

# COMPUTER & INFORMATION SCIENCE (CIS)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

## CIS 107 Computer Literacy (3 Credits)

An introduction to Personal Computers, this course is specifically designed for students who have had little or no experience using the personal computer. The topics covered are designed to prepare the student for further study of computer-related courses and the more immediate word processing assignments in college courses. The class utilizes hands-on lab experiences to ensure that these important computer concepts are thoroughly understood. Included in this course is an overview of the microcomputer applications, Microsoft Windows, Microsoft Word and accessing information on the Internet. Note: CIS 107 can be used as a free elective in all programs/majors except Computer Science/Computer Information Systems.

**Pre-requisites:** ((Companion Essay with a score of 06 and Companion Reading Comprehensio with a score of 059) or (Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06 and Companion Reading Comprehensio with a score of 20) or Companion Essay with a score of 07 or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or ENG 085 with a minimum grade of C or AFE 083 with a minimum grade of C or Move Up English 085 with a score of P or ENG 085 Summer Bridge with a score of P or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

## CIS 131 Micro Computers in Business (3 Credits)

An introduction to personal computers, this course is specifically designed for students who have had some or little experience using the personal computer. The topics covered are designed to prepare the student for further study of computer-related courses and the more immediate word processing assignments in college courses. The class utilizes hands-on lab experiences to ensure that these important computer concepts are thoroughly understood. Included in this course is an overview of the microcomputer applications software package, Microsoft Office. The focus of the course will include an introduction to Windows, Internet Browsers, Microsoft Word, Excel, PowerPoint, Outlook, and Access. [Note: CIS 131 can be used as a free elective.]

**Pre-requisites:** (Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or ESL 063 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

## CIS 135 Micro Computers Spreadsheets (3 Credits)

An introduction to Microsoft Excel, this course is specifically designed for students who have had experience with MS Word. This course will provide hands-on instruction in the use of one of the powerful spreadsheet analysis applications, Microsoft Excel. Basic spreadsheet design and creation, formulas, charts and data management are included. Step-by-step instruction using realistic case studies emphasizes the important features of the software. (Advanced features, case studies and macro creation using Visual Basic are included in CIS 235).

**Pre-requisites:** (Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or ESL 063 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

## CIS 136 Desktop Publ for IBM Computers (3 Credits)

This course provides hands-on instruction to develop students' understanding of desktop publishing using Microsoft Office and the Internet. Topics covered include basic concepts, layout and good form, research, creating a presentation, using templates, and working with text, fonts, clip-art, drawings, and photographs. Students are required to design a variety of presentations as well as printed works indicative of their competence and typical of those found in business and industry as part of their portfolio.

**Pre-requisites:** CIS 107 with a minimum grade of C

## CIS 137 Micro Computer Data Bases (3 Credits)

This course introduces students to the windows concepts, entering and updating records in a database, performing reporting and query functions with multiple databases, and the differences between Excel and Access. Students will be exposed to step-by-step instruction using MS Access to create and maintain databases. Students will be able to plan, create and manipulate databases for typical business needs.

**Pre-requisites:** CIS 107 with a minimum grade of C

## CIS 139 Introduction to Multimedia (3 Credits)

This course provides an introduction to many of the individual components of interactive, computer-assisted communications. Because multimedia technology is a tool, the applications are practically endless and multimedia may mean different things to different people. It may be a communications tool to some and an artistic medium to others. It can also be a teaching tool or a way to complete a business transaction. This course assists students in planning and developing multimedia presentations in their field of interest.

**Pre-requisites:** CIS 107 with a minimum grade of C

**CIS 152 Internet Concepts (3 Credits)**

This course provides a basic introduction to the world-wide computer communications network, the Internet, including the World-Wide Web. Students gain an understanding of the history and background as well as the hardware and media that comprise the Internet. This is a research-oriented course in which Internet Protocol, net etiquette, e-mail, accessing Internet services, File Transfer Protocol, and searching the databases are explored. Students are provided hands-on introduction to the Hypertext Markup Language (HTML) used to create World-Wide web sites in the Internet. Students also create their own web site and begin to use the Hypertext Markup Language (HTML) to create, edit, and maintain their site.

**Pre-requisites:** CIS 107 with a minimum grade of C or CIS 131 with a minimum grade of C or CIS 135 with a minimum grade of C or CIS 136 with a minimum grade of C or CIS 137 with a minimum grade of C or CIS 139 with a minimum grade of C

**CIS 153 Adv. Internet Concepts/Applic. (3 Credits)**

This course is an extension of the basic introduction to Hypertext Markup Language (HTML), the Internet language covered in CIS 152. Students learn to design and improve World-Wide Web sites. The course also covers more complex tables, manipulation of frames, Common Gate Interface (CGI), Cascading Style Sheets (CSS), and a brief introduction to JavaScript within the confines of HTML tags. Incorporating multimedia (audio and video) files are also covered. CSS and JavaScript are discussed on a basic level with the goal of introducing students to tools that enhance HTML and add dynamic content to web sites. Upon the completion of this course, students will be prepared to take the introductory course in JavaScript.

**Pre-requisites:** CIS 152 with a minimum grade of C

**CIS 212 Systems Analysis and Design (3 Credits)**

This course gives an overview of the system development life cycle covering information gathering and reporting activities from the analysis phase through the maintenance and support phase. The course introduces the classical and structural tools/techniques for describing processes, data flows, data structures, file and database design, input/output design and program specifications.

**Pre-requisites:** (( ((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehension with a score of 079 or Reading (Next-Gen) with a score of 237 or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P) or ESL 063 with a minimum grade of C ) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998 ) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999) and (CIS 107 with a minimum grade of C or CIS 111 with a minimum grade of C or CIS 114 with a minimum grade of C or CIS 131 with a minimum grade of C or CIS 135 with a minimum grade of C or CIS 136 with a minimum grade of C or CIS 137 with a minimum grade of C or CIS 139 with a minimum grade of C or CIS 152 with a minimum grade of C or CIS 153 with a minimum grade of C or CIS 235 with a minimum grade of C or CIS 237 with a minimum grade of C)

**CIS 215 Data Communications (3 Credits)**

This course is designed to develop an understanding of current data communications technology as it applies to information systems. Topics covered include basic concepts and terminology as it relates to data communications and networks, with particular emphasis on local area networks. Students are required to design PC network hardware configurations based upon selected case studies.

**Pre-requisites:** CIS 212 with a minimum grade of C

**CIS 235 Advanced MicroComp Spreadsheet (3 Credits)**

This course is a continuation of CIS 135, which introduced students to the spreadsheet analysis application, Excel for Windows. Continuing the step-by- step instruction using case studies, advanced Excel features and OLE (Object Linking and Embedding), hyperlink to the Internet and Visual Basic function will be covered. Special attention is paid to creating macro modules using Visual Basic. An advanced research project is required.

**Pre-requisites:** CIS 135 with a minimum grade of C

**CIS 237 Advanced Microcomp Database (3 Credits)**

This course is a continuation of CIS 137, which introduced students to databases in MS Access. Continuing the step-by-step instruction using case studies, this course covers advanced Access features including sophisticated queries, reports based on databases, queries and reports that can support the business decision-making processes, data access pages which provide internet access to databases, exporting data from the databases to an HTML file that is accessed over the Internet (www) or intranet (local), and integrating the database with other programs (e.g., word processing, spreadsheet, etc.). An advanced research project is required

**Pre-requisites:** CIS 137 with a minimum grade of C