, as will object-oriented techniques.

Course Prerequisites

WBIT 1310 Programming and Problem Solving I, WBIT 2000 The Enterprise and IT.

Learning Objectives

Upon completion of the course the student should be able to:

1. Define the discipline of Systems Analysis and Design, and contrast the Analysis component of the discipline with the Design component.
2. Be able to compare and contrast the different participants in the systems analysis and design process, with special emphasis with the role of the analyst as a facilitator of systems work and the interaction of the analyst with the other participants.
3. Understand the Systems Development Life Cycle (SDLC) in the form of a systems development methodology.

4. Understand and use various project management techniques, especially the use of MS Project as a project management tool, and Gantt and PERT charts.
5. Demonstrate an understanding in the use of various Systems Analysis techniques, including: logical system modeling; fact-finding techniques; modeling system requirements with Use Cases; Data Modeling and entity relationship diagrams; Process Modeling and data flow diagrams; creating the Feasibility Analysis and System Proposal; and Object-Oriented Analysis and Modeling with UML.
6. Demonstrate an understanding in the use of various System Design techniques, including: Application and Architecture Modeling; Database Design; Output Design and Prototyping; Input Design and Prototyping; User Interface Design; and Object-Oriented Modeling using the UML.
7. Understand the concepts of System Construction and Implementation.

Admissions and Registration Information

Student **must** be admitted to the institution to enroll in this course. The admission process **can** be handled via the Web. Students **can** register for this course via the Web.

Estimated Tuition and Fees

Electronic Rate

$USD 873.00

WBIT 3111 Information Technology Project Management

Course Details

Course Information: WBIT 3111 - Undergraduate, 3 credits (semester)
Subject Area: Computer and Information Sciences, General
Enrollment: 20

Special Attendance Requirements

All of the class sessions are delivered via technology. The course does not require students to travel to a classroom for instruction; however, it might require students to travel to a site to take exams.

Method of Course Instruction

The course is delivered primarily through *Internet*

Course Description

Project management techniques and tools as applied to information systems projects including resource and personnel management and allocation, product testing, scheduling, and project management software. Students will study examples of both successful and unsuccessful projects and apply lessons learned to a class project.

Course Prerequisites

WBIT 3110 Systems Analysis & Design, WBIT 3010 Technical Communications, Introduction to Statistics

Learning Objectives

Upon completion of this course the student should be able to:

1. Discuss the four phases of IT Project Management
2. Develop a simple IT Project Plan
3. Develop a set of Metrics for IT Project Monitoring and Tracking
4. Make Trade-offs and Adjustments to a project, if necessary

Admissions and Registration Information

Student **must** be admitted to the institution to enroll in this course. The admission process **can** be handled via the Web. Students **can** register for this course via the Web.

Estimated Tuition and Fees

Electronic Rate
$USD 873.00

WBIT 3200 Database Design, Development and Deployment

Course Details

Course Information: WBIT 3200 - Undergraduate, 3 credits (semester)
Subject Area: Computer and Information Sciences, General
Enrollment: 20

Special Attendance Requirements

All of the class sessions are delivered via technology. The course does not require students to travel to a classroom for instruction; however, it might require students to travel to a site to take exams.

Method of Course Instruction

The course is delivered primarily through *Internet*

Course Description

This is an advanced course in database design, development and deployment. Course emphasizes database design drawing distinctions between data modeling and process modeling using various modeling techniques including Entity-Relationship Modeling, Object Modeling and Data Flow Diagramming; database development using the relational model, normalization, and SQL; database deployment including control mechanisms, forms, reports, menus and web interfaces. Additional topics include procedures, functions, packages and triggers. Students will design, create and process a database to demonstrate competency in the course content.

Course Prerequisites

WBIT 2311 Programming and Problem Solving II

Learning Objectives

Upon completion of this course the student should be able to:

1. Develop and refine skills necessary to function effectively as database designers, implementers, and managers in information technology environments.
2. Acquire and apply appropriate design and development principles and techniques to design, create, and process databases and database applications.

3. Understand issues and problems of multi-user databases and the importance of database administration.

Admissions and Registration Information

Student **must** be admitted to the institution to enroll in this course. The admission process **can** be handled via the Web. Students **can** register for this course via the Web.

Estimated Tuition and Fees

Electronic Rate
$USD 873.00

WBIT 3400 Introduction to Digital Media

Course Details

Course Information: WBIT 3400 - Undergraduate, 3 credits (semester)
Subject Area: Computer and Information Sciences, General
Enrollment: 20

Special Attendance Requirements

All of the class sessions are delivered via technology. The course does not require students to travel to a classroom for instruction; however, it might require students to travel to a site to take exams.

Method of Course Instruction

The course is delivered primarily through *Internet*

Course Description

This course covers the basic design principles and tools for creating and editing digital media elements. Examples of these elements include graphics, animation, audio, video, virtual space and simulation.

Course Prerequisites

WBIT 1100 Introduction to Information Technology

Learning Objectives

Upon successful completion of this course, students should be able to:

1. Define appropriate contextual uses for a variety of multimedia elements.
2. Develop, analyze, and edit digital media elements.
3. Demonstrate 2D Image Manipulation.
4. Demonstrate Audio Manipulation.
5. Demonstrate Digital Video Editing.
6. Demonstrate 3D Modeling.
7. Define and Develop a Virtual Web Space.

Admissions and Registration Information

Student **must** be admitted to the institution to enroll in this course. The admission process **can** be handled via the Web. Students **can** register for this course via the Web.

Estimated Tuition and Fees

Electronic Rate
$USD 873.00

WBIT 3410 Web Applications Development

Course Details

Course Information: WBIT 3410 - Undergraduate, 3 credits (semester)
Subject Area: Computer and Information Sciences, General
Enrollment: 20

Special Attendance Requirements

All of the class sessions are delivered via technology. The course does not require students to travel to a classroom for instruction; however, it might require students to travel to a site to take exams.

Method of Course Instruction

The course is delivered primarily through *Internet*

Course Description

The course provides a survey of techniques and tools for developing basic web pages for delivery of text and graphic information; focus on page markup languages, client-side scripting, page design principles, page layout techniques, markup language syntax, and page styling methods.

Course Prerequisites

WBIT 1310 Programming & Problem Solving I

Learning Objectives

Upon successful completion of this course, students will be able to:

1. Design, layout and create Web pages using HTML.
2. Apply the concepts and principles of information architecture to Web design.
3. Create and use cascading style sheets to control display of HTML pages.
4. Create and process HTML forms to transfer information to and from a Web server.
5. Use JavaScript for client-side information processing and to create dynamic Web pages.
6. Design and create XML documents.
7. Design and code simple document type definitions and XML Schemas.
8. Use CSS and XSLT to display XML documents.

9. Use PHP for server-side programming.
10. Access database information using PHP.
11. Choose between server-side and client-side programming depending on the task to be performed.
12. Choose the appropriate programming tools given a Web development task.

Admissions and Registration Information

Student **must** be admitted to the institution to enroll in this course. The admission process **can** be handled via the Web. Students **can** register for this course via the Web.

Estimated Tuition and Fees

Electronic Rate

$USD 873.00

WBIT 3500 Architecture and Operating Systems

Course Details

Course Information: WBIT 3500 - Undergraduate, 3 credits (semester)
Subject Area: Computer and Information Sciences, General
Enrollment: 20

Special Attendance Requirements

All of the class sessions are delivered via technology. The course does not require students to travel to a classroom for instruction; however, it might require students to travel to a site to take exams.

Method of Course Instruction

The course is delivered primarily through *Internet*

Course Description

This course introduces students to the architectures of computer systems and the operating systems that run on them. It explores and gives experience with some common computer designs and operating systems. Topics include basic computer architecture, instruction set architecture, memory, memory management, processes, and file systems.

Course Prerequisites

WBIT 1310 Programming & Problem Solving I

Learning Objectives

Upon successful completion of this course, students will be able to:

1. Explain the concept of an operating system.
2. Describe the major types of OS and how different types evolved to meet different user needs and hardware capabilities.
3. Explain the fundamental services provided by an OS.
4. Explain the activities and responsibilities of the OS in connection with memory management.
5. Explain the activities and responsibilities of the OS in connection with process management.
6. Explain the basic aspects of files, their protection and the directory structures.

7. Identify computer security threats and important prevention and response measures.
8. Explain OS policies and mechanisms used to secure computer systems.
9. Identify ethical issues that arise in the computer-using community.
10. Explain the ethical standards expected of an information technology professional.
11. Distinguish between current major operating systems and determine which is more appropriate in different situations.
12. Explain the relationship between different management policies (memory, processor, and file) and end-user needs.

Admissions and Registration Information

Student **must** be admitted to the institution to enroll in this course. The admission process **can** be handled via the Web. Students **can** register for this course via the Web.

Estimated Tuition and Fees

Electronic Rate
$USD 873.00

WBIT 3510 Data Communications and Networking

Course Details

Course Information: WBIT 3510 - Undergraduate, 3 credits (semester)
Subject Area: Computer and Information Sciences, General
Enrollment: 20

Special Attendance Requirements

All of the class sessions are delivered via technology. The course does not require students to travel to a classroom for instruction; however, it might require students to travel to a site to take exams.

Method of Course Instruction

The course is delivered primarily through *Internet*

Course Description

This course covers computer network and communications concepts, principles, components, and practices; coverage of common networking standards, topologies, architectures, and protocols; design and operational issues surrounding network planning, configuration, monitoring, troubleshooting, and management.

Course Prerequisites

WBIT 3500 Architecture and Operating Systems.

Learning Objectives

Upon completion of this course the student should be able to:

1. Understand the current technologies in data communications, networks, and network design.
2. Understand networking terminologies, topologies, protocols and OSI networking reference models.
3. Understand pervasive computing, wireless, 802.11, Bluetooth, and VoIP.
4. Understand IEEE networking standards, RFCs and their use in networking implementation.
5. Understand network security including firewalls, encryption, authentication, and security policy and design issues.

6. Understand the best practices of implementing network infrastructure in an organization.
7. Understand how to implement an appropriate network infrastructure in meeting organizational objectives.
8. Understand different networking models and their implementation in an organization.
9. Analyze threats and vulnerabilities in an organization and implement networking technologies and security policies to address those issues.
10. Apply mathematical reasoning and functions to analyze network performance and solve network problems.

Admissions and Registration Information

Student **must** be admitted to the institution to enroll in this course. The admission process **can** be handled via the Web. Students **can** register for this course via the Web.

Estimated Tuition and Fees

Electronic Rate
$USD 873.00

WBIT 3600 Introduction to E-Commerce

Course Details

Course Information: WBIT 3600 - Undergraduate, 3 credits (semester)
Subject Area: Computer and Information Sciences, General
Enrollment: 20

Special Attendance Requirements

All of the class sessions are delivered via technology. The course does not require students to travel to a classroom for instruction; however, it might require students to travel to a site to take exams.

Method of Course Instruction

The course is delivered primarily through *Internet*

Course Description

The emphasis of this course is on basic principles and practices of E-business and E-commerce. Topics include infrastructures and applications of Ecommerce, E-Tailing, E-Marketing, advertisement, B2B, B2C, C2C, E-Government, M-Commerce, E-Learning, electronic payment systems, security, and legal issues. Students also learn to build simple dynamic E-commerce sites using server-side scripting.

Course Prerequisites

WBIT 3110 System Analysis & Design, WBIT 3410 Web Applications Development

Learning Objectives

Upon completion of this course the student should be able to:

1. Plan, manage, and evaluate an effective, interactive, and dynamic Virtual Store.
2. Understand and follow legal constraints on E-Commerce webs sites.
3. Understand and follow ethical constraints on E-Commerce web sites.
4. Plan, gather, and manage competitive marketing intelligence.
5. Plan and implement successful electronic advertising.
6. Understand and use electronic banking and payment systems.
7. Understand and work within the implications of international financial transactions.
8. Understand and capitalize upon the unique marketing strategies of the Internet.

Admissions and Registration Information

Student **must** be admitted to the institution to enroll in this course. The admission process **can** be handled via the Web. Students **can** register for this course via the Web.

Estimated Tuition and Fees

Electronic Rate
$USD 873.00

WBIT 4020 Professional Practices and Ethics

Course Details

Course Information: WBIT 4020 - Undergraduate, 3 credits (semester)
Subject Area: Computer and Information Sciences, General
Enrollment: 20

Special Attendance Requirements

All of the class sessions are delivered via technology. The course does not require students to travel to a classroom for instruction; however, it might require students to travel to a site to take exams.

Method of Course Instruction

The course is delivered primarily through *Internet*

Course Description

This course covers historical, social, economic and legal considerations of information technology. It includes studies of professional codes of ethical conduct, philosophy of ethics, risk analysis, liability, responsibility, security, privacy, intellectual property, the internet and various laws that affect an information technology infrastructure.

Course Prerequisites

Senior Standing

Learning Objectives

Upon completion of this course the student should be able to:

1. Describe systems of ethics.
2. Identify ethical considerations and apply ethics in scenarios and case studies.
3. Identify and use resources for keeping up with the IT profession.
4. Explain privacy-related issues that arise in the application of computing technology.
5. Discuss the idea of freedom of speech, including limitations and importance, and the relevance of freedom of speech to computing technology.
6. Explain the basis for rights in intellectual property and explain the relevance to computing and software engineering.

7. Identify and discuss data communications issues, including cryptography, interception of data, and others.
8. Describe the foundations and implications of societal and individual perceptions of "trust" in relation to computers and computing systems.
9. Discuss issues relating to computer crime.
10. Explain the impact of computers on work and personal life.
11. Identify and discuss technology policy issues, including approaches from other countries.

Admissions and Registration Information

Student **must** be admitted to the institution to enroll in this course. The admission process **can** be handled via the Web. Students **can** register for this course via the Web.

Estimated Tuition and Fees

Electronic Rate
$USD 873.00

WBIT 4030 Senior Project

Course Details

Course Information: WBIT 4030 - Undergraduate, 3 credits (semester)
Subject Area: Computer and Information Sciences, General
Enrollment: 20

Special Attendance Requirements

All of the class sessions are delivered via technology. The course does not require students to travel to a classroom for instruction; however, it might require students to travel to a site to take exams.

Method of Course Instruction

The course is delivered primarily through *Internet*

Course Description

A capstone course for WebBSIT majors, students will be expected to complete a final team or individual project. The project may be an approved industry, internship or a project developed and designed by faculty of the WebBSIT. Students will apply skills and knowledge from previous WebBSIT courses in project management, system design and development, digital media development, eCommerce, database design, and system integration.

Course Prerequisites

Senior Standing and Advisor Approval

Learning Objectives

Upon completion of this course the student should be able to:

1. Use and apply current IT discipline-related concepts and practices.
2. Identify and analyze organizational and individual problems or opportunities in the IT realm and define requirements for addressing them when an IT solution is appropriate.
3. Design and develop effective, IT-based solutions and integrate them into the user environment.
4. Create and implement effective project plans.

5. Identify and investigate current and emerging technologies and assess their applicability to address individual and organizational needs.
6. Analyze the impact of technology on individual and organizational needs.
7. Collaborate in teams to accomplish common goals.
8. Communicate effectively and efficiently.
9. Recognize the qualities necessary to succeed in a professional environment.

Admissions and Registration Information

Student **must** be admitted to the institution to enroll in this course. The admission process **can** be handled via the Web. Students **can** register for this course via the Web.

Estimated Tuition and Fees

Electronic Rate
$USD 873.00

WBIT 4112 Systems Acquisition, Integration and Implementation

Course Details

Course Information: WBIT 4112 - Undergraduate, 3 credits (semester)
Subject Area: Computer and Information Sciences, General
Enrollment: 20

Special Attendance Requirements

All of the class sessions are delivered via technology. The course does not require students to travel to a classroom for instruction; however, it might require students to travel to a site to take exams.

Method of Course Instruction

The course is delivered primarily through *Internet*

Course Description

Most IT applications used by organizations are configured from components that have been purchased from third-party vendors. This includes both hardware components and, increasingly, software components. In this course, students will study the component acquisition process, and methods and techniques for integrating these components into an existing IT infrastructure.

Course Prerequisites

WBIT 4520 Information Security, WBIT 3200 Database Design and Development, WBIT 3110 System Analysis & Design

Learning Objectives

Upon completion of this course the student should be able to:

1. Discuss sourcing strategies their advantages and drawbacks
2. Discuss Systems Acquisition Life Cycle (SALC) - phases of systems acquisition, implementation, integration, and transition process
3. Discuss IT capability to add value to an organization
4. Discuss business systems as domains for acquired systems
5. Discuss useful life of technologies (expectancies), planning for upgrades and enhancements of existing systems
6. Discuss RFP (or RFQ), vendor & contract development and management

7. Discuss cross-functional and virtual team organization, management and facilitation
8. Discuss challenges of managing changes caused by systems acquisition
9. Discuss facilities management

Admissions and Registration Information

Student **must** be admitted to the institution to enroll in this course. The admission process **can** be handled via the Web. Students **can** register for this course via the Web.

Estimated Tuition and Fees

Electronic Rate
$USD 873.00

WBIT 4120 Human-Computer Interaction

Course Details

Course Information: WBIT 4120 - Undergraduate, 3 credits (semester)
Subject: Computer and Information Sciences, General
Enrollment: 20

Special Attendance Requirements

All of the class sessions are delivered via technology. The course does not require students to travel to a classroom for instruction; however, it might require students to travel to a site to take exams.

Method of Course Instruction

The course is delivered primarily through *Internet*

Course Description

The emphasis of this course is on fundamentals of human-machine interfaces, both cognitive and physical. Learning styles and effects of short-term memory on cognition and reaction will affect hardware and software development. Students will design a prototype interface.

Course Prerequisites

WBIT 2311 Programming & Problem Solving II, WBIT 3400 Introduction to Digital Media

Learning Objectives

Upon completion of this course the student should be able to:

1. Have an understanding of the role of the Information Technology professional as an advocate for the user in the development of IT applications and systems.
2. Develop a mind-set that recognizes the importance of users and organizational contexts in IT solutions.
3. Employ user-centered methodologies in the development, evaluation, and deployment of IT applications and systems.
4. Develop knowledge of HCI in such areas as user and task analysis, human factors, ergonomics, accessibility standards, and cognitive models.

Admissions and Registration Information

Student **must** be admitted to the institution to enroll in this course. The admission process **can** be handled via the Web. Students **can** register for this course via the Web.

Estimated Tuition and Fees

Electronic Rate
$USD 873.00

WBIT 4520 Information Assurance and Security

Course Details

Course Information: WBIT 4520 - Undergraduate, 3 credits (semester)
Subject Area: Computer and Information Sciences, General
Enrollment: 20

Special Attendance Requirements

All of the class sessions are delivered via technology. The course does not require students to travel to a classroom for instruction; however, it might require students to travel to a site to take exams.

Method of Course Instruction

The course is delivered primarily through *Internet*

Course Description

This course is an introduction to information assurance and security in computing. Topics include computer, network (distributed) system and cyber security, digital assets protection, data backup and disaster recovery, encryption, cryptography, computer virus, firewalls, terrorism and cyber crimes, legal, ethical and professional issues, risk management, information security design, implementation and maintenance.

Course Prerequisites

WBIT 3500 Architecture and Operating Systems, Pre or Co-requisite: WBIT 3510 Data Communication and Networking

Learning Objectives

Upon completion of this course the student should be able to:

1. Understand access security models, access control administration, data ownership and attack methods.
2. Describe management practices designed to identify company assets, determine appropriate protection levels, and strike a balance between adequate protection and cost.
3. Understand and measure the effectiveness of the security components of operating systems, programs, applications, and information systems.

4. Understand software life cycles, change control, application security, malicious code, data warehousing, development practices and associated risks, and system storage and processing components.
5. Understand the techniques, approaches and technologies available for encrypting data and information.
6. Understand security architecture models and apply principles and standards for designing and implementing secure systems.
7. Understand the characteristics and importance of physical security including entry control, environmental and safety regulations, and the protection of hardware, data, media, and personnel.
8. Describe the elements, protocols, devices, and procedures necessary to protect telecommunications and network structures.
9. Understand the importance of operations security, recognize possible abuse channels, and apply corrective action.
10. Contribute to the development business continuity planning, risk assessment, and countermeasure implementation.
11. Act in an ethical and lawful manner, protect forensic evidence of computer crime, and understand regulations governing investigation techniques, evidence gathering, and incident handling.

Admissions and Registration Information

Student **must** be admitted to the institution to enroll in this course. The admission process **can** be handled via the Web. Students **can** register for this course via the Web.

Estimated Tuition and Fees

Electronic Rate
$USD 873.00

WBIT 4601 Customer Relationship Management

Course Details

Course Information: WBIT 4601 - Undergraduate, 3 credits (semester)
Subject Area: Computer and Information Sciences, General
Enrollment: 20

Special Attendance Requirements

All of the class sessions are delivered via technology. The course does not require students to travel to a classroom for instruction; however, it might require students to travel to a site to take exams.

Method of Course Instruction

The course is delivered primarily through *Internet*

Course Description

The use of IT applications has allowed many organizations to collect large amounts of data on their clients and to use such data to improve the relationships with their customers. In this course, students will study customer relationship management systems, including the reasons for their emergence, the functionalities that they provide and the issues one would have to face to successfully introduce a Customer Relationship Management System into an organization.

Course Prerequisites

WBIT 3600 Introduction to E-Commerce, WBIT 3200 Database Design & Development

Learning Objectives

Upon completion of this course the student should be able to:

1. Describe key elements and components of CRM.
2. Develop the business vernacular, concepts, data and methods to effectively and properly communicate and understand project goals and technology for a CRM implementation in the workplace.

Admissions and Registration Information

Student **must** be admitted to the institution to enroll in this course. The admission process **can** be handled via the Web. Students **can** register for this course via the Web.

Estimated Tuition and Fees

Electronic Rate
$USD 873.00

WBIT 4602 IT Seminar

Course Details

Course Information: WBIT 4602 - Undergraduate, 3 credits (semester)
Subject Area: Computer and Information Sciences, General
Enrollment: 20

Special Attendance Requirements

All of the class sessions are delivered via technology. The course does not require students to travel to a classroom for instruction; however, it might require students to travel to a site to take exams.

Method of Course Instruction

The course is delivered primarily through *Internet*

Course Description

Students will participate in research and discussion on a topic of current interest. A term paper on the topic (or related subtopic) is required. A designated faculty member will select the topic in advance based on his/her expertise and lead the seminar.

Course Prerequisites

WBIT 3111 IT Project Management, WBIT 3600 Introduction to E-Commerce, WBIT 3200 Database Design, Development, and Deployment, WBIT 4120 Human Computer Interaction

Learning Objectives

Upon completion of this course the student should be able to:

1. Critically consider emerging IT issues and their impact on existing IT discipline-related concepts and practices.
2. Critically consider emerging IT issues and assess the related opportunities to provide IT solutions in new ways or to new domains.
3. Critically consider the impact of emerging IT issues on the user.
4. Critically consider the impact of emerging IT issues on project planning.
5. Investigate a current or emerging IT issue and assess its applicability to address individual and organizational needs.

6. Analyze the impact of a current or emerging IT issue on individuals, organizations, and society.
7. Collaborate through discussions to more fully consider an IT issue.
8. Communicate ideas related to an IT issue effectively and efficiently in both discussion and more formal writing.
9. Demonstrate proficiency in assessing the impact of a current or emerging IT issue on both IT professionals and their constituencies.

Admissions and Registration Information

Student **must** be admitted to the institution to enroll in this course. The admission process **can** be handled via the Web. Students **can** register for this course via the Web.

Estimated Tuition and Fees

Electronic Rate
$USD 873.00

WBIT 4610 IT Policy and Law

Course Details

Course Information: WBIT 4610 - Undergraduate, 3 credits (semester)
Subject Area: Computer and Information Sciences, General
Enrollment: 20

Special Attendance Requirements

All of the class sessions are delivered via technology. The course does not require students to travel to a classroom for instruction; however, it might require students to travel to a site to take exams.

Method of Course Instruction

The course is delivered primarily through *Internet*

Course Description

This course will focus on the legal implications of conducting business in the information technology age. Topics will include current understanding of Internet contracts, copyright, trademark and patent law. Further, this course will examine cutting-edge cases relating to security, e-commerce, and emerging ethical issues and trends.

Course Prerequisites

WBIT 3600 Introduction to E-Commerce

Learning Objectives

Upon completion of this course the student should be able to:

1. Identify the primary concepts of information policy.
2. Identify and discuss participants and their roles in information policy formulation.
3. Understand the basics of contract law and implementation in electronic environments.
4. Understand the potential and likely impact of international, national, state, and local information policies on an organization's management and functional strategies.
5. Identify emerging information policy concerns and their potential impacts on business and IT.

6. Develop structured methodologies for resolving potential and real impacts of information policies.
7. Describe the impact of local, state, federal and international law on IT policy, the basics of/differences between copyright, trademark and patent law, the impact of information technology on society, and the major policy issues related to the generation, movement, and use of information and related technologies in society.
8. Apply policy and legal concepts to existing cases.
9. Communicate effectively when addressing issues related to information policy and law.
10. Understand the inherent cultural, economic, legal, and regulatory influences that shape information policy, practice, products, and services.
11. Identify resources that relate specific information policy issues (such as copyright, data security) to broader information policy concepts and to the successful achievement of their professional goals.
12. Understand the basics of contract law and implementation in electronic environments.

Admissions and Registration Information

Student **must** be admitted to the institution to enroll in this course. The admission process **can** be handled via the Web. Students **can** register for this course via the Web.

Estimated Tuition and Fees

Electronic Rate

$USD 873.00