



ENLIGHTIUM ACADEMY

Ignitia™ Career and Technical Education
Electives

Introduction to Information Technology

Enlightium Academy invites you to open the door to career and college readiness with Career and Technical Education (CTE) courses from Alpha Omega Publications - Ignitia™.

These rigorous, hands-on courses for grades 7-12 promote critical thinking, emphasize problem solving, and encourage students to take responsibility for their own learning. With 24 CTE courses divided into six clusters, these courses put students on practical paths to post-graduate success.

Should you have any questions about the curriculum, please contact support@enlightiumacademy.com or call Enlightium Academy Customer Support at (866) 488-4818 ext. 2017.

If you have questions about technical support or product configuration, please see the information below for Alpha Omega Publications.

Alpha Omega Publications Technical Support

Alpha Omega Publications' technical support is Ignitia™'s full-service technical support system. We exist to promote and preserve our customers' satisfaction. Our services include:

- Technical Support
- Product Configuration and Update Management

Please use the following information to contact Alpha Omega Publications' technical support:

Online:

Access our helpful Technical Support website simply by clicking on the life preserver located in the upper-right corner of any screen in our program!

Telephone:

Toll Free: 1-877-251-6662
Monday –Friday 7 a.m. to 5 p.m. (CT)

INTRODUCTION TO INFORMATION TECHNOLOGY

COURSE OVERVIEW

In this course, we introduce students to the knowledge base and technical skills that will help them to successfully compete for jobs within the Information Technology Career Cluster. Lessons are structured so that students learn and then demonstrate not only critical assessment and analytic skills, but also interpersonal skills that are valued so highly among IT employers.

We explore a range of career tracks that include network engineers, application/programming developers, and systems analysts. These career paths are described in depth, discussing typical job responsibilities, educational and licensure requirements, working conditions, and job outlooks.

Our lessons help students place the evolution of technology and job opportunities in context so that they will understand their important role in furthering its development. We believe that the most successful IT professionals combine technical know-how with leadership ability. To this end, students learn that their acquired expertise comes with the responsibility to represent themselves and the companies they work for within the highest legal and ethical standards.

Objectives

- Identify the basic components and structure of a computer system and its use within a networking/communications environment.
- Design and implement a basic network while being introduced to multiple types of network systems.
- Apply both ethical and industry standard security policies to networks.
- Discuss the history and development and use of the Internet in business and society.
- Explain the development of human-centered technology interaction.
- Apply mobile computing technology capabilities to learning and business.
- Identify the variety of operating systems found on desktops, laptops, and mobile devices.
- Understand mobile application architecture, deployment, and marketing.
- Determine best practice application skills for the variety of information technology systems available to implement.
- Plan, develop, and implement an information system.
- Maximize use of the Internet within the home and business.
- Identify the structure of wireless communication networks and the mechanisms behind its functionality.
- Identify and develop protocols for use of the Internet within business.
- Identify and develop information system libraries and repositories of information.
- Develop an understanding of the logic behind object-oriented programming.
- Identify the multiple programming languages for use in mobile/Internet application development.
- Plan, develop, and implement a mobile/Internet application.

INTRODUCTION TO INFORMATION TECHNOLOGY
UNIT 1: HARDWARE AND COMMUNICATIONS TECHNOLOGY INTRODUCTION

Assignment Titles

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|---|--|
| 1. Course Overview | 9. Human-Centered Technology |
| 2. Computer Systems and Networks | 10. Project: Biometrics Report |
| 3. Network Ethics and Security | 11. Mobile Computing |
| 4. Project: Benefit Analysis Study: Small Business Expansion | 12. Project: Geocache Treasure Hunt |
| 5. Information Storage | 13. Quiz 2: Internet in Business and Society |
| 6. Project: Correspondence Between Stringer and Newspaper Editor: Media Preview | 14. Project: Special Project |
| 7. Quiz 1: Computer Systems and Networks | 15. Unit 1 Test |
| 8. Internet in Business and Society | 16. Course Project Part 1: Capstone Project |
| | 17. Glossary and Credits |

INTRODUCTION TO INFORMATION TECHNOLOGY
UNIT 2: OPERATING SYSTEMS, SYSTEM SOFTWARE, MOBILE APPLICATIONS

Assignment Titles

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|--|---|
| 1. Computer, Server, and Mobile Operating Systems | 8. Project: Mobile App Development |
| 2. Project: Similarities/Differences Chart: School Operating Systems | 9. Applications vs. Software |
| 3. Operating Systems vs. System Software | 10. The Mobile Application Business |
| 4. Battle of the Operating Systems | 11. Project: Market Research Comparison/Contrast Matrix – Free Mobile App |
| 5. Project: PowerPoint Presentation: Smart Phone Preference Survey | 12. Quiz 2: Mobile Application Development |
| 6. Quiz 1: Operating Systems and System Software | 13. Project: Special Project |
| 7. Mobile Application Development and Implementation | 14. Unit 2 Test |
| | 15. Course Project Part 2: Capstone Project |
| | 16. Glossary and Credits |

INTRODUCTION TO INFORMATION TECHNOLOGY
UNIT 3: INTRODUCTION TO INFORMATION SYSTEMS

Assignment Titles

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|--|---|
| 1. What is an Information System? | 10. Implementing Information Systems |
| 2. Project: Building a Local GIS | 11. Project: On the Job: System Developer |
| 3. Types of Information Systems | 12. Quiz 2: Developing and Implementing Information Systems |
| 4. Jobs in Information Systems | 13. Project: Special Project |
| 5. Project: Career Day Presentation | 14. Unit 3 Test |
| 6. Quiz 1: Introduction to Information Systems | 15. Course Project Part 3: Capstone Project |
| 7. Planning Information Systems | 16. Glossary and Credits |
| 8. Project: Strategic Report | |
| 9. Developing Information Systems | |

INTRODUCTION TO INFORMATION TECHNOLOGY
UNIT 4: INTERNET UTILIZATION AND INFORMATION LITERACY

Assignment Titles

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|---|---|
| 1. Internet Use in Home and Business | 9. Information Library Systems |
| 2. Project: School Internet Policies Report | 10. Jobs in Information Literacy |
| 3. Security on the Internet | 11. Project: Digital Library Research |
| 4. Project: Comparison Shopping Report | 12. Quiz 2: Internet Best Practices and Protocols |
| 5. Cloud Computing | 13. Project: Special Project |
| 6. Quiz 1: Internet Use in Home and Business | 14. Unit 4 Test |
| 7. Internet Best Practices and Protocols | 15. Course Project Part 4: Capstone Project |
| 8. Project: Search Strategy and Intelligent Agent | 16. Glossary and Credits |

INTRODUCTION TO INFORMATION TECHNOLOGY
UNIT 5: MOBILE APPLICATION PROGRAMMING AND PRODUCTIVITY

Assignment Titles

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|---|--|
| 1. Mobile Application Construction | 8. Project: Compare/Contrast Report: Five Mobile Operating Platforms |
| 2. Project: Flowcharts for Free-to-Play and Pay-to-Play Versions of a Travel Game App | 9. Tools of the Trade |
| 3. Mobile Application Programming | 10. Outsourcing vs. In-House Development |
| 4. The Business of Mobile Application Development | 11. Project: Design a Work-Around; Role-Playing Panel |
| 5. Project: Compare/Contrast Report: Contract Versus Salaried Mobile App Development Jobs | 12. Quiz 2: Mobile Application Development |
| 6. Quiz 1: Mobile Application Construction and Programming | 13. Project: Special Project |
| 7. Mobile Application Development Project Management | 14. Unit 5 Test |
| | 15. Course Project Part 5: Capstone Project |
| | 16. Glossary and Credits |

INTRODUCTION TO INFORMATION TECHNOLOGY
UNIT 6: COURSE PROJECT, REVIEW, AND EXAM

Assignment Titles

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| 1. Course Project Part 6: Capstone Project | 3. Exam |
| 2. Review | |