

COMP-235 Natural Gas Compression Preventative Maintenance 4 cr.

This course studies compressor preventative maintenance and provides students with the techniques, skills and procedures to adequately perform routine preventative maintenance on natural gas compressors. Prerequisites: to successfully complete the course students must have a working knowledge of natural gas engine theory and overhaul/or have equivalent work experience. Offered: Spring. Faculty Permission Required.

COMP-236 Natural Gas Compressor Troubleshooting 2 cr.

Students will gain techniques, skills and procedures to troubleshoot and diagnose common problems with natural gas compressors. Safety will be strictly enforced. Prerequisites: to successfully complete the course students must have a working knowledge of natural gas engine theory and overhaul/or have equivalent work experience. Prerequisites: COMP-230, COMP-231, and COMP-235. Minimum grade required: C. Offered: Spring. Faculty Permission Required.

COMP-256 Natural Gas Comp Instrumentation & Control 2 cr.

Provide students with an introduction to basic uses of instrumentation and controls associated with natural gas compression. Offered: All.

COMP-280 Natural Gas Compression Coop Work Experience 6 cr.

This course studies compressor maintenance and provides students with the techniques, skills and procedures to adequately perform routine maintenance on natural gas compressors. Prerequisites: students must have completed all other program requirements before entering OJT or obtain equivalent work experience. Offered: All. Faculty Permission Required.

COMP-281 Nat Gas Comp Cooperative Work Exp II 9 cr.

The students will be employed by a company in the lease operator field which will provide relevant learning experiences that are directly related to the student's most recent classroom/laboratory experiences. The student will be supervised jointly by his/her employer and San Juan College personnel. Requires completion of all COMP courses. Offered: All. Faculty Permission Required.

COMPUTER SCIENCE**COSC-095 Basic Computer Skills 1 cr.**

Learn your way around the computer and its related components. Covers keyboard and mouse operations. Become familiar with the operating system's desktop, icons, and menus. Prerequisites: Completion of RDNG-050 or appropriate Accuplacer Reading score. Offered: On Demand.

COSC-096 Working With Windows 1 cr.

Managing and organizing files and folders. Copying and moving files to a different folder or disk. Sort and find files. Prerequisites: Completion of RDNG-050 or appropriate Accuplacer Reading score. Offered: On Demand.

COSC-097 Basic Computer/Internet Skills 3 cr.

Learn your way around the computer and the Internet. Covers keyboard and mouse operations; operating systems' desktop, icons, and menu system; and searching the internet and use of e-mail. This course combines COSC 095, COSC 096, and COSC 099. Offered: All.

COSC-099 Basic Internet Skills 1 cr.

Practical search techniques and common vocabulary to make your searches more effective. Learn to use e-mail. Prerequisites: Completion of RDNG-050 or appropriate Accuplacer Reading score. Offered: On Demand.

COSC-111 Computer Literacy 3 cr.

The evolution of computers, their application and their economic and social implications including a brief introduction to programming and computer literacy with a non-technical emphasis. For non-computing majors. Prerequisites: Completion of MATH-050, ENGL-095, and RDNG-050 or appropriate Accuplacer scores in Math, English, and Reading. Offered: All.

COSC-115 Intro to Information Tech 3 cr.

A technical examination of computing system functions, design, and operations. Topics will include hardware, software, and networking technologies, systems integration, and IT operations as they apply to the enterprise. This course is designed for students with a background in computing which should include extensive use of personal computers and experience doing computer troubleshooting or support if possible; it is not an introductory course in computing. Prerequisites: MATH 096 or APAL 061, ENGL 099 or APEN 085, and RDNG 113 or APRD 081. Corequisite: ITCT 111 or prior A+ certification. Semesters Offered: On demand. Prerequisites: Completion of MATH-096, ENGL-099, and RDNG-113 or appropriate Accuplacer scores in Math, English, and Reading. Offered: Fall & Spring.

COSC-116 Spreadsheets 3 cr.

Comprehensive coverage of current spreadsheeting software - from basic data entry and formatting to complex functions, data importation, and Macro creation. Students will be taught most of the features available in the software, and will be required to apply those skills throughout the course. Special emphasis is placed on spreadsheet development for mathematical and financial/accounting applications. This course can be used to prepare for the corresponding Microsoft Certified Application Specialist exam. Prerequisites: Completion of MATH-096, ENGL-095, and RDNG-113 or appropriate Accuplacer scores in Math, English, and Reading. Offered: All.

COSC-118 Comp Programming Fund I w/C++ 3 cr.

An introduction to programming and computing integrating problem solving and algorithmic design using the object-oriented programming language C++. Prerequisites: Completion of MATH-096, ENGL-095, and RDNG-095 or appropriate Accuplacer scores in Math, English, and Reading. Offered: Fall & Spring.

COSC-122 Game Programming I 3 cr.

This course is an introduction to game programming as well as an introduction to the C++ computer programming language. A variety of game programs are presented in the textbook and most assignments involve making changes and/or improvements to the existing game programs. Games include Lost Fortune, Guess My Number, Word Jumble, Hangman, Tic-Tac-Toe, and Blackjack. Offered: On Demand.

COSC-125 Business Microcomputer Applications 3 cr.

This course is designed to provide students with real world examples and procedures that will prepare them to be skilled users of microcomputers. Students gain hands-on experience in utilizing database, spreadsheet, and word processing applications in the Windows operating system. [NM Common Course Number: BCIS 1113, Business Transfer Module]. Offered: All.

COSC-135 Computer/Basic Management 3 cr.

A course in management using the computer for Automotive Technology students covering concepts in shop management, small business administration and accounting, and computer systems. Permission of Instructor. Offered: On Demand.

COSC-137 Energy Industry Microcomputer 3 cr.

This course is designed to give students in the School of Energy specific skills in using microcomputers. Students will be given hands-on experience in using scheduling, word processing, spreadsheet and graphic presentation applications. Students will also learn to work with a computer operating system. Prerequisites: Completion of RDNG-095 or appropriate Accuplacer Reading scores. Offered: All.

COSC-185 Database Management Systems 3 cr.

This course instructs students in the most current and widely used database programs on microcomputers. It teaches the concepts and procedures needed to become a designer, developer, and informed user of databases. Topics covered in this course include creating and editing tables, forms, reports, data access pages, and using the World Wide Web and hyperlink fields. This course can be used to prepare for the corresponding Microsoft Certified Application Specialist exam. Offered: Fall & Spring.

COSC-190 Database Concepts & Principles 3 cr.

A comprehensive course providing a solid, modern foundation in the fundamentals of database processing. Coverage includes understanding and applying entity-relationship data modeling, relational database design and table normalization, the SQL language and database coding, and introduction to popular multi-user databases, and current database access standards. Offered: Fall.

COSC-202 Web Development I 3 cr.

Introduction to HTML code. Creating and designing a web page in HTML, adding tables and using frames in web design. Use XML to create interactive, dynamic Web pages. Implement cascading style sheets. Prerequisites: Completion of MATH-096, ENGL-095, and RDNG-113 or appropriate Accuplacer scores in Math, English, and Reading. Offered: Fall.

COSC-203 Web Development II 3 cr.

This course expands on existing HTML/XHTML skills learned in COSC 202 with advanced techniques of clientside web page development using a variety of cutting edge technologies and software to help produce professional looking and structured multimedia web sites. Prerequisites: COSC-202. Offered: Spring.

COSC-214 Visual Basic I 3 cr.

An introduction to object oriented, event-driven business application programming and graphical user interfaces in the Microsoft Windows environment. Offered: Fall & Spring.

COSC-218 Comp Programming Fund II W/C++ 3 cr.

Intermediate level course in object-oriented programming with emphasis on development and use of classes in the Microsoft Visual Studio.NET environment using C++. Inheritance, polymorphism, pointers, and templates are covered. The Standard Template Library is presented as an introduction to data structures. Prerequisites: COSC-118. Offered: Spring.

COSC-223 Applications-Based Programming 3 cr.

Microcomputer program design and implementation with an emphasis on programming from an application environment. Includes the Windows programming environment, advanced database programming, and advanced use of macros in word processing and spreadsheeting environments. Prerequisites: AOAP-210, COSC-116, and COSC-185. Offered: Spring.

COSC-225 Information Systems Design 3 cr.

Information system design techniques for computer-based information systems, including problem definition techniques, design procedures for input, output and file organization. Course uses the seminar approach with group simulation projects. Offered: Spring.

COSC-236 UNIX 3 cr.

An introduction to the Linux operating system. A study of basic installation, operation, administration and troubleshooting services for the Linux operating system on workstations and servers. May be preparation for an industry certification. Prerequisites: COSC-262. Offered: Fall.

COSC-240 Java Programming 3 cr.

Object-Oriented programming in Java. The course covers all the basics of Java Programming with special emphasis on classes, graphics, and animation. Prerequisites: COSC-118. Offered: Fall.

COSC-243 Web Programming on UNIX 3 cr.

Designing server side applications for the Apache web server installed on UNIX systems. Interacting with databases using SQL. Developing dynamic Web pages using CGI and Perl. Prerequisites: COSC-118 and COSC-236. Offered: Spring.

COSC-262 Data Structures With C++ 3 cr.

A course in data structures, software methodologies, and analysis of algorithms using the object-oriented programming language C++. The Standard Template Library (STL) is covered in detail. Prerequisites: COSC-218. Offered: Fall.

COSC-270 Windows GUI Programming 3 cr.

Designing application programs for the Windows GUI. Learning the Microsoft Foundation Classes (MFC) and how to use them. Working in the Visual Studio. NET integrated development environment. Prerequisites: COSC-262. Offered: Spring.

COSMETOLOGY**COSM-110 Theory I 3 cr.**

Introduces the student to the cosmetology industry concerning professional image, ethics, first aid, NM state laws and regulations, chemistry and electricity. Offered: Fall and Spring Faculty Permission Required.