A Course of Study for

COMPUTER INFORMATION SYSTEMS

Computer Information Systems managers oversee a variety of administrative, clerical, and accounting functions necessary to efficiently run and maintain computerized business systems. Office workers use a variety of software to produce correspondence, maintain databases, manage projects, organize meetings, manage financial records, and create presentations. Students focusing on Web applications attain the skills to professionally design, develop, and manage websites.

This major may also lead to many other careers. For additional career possibilities, visit the Career Services Center on the main campus to utilize computerized career information systems and other valuable career resources.

PROGRAMS OFFERED
- Transfer Preparation
- Computer Business Applications Associate Degree
- Website Software Specialist Associate Degree
- Computer Business Applications Certificate of Achievement (30 units)
- Website Software Specialist Certificate of Achievement (31 units)
- Digital Publishing *(formerly Desktop Publishing)* Department Certificate (17 units)
- Website Creator Department Certificate (15 units)
- Website Development Management Department Certificate (13 units)

TRANSFER PREPARATION
Students planning to transfer to a four-year college or university should refer to the transfer preparation information under Business.
COMPUTER BUSINESS APPLICATIONS, ASSOCIATE DEGREE OR CERTIFICATE OF ACHIEVEMENT

The core of this program provides advanced computer skills and business concepts that can be applied in nearly every industry. Students will learn to use Microsoft Office products, as well as other computer software applications, that can be applied in business situations to create, edit, format, and publish documents, spreadsheets, presentations, and databases.

Students can select from three specializations within the Computer Business Applications program:

- Social Media Specialist students will be introduced to the finer points of the most popular social media applications, including search engine optimization, HTML and Web design.
- Office Finance Specialist students will develop the skills necessary to handle basic accounting and bookkeeping procedures for small businesses.
- Microsoft Office Specialist students will develop additional expertise in each of the Microsoft Office applications. This specialization assists in preparation for the Microsoft Office Specialist (MOS) certification exams.

Program Learning Outcomes: Upon completion of the program, students will be able to analyze different types of business information, use the Internet to support findings, and use software applications to produce various business reports and presentations used in industry of concentration area.

Required courses: (21 units)

- BUS 1, Introduction to Business (3)
- CIS 1, Computer Concepts with Applications (3)
- CIS 4, Business Information Systems with Applications (3)
- CIS 37, Microsoft Word (3)
- CIS 39, Microsoft Outlook – Comprehensive Course (3)
- OFTECH 5, English Skills for the Office (3)
- OFTECH 1, Keyboarding I (3)
- or
- OFTECH 10, Skill Building on the Keyboard (3)

Complete one of the following specialization tracks listed below based on career interest: (9 units)

**TRACK 1: Social Media Specialist**

- CIS 50, Internet, HTML, and Web Design (3)
- CIS 67, WordPress (3)
- CIS 70, Social Media Applications (3)

**TRACK 2: Office Finance Specialist**

- CIS 30, Microsoft Excel (3)
- CIS 35, QuickBooks (3) *(formerly same as ACCTG 35)*
- ACCTG 1, Introduction to Financial Accounting (5)
- or
- ACCTG 21, Business Bookkeeping (3)

**TRACK 3: Microsoft Office Specialist**

- CIS 30, Microsoft Excel (3)
- CIS 32, Microsoft Access (3)
- CIS 38, Microsoft PowerPoint (3)
WEBSITE SOFTWARE SPECIALIST, ASSOCIATE DEGREE OR CERTIFICATE OF ACHIEVEMENT

A Website Software Specialist designs, develops, and manages websites with the skills needed to be successful in today’s job market. A Website Software Specialist needs to be knowledgeable in variety of Internet technologies (HTML, CSS, JavaScript, and server-side scripting), as well as web-authoring applications such as Dreamweaver, Photoshop, and WordPress. These specialists are primarily responsible for developing user friendly and interactive webpages, integrating and optimizing different multimedia components, and implementing hosting, publishing, and development workflow strategies.

**Program Learning Outcomes:** Upon completion of the program, students will learn a variety of Internet technologies and web-authoring tools for website development and maintenance. Students will gain the necessary knowledge and skills for designing, developing, and managing websites.

**Required Core Courses:**

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>CIS 1</td>
<td>Computer Concepts with Applications</td>
<td>(3)</td>
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<tr>
<td>CIS 50</td>
<td>Internet, HTML, and Web Design</td>
<td>(3)</td>
</tr>
<tr>
<td>CIS 51</td>
<td>HTML5, CSS3, and Accessibility</td>
<td>(3)</td>
</tr>
<tr>
<td>CIS 54</td>
<td>Web Development and Scripting</td>
<td>(3)</td>
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<tr>
<td>CIS 55</td>
<td>Advanced Webpage Development and Scripting</td>
<td>(3)</td>
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<td>CIS 57</td>
<td>Website Planning and Production</td>
<td>(3)</td>
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<tr>
<td>CIS 59A</td>
<td>Dreamweaver I</td>
<td>(3)</td>
</tr>
<tr>
<td>CIS 60A</td>
<td>Photoshop I</td>
<td>(3)</td>
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<tr>
<td>CIS 67</td>
<td>WordPress</td>
<td>(3)</td>
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<tr>
<td>CIS 70</td>
<td>Social Media Applications</td>
<td>(3)</td>
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<tr>
<td>CIS 88A</td>
<td>Independent Studies in CIS</td>
<td>(1)</td>
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DIGITAL PUBLISHING (FORMERLY DESKTOP PUBLISHING), DEPARTMENT CERTIFICATE

This program provides students with specific skills that make them job ready for the publishing industry, whether it is for printing or the web. Digital Publishing Specialists use Adobe Photoshop, InDesign, and Illustrator programs, along with Microsoft Word, to format and combine text, numeral data, photographs, charts, drawings, and other visual graphic elements to produce digital and/or printed publication-ready materials.

**Program Learning Outcomes:** Upon completion of the program:

1. Given client data, students will utilize marketing research tools, apply creative techniques, choose and utilize appropriate software program(s), and analyze and solve graphic design and page layout problems to produce an effective publication.
2. Working as a member of a Digital Publishing team, students will demonstrate professional work habits, meet scheduled timeline milestones and deadlines, and communicate effectively via oral presentations and written documents.

**Required Courses:** (16 units)

<table>
<thead>
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<th>Units</th>
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<tr>
<td>CIS 36P</td>
<td>Microsoft PowerPoint</td>
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<tr>
<td>CIS 37</td>
<td>Microsoft Word</td>
<td>(3)</td>
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<tr>
<td>CIS 40</td>
<td>InDesign</td>
<td>(3)</td>
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<tr>
<td>CIS 60A</td>
<td>Photoshop I</td>
<td>(3)</td>
</tr>
<tr>
<td>CIS 64</td>
<td>Illustrator</td>
<td>(3)</td>
</tr>
<tr>
<td>OFTECH 5</td>
<td>English Skills for the Office</td>
<td>(3)</td>
</tr>
</tbody>
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Select 1 unit from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>OFTECH 1</td>
<td>Keyboarding I</td>
<td>(3)</td>
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<tr>
<td>OFTECH 1A</td>
<td>Keyboarding 1A</td>
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<td>OFTECH 1B</td>
<td>Keyboarding 1B</td>
<td>(1)</td>
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<td>OFTECH 1C</td>
<td>Keyboarding 1C</td>
<td>(1)</td>
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<tr>
<td>OFTECH 9</td>
<td>Keyboarding Improvement</td>
<td>(1)</td>
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<tr>
<td>OFTECH 10</td>
<td>Skill Building on the Keyboard</td>
<td>(3)</td>
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**WEBSITE CREATOR, DEPARTMENT CERTIFICATE**

This certificate provides students with the basic skills needed to create websites. Students will use Web authoring programs for Web page creation and site management. They will extend their skills in the development of websites through the use of XHTML, cascading style sheets, and client and server-side scripting. Focus will be on the creation of effective user interfaces and website design principles using various state-of-the-art technologies for the Web. Upon completing this certificate, students will be ready to plan, build, promote, and maintain professional websites.

**Required Courses:**

- CIS 50, Internet, HTML, and Web Design (3)
- CIS 51, HTML5, CSS3, and Accessibility (3)
- CIS 54, Web Development and Scripting I (3)
- CIS 59A, Dreamweaver I (3)
- CIS 60A, Photoshop I (3)

**WEBSITE DEVELOPMENT MANAGEMENT, DEPARTMENT CERTIFICATE**

This program provides students with the knowledge needed to develop website projects in a real-world setting. Students learn how to develop websites while applying the skills needed to plan and budget resources in development projects from conceptual design to deployment.

**Program Learning Outcomes:** Upon completion of the program, students will apply the principles of Project Management to plan schedules and manage cost and resources to lead website development projects to success. Students will demonstrate their comprehensive knowledge of website development by creating and managing a portfolio of Web and Social Media projects.

**Required Courses:**

- CIS 9A, Technology Project Management I (3) *(same as CS 9A)*
- CIS 9B, Technology Project Management II (3) *(same as CS 9B)*
- CIS 56, Web Media Production (3)
- CIS 57, Website Planning and Production (3)
- CIS 88A, Independent Studies in CIS (1)

**WORD PROCESSING, DEPARTMENT CERTIFICATE**

This program prepares students for both entry-level and advanced word processing positions in a variety of office settings. It also serves as a foundation for specialization in fields such as legal transcription and desktop publishing. The Word Processing Certificate includes courses in rapid and accurate keyboarding, document editing and formatting, advanced word processing techniques, English skills for the office, and an overview of the Microsoft Office Suite.

**Program Learning Outcomes:** Upon completion of this program, when given a hard copy of a document with complex formatting, students will be able to recreate the document in Microsoft Word. Also, they will create mail merge documents and templates.

**Required courses:** *(9 units)*

- CIS 4, Business Information Systems with Applications (3)
- CIS 37, Microsoft Word (3)
- OFTECH 5, English Skills for the Office (3)

**Select 3 units from the following keyboarding courses:**

- OFTECH 1, Keyboarding I (3)
- OFTECH 1A, Keyboarding 1A (1)
- OFTECH 1B, Keyboarding 1B (1)
- OFTECH 1C, Keyboarding 1C (1)
- OFTECH 9, Keyboarding Improvement (1)
- OFTECH 10, Skill Building on the Keyboard (3)

*ADDITIONAL INFORMATION ON REVERSE. SUBJECT TO CHANGE WITHOUT NOTICE.*