American River College

**Information**

Website: <http://www.arc.losrios.edu/>

Catalog: <http://www.arc.losrios.edu/catalog.htm>

Email:

Phone: (916) 484-8011

Address: 4700 College Oak Drive, Sacramento, Calif. 95841

**Full Time Courses**

Green Pre-Apprenticeship Certificate

This program prepares students for entry into an apprenticeship program in the commercial and industrial building and construction industries. Topics include Leadership in Energy and Environmental Design (LEED) processes, green technologies, green building techniques, infrastructure, and transportation projects.

Requirements for Certificate 16 Units

PREAP 111 Infrastructure Pre-Apprenticeship

PREAP 141 Green Technology Pre-Apprenticeship

FITNS 358 Workforce Wellness (1)

Green Technology Pre-Apprenticeship Certificate

This certificate prepares students for entry into an apprenticeship program in the commercial and industrial building and construction industries. Topics include green building practices, construction job site safety requirements, construction mathematics, and apprenticeship entry requirements.

FITNS 358 Workforce Wellness

PREAP 141 Green Technology Pre-Apprenticeship

Computer Science Degree

This program is a comprehensive exposure to programming languages, algorithms and problem solving in preparation for upper division computer science courses. The Computer Science degree includes substantial course work in mathematics as is required by most university computer science programs.

CISP 300 Algorithm Design/Problem Solving

CISP 360 Introduction to Structured Programing

CISP 480 Honors Introduction to Structured Programming

CISP 310 Assembly Language Programming for Microcomputers

CISP 400 Object Oriented Programming with C++

CISP 430 Data Structures

CISP 440 Discrete Structures for Computer Science

MATH 400 Calculus I

MATH 401 Calculus II

CIS: Computer Networking Management Degree

The degree covers network administration technologies, techniques, and the hardware and software used in today’s business/enterprise networking environment. Major topics covered include installation, configuration, and troubleshooting of network operating systems. The degree stresses the knowledge and skills required for the day-to-day operation, business aspects, security and management of computer networks. This degree has three distinct concentrations with specific courses for each concentration track:

BUS 310 Business Communications

ENGWR 300 College Composition

ENGWR 480 Honors College Composition

ESLW 340 Advance Composition

CISA 315 Introduction to Electronic Spreadsheets

CISC 320 Operating Systems

CISC 323 Linux Operating Systems

CISC 350 Introcution to Data Communications

CISC 361 Microcomputer Support Essentials - Preparation for A+ Certification

CISS 310 Network Security Fundamentals

• Microsoft Windows networking concentration, focusing on preparing for the Microsoft Certified Systems Engineer (MCSE) and/or the Microsoft Certified Systems Administrator (MCSA) certification.

CISN 110 Networking Technologies - Preparation for N+ Certification

CISN 111 Intermediate Networking Technologies - Preparation for N+ Certification

CISN 300 Network Systems Administration

CISN 302 Intermediate Network Systems Administration

CISN 307 Windows Active Directory Services

CISN 308 Internetworking with TCP/IP

CISN 119 TCP/IP Protocols

CISP 370 Beginning Visual Basic

CISS 341 Implementing Windows Operating System Security

• Linux/Unix networking concentration, focusing on preparing for the administration of commercial Linux/Unix servers and network environments.

CISC 324 Intermediate Linux Operating System

CISN 110 Networking Technologies - Preparation for N+ Certification

CISN 111 Intermediate Networking Technologies - Preparation for N+ Certification

CISN 119 TCP/IP Protocols

CISN 120 Beginning Network Administration with Linux

CISN 121 Network Administration with Linux: LAN Services

CISN 122 Network Administration with Linux: Internet Services

CISP 400 Object Oriented Programming with C++

CISS 342 Implementing Linux Operating System Security

•Cisco router and network administration concentration, which covers all the objectives of the Cisco Certified Network Associate (CCNA) certification exam.

CISC 324 Intermediate Linux Operating System

CISN 110 Networking Technologies - Preparation for N+ Certification

CISN 111 Intermediate Networking Technologies - Preparation for N+ Certification

CISN 119 TCP/IP Protocols

CISN 140 CISCO Networking Academy (CCNA): Network Fundamentals

CISN 141 CISCO Networking Academy (CCNA): Routing Protocols and Concepts

CISN 142 CISCO Networking Academy (CCNA): LAN Switching and Wireless

CISN 143 CISCO Networking Academy (CCNA): Accessing the Wide Area Network

CISS 325 Network Security and Firewalls

CIS: Computer Networking Management Certificate

The CIS: Computer Networking Management certificate provides instruction for entry-level and IT professionals aiming for skill enhancement on the specific knowledge and skills required to master one of three industry standard network technologies:

CISC 323 Linux Operating System

CISC 350 Introduction to Data Communications

CISC 361 Microcomputer Support Essentials - Preparation for A+ Certification

CISS 310 Network Security Fundamentals

•Microsoft Windows networking concentration, focusing on preparing for the Microsoft Certified Systems Engineer (MCSE) and/or the Microsoft Certified Systems Administrator (MCSA) certification.

CISN 110 Networking Technologies - Preparation for N+ Certification

CISN 111 Intermediate Networking Technologies - Preparation for N+ Certification

CISN 300 Network Systems Administration

CISN 302 Intermediate Network Systems Administration

CISN 307 Windows Active Directory Services

CISN 308 Internetworking with TCP/IP

CISN 119 TCP/IP Protocols

•Linux/Unix networking concentration, focusing on preparing for the administration of commercial Linux/Unix servers and network environments.

CISC 324 Intermediate Linux Operating System

CISN 110 Networking Technologies - Preparation for N+ Certification

CISN 111 Intermediate Networking Technologies - Preparation for N+ Certification

CISN 119 TCP/IP Protocols

CISN 120 Beginning Network Administration with Linux

CISN 121 Network Administration with Linux: LAN Services

CISN 122 Network Administration with Linux: Internet Services

• Cisco router and network administration concentration, which covers all the objectives of the Cisco Certified Network Associate (CCNA) certification exam.

CISC 324 Intermediate Linux Operating System

CISN 140 CISCO Networking Academy (CCNA): Network Fundamentals

CISN 141 CISCO Networking Academy (CCNA): Routing Protocols and Concepts

CISN 142 CISCO Networking Academy (CCNA): LAN Switching and Wireless

CISN 143 CISCO Networking Academy (CCNA): Accessing the Wide Area Network

CIS: Computer Programming Degree

This degree includes general topics in the field of computer programming as well as focused topics related to one commonly used programming language. General topics include the use of an operating system, and the translation of a problem statement into a generic program solution. Programming language-specific topics include syntax, program structuring, language constructs and proper programming methods.

CISC 310 Introduction to Computer Information Science

CISP 350 Database Programming

* C++ Concentration

CISP 300 Algorithm Design/Problem Solving

CISP 360 Introduction to Structured Programming

CISP 480 Honors Introduction to Structured Programming

CISP 400 Object Oriented Programming with C++

CISP 430 Data Structures

* Cobol Concentration

CISA 322 Design and Development of Desktop Database Applications

CISP 300 Algorithm Design/Problem Solving

CISP 320 COBOL Programming

* Java Concentration

CISP 300 Algorithm Design/Problem Solving

CISP 360 Introduction to Structured Programming

CISP 480 Honors Introduction to Structured Programming

CISP 401 Object Oriented Programming with Jav

* Visual Basic Concentration

CISA 322 Design and Development of Desktop Database Applications

CISP 300 Algorithm Design/Problem Solving

CISP 370 Beginning Visual Basic

CISP 371 Intermediate Visual Basic

CIS: Computer Programming Certificate

This certificate includes general topics in the field of computer programming as well as focused topics related to one commonly used programming language. General topics include the use of an operating system, and the translation of a problem statement into a generic program solution. Programming language-specific topics include syntax, program structuring, language constructs and proper programming methods.

CISC 310 Introduction to Computer Information Science

CISC 320 Operating Systems

* C++ Concentration

CISP 300 Algorithm Design/Problem Solving

CISP 360 Introduction to Structured Programing

CISP 480 Honors introdution to Structured Programming

CISP 400 Object Oriented Programming with C++

CISP 430 Data Structures

* Java Concentration

CISP 300 Algorithm Design/Problem Solving

CISP 360 Introduction to Structured Programing

CISP 480 Honors introdution to Structured Programming

CISP 350 Database Programming

CISP 401 Object Oriented Programming with Jav

* Visual Basic Concentration

CISA 322 Design and Development of Desktop Database Applications

CISP 300 Algorithm Design/Problem Solving

CISP 370 Beginning Visual Basic

CISP 371 Intermediate Visual Basic

CIS: Database Management Degree

The CIS: Database Management degree focuses on relational database technology used in the business environment. The emphasis is on selecting the appropriate system platform for database deployment. Course work includes database system design and programming for desktop, enterprise and Internet platforms, structure query language (SQL) programming, introductory principles of modular programming, system design and problem solving, desktop operating systems, electronic spreadsheets and a variety of introductory business courses.

ACCT 101 Fundamentals of College Accounting

ACCT 301 Financial Accounting

BUS 110 Business Economics

ECON 302 Principles of Macroeconomics

BUS 300 Introduction to Business

BUS 310 Business Communications

ENGWR 300 College Composition

CISA 315 Introduction to Electronic Spreadsheets

CISA 320 Introduction to Database Management

CISA 322 Design and Development of Desktop Database Applications

CISC 310 Introduction to Computer Information Science

CISC 320 Operating Systems

CISP 300 Algorithm Design/Problem Solving

CISP 350 Database Programming

CISP 370 Beginning Visual Basic.

CISW 300 Web Publishing

CISW 410 Middleware Web Scripting

CIS: Database Management Certificate

The CIS: Database Management certificate involves the study of relational database technology used in the business environment. The emphasis is on selecting the appropriate system platform for database deployment. Course work includes database system design and programming for desktop, enterprise and Internet platforms, structure query language (SQL) programming, introductory principles of modular programming, system design and problem solving, desktop operating systems, and electronic spreadsheets.

CISA 315 Introduction to Electronic Spreadsheets

CISA 320 Introduction to Database Management

CISA 322 Design and Development of Desktop Database Applications

CISC 320 Operating Systems

CISP 300 Algorithm Design/Problem Solving

CISP 350 Database Programming

CISP 370 Beginning Visual Basic.

CISW 300 Web Publishing

CISW 410 Middleware Web Scripting

CIS: Microcomputer Applications Degree

This degree focuses on the use of the microcomputer and current, commonly used software to solve problems in a business environment. Course work includes microcomputer applications in database management, desktop publishing, electronic spreadsheets, presentation graphics, operating systems, word processing, and at least one programming language.

CISA 126 Outlook: Basics

BUSTEC 126 Outlook: Basics

CISA 127 Outlook: Tools

BUSTEC 127 Outlook: Tools

CISA 305 Beginning Word Processing

CISA 306 Intermediate Word Processing

CISA 315 Introduction to Electronic Spreadsheets

CISA 316 Intermediate Electronic Spreadsheets

CISA 320 Introduction to Database Management

CISA 322 Design and Development of Desktop Database Applications

CISA 330 Desktop Publishing

CISA 340 Presentation Graphics

CISC 306 Introduction to Web Page Creation

CISC 310 Introduction to Computer Information Science

CISC 320 Operating Systems

CISC 323 Linux Operating System

CISP 370 Beginning Visual Basic

BUSTEC 300 Beginning Keyboarding/Applications

ACCT 341 Computerized Accounting

BUSTEC 313 Presentations for the Business Professional

CISA 141 Capturing and Publishing Digital Media

CISA 160 Project Management Techniques and Software

CISA 171 Introduction to Adobe Acrobat

CISC 350 Introduction to Data Communications

CISC 351 Introduction to Local Area Networks

CISS 301 Ethical Hacking

CISW 300 Web Publishing

CISW 307 Introduction to Web Development and Design

ACCT 343 Computer Spreadsheet Applications for Accounting

CISA 331 Intermediate Desktop Publishing

CISC 305 Introduction to the Internet

CISP 350 Database Programming

CISP 360 Introduction to Structured Programming

CISP 371 Intermediate Visual Basic

CISP 480 Honors Introduction to Structured Programming

CISS 300 Introduction to Information Systems Security

CISW 370 Designing Accessible Web Sites

CIS: Microcomputer Applications Certificate

This certificate involves the use of the microcomputer and current, commonly used software to solve problems in a business environment. Course work includes microcomputer applications in database management, desktop publishing, electronic spreadsheets, presentation graphics, operating systems, and word processing.

CISA 305 Beginning Word Processing

CISA 315 Introduction to Electronic Spreadsheets

CISA 320 Introduction to Database Management

CISA 330 Desktop Publishing

CISA 340 Presentation Graphics

CISC 305 Introduction to the Internet

CISC 310 Introduction to Computer Information Science

CISC 320 Operating Systems

CISC 350 Introcution to Data Communications

CISA 306 Intermediate Word Processing

CISA 316 Intermediate Electronic Spreadsheets

CISA 322 Design and Development of Desktop Database Applications

CISC 306 Introduction to Web Page Creation

CISC 323 Linux Operating System

CIS: PC Support Management Degree

The CIS: PC Support Management degree covers the use and maintenance of a microcomputer’s hardware, software and network connections in today’s business environment. Course work includes learning basic computer skills in configuration, use, and troubleshooting major hardware components, different operating systems, and applications in a standalone and network environment. Additionally, the degree introduces basic business and project management skills. This program covers all the objectives of the Computing Technology Industry Association (CompTIA) A+ certification exam.

BUS 300 Introduction to Business

BUS 301 Business Communications

CISA 160 Project Management Techniques and Software

CISC 310 Introduction to Computer Information Science

CISC 320 Operating Systems

CISC 350 Introcution to Data Communications

CISC 351 Introduction to Local Area Networks

CISC 361 Microcomputer Support Essentials - Preparation for A+ Certification

CISC 362 Microcomputer and Applications Support

CISC 363 Microcomputer Support Technical - Preparation for A+ Certification

CISS 301 Ethical Hacking

CISA 126 Outlook: Basics

BUSTEC 126 Outlook: Basics

CISA 127 Outlook: Tools

BUSTEC 127 Outlook: Tools

CISA 305 Beginning Word Processing

CISA 315 Introduction to Electronic Spreadsheets

CISA 320 Introduction to Database Management

CISA 340 Presentation Graphics

CISC 306 Introduction to Web Page Creation

CISC 323 Linux Operating Systems

CIS: PC Support Certificate

The CIS: PC Support certificate covers the use and maintenance of a microcomputer’s hardware, software and network connections in today’s business environment. Course work includes basic computer skills in configuration, use, and troubleshooting major hardware components, different operating systems, and applications in a standalone and network environment. This program covers all the objectives of the Computer Technology Industry Associates (CompTIA) A+ certification exam.

BUS 310 Business Communications

CISC 310 Introduction to Computer Information Science

CISC 320 Operating Systems

CISC 350 Introcution to Data Communications

CISC 351 Introduction to Local Area Networks

CISC 361 Microcomputer Support Essentials - Preparation for A+ Certification

CISC 362 Microcomputer and Applications Support

CISC 363 Microcomputer Support Technical - Preparation for A+ Certification

CISS 301 Ethical Hacking

CISA 126 Outlook: Basics

BUSTEC 126 Outlook: Basics

CISA 127 Outlook: Tools

BUSTEC 127 Outlook: Tools

CISA 305 Beginning Word Processing

CISA 315 Introduction to Electronic Spreadsheets

CISA 320 Introduction to Database Management

CISA 340 Presentation Graphics

CISC 306 Introduction to Web Page Creation

CISC 323 Linux Operating Systems

Computer Information Security Essentials Certificate

This program provides the basic information and skills necessary for network administrators to implement security from internal and external threats to a network. It also provides preparation for the Computing Technology Industry Association (CompTIA) Security+ exam.

CISS 310 Network Security Fundamentals

CISS 325 Network Security and Firewalls

CISS 341 Implementing Windows Operating System Security

CISS 342 Implementing Linux Operating System Security

CISS 360 Computer Forensics and Investigation

Information Systems Security Degree

This program provides the information and skills necessary for network administration professionals to implement security from internal and external threats for an enterprise network. It covers client and server security on different operating systems, disaster recovery planning, and forensics. This program also provides preparation for several computer information security certification exams, including the Computer Technology Industry Association (CompTIA) Security+ exam, Microsoft Certified Systems Engineer (MCSE) exams and several of the Certified Information Systems Security Professional (CISSP) certification exams.

BUS 310 Business Communications

CISC 323 Linux Operating Systems

CISC 324 Intermediate Linux Operating System

CISN 110 Networking Technologies - Preparation for N+ Certification

CISN 111 Intermediate Networking Technologies - Preparation for N+ Certification

CISN 300 Network Systems Administration

CISN 302 Intermediate Network Systems Administration

CISN 307 Windows Active Directory Services

CISS 310 Network Security Fundamentals

CISS 325 Network Security and Firewalls

CISS 341 Implementing Windows Operating System Security

CISS 342 Implementing Linux Operating System Security

CISS 350 Disaster Recovery

CISS 360 Computer Forensics and Investigation

Information Systems Security Certificate

This program provides the information and skills necessary for network administrators to implement security to protect against internal and external threats to an enterprise network, and covers client and server security on different operating systems. This program provides preparation for several certification exams, including the Computer Technology Industry Association (CompTIA) Security+ exam, Microsoft Certified Systems Engineer (MCSE) exams and some of the Certified Information Systems Security Professional (CISSP) certification exams.

CISC 323 Linux Operating Systems

CISC 324 Intermediate Linux Operating System

CISN 300 Network Systems Administration

CISN 302 Intermediate Network Systems Administration

CISN 307 Windows Active Directory Services

CISS 310 Network Security Fundamentals

CISS 325 Network Security and Firewalls

CISS 341 Implementing Windows Operating System Security

CISS 342 Implementing Linux Operating System Security

CISN 110 Networking Technologies - Preparation for N+ Certification

CISN 111 Intermediate Networking Technologies - Preparation for N+ Certification

CISN 140 CISCO Networking Academy (CCNA): Network Fundamentals

CISS 301 Ethical Hacking

Network Administration Essentials - Windows Certificate

This program provides the information and skills necessary for network administration professionals to administer a Windows Active Directory domain-based enterprise network. It also provides preparation for several Microsoft Certified Systems Engineer (MCSE) certification exams.

CISN 300 Network Systems Administration

CISN 302 Intermediate Network Systems Administration

CISN 307 Windows Active Directory Services

CISN 308 Internetworking with TCP/IP

Web Developer Certificate

This certificate offers a program of study for students seeking jobs in the fields of web-based programming and web application development. It provides opportunities to develop the necessary skills and aptitudes for creating and maintaining interactive, database-driven web applications.

CISC 320 Operating Systems

CISC 323 Linux Operating Systems

CISC 324 Intermediate Linux Operating System

CISP 300 Algorithm Design/Problem Solving

CISP 360 Introduction to Structured Programing

CISP 370 Beginning Visual Basic.

CISP 401 Object Oriented Programming with Jav

CISP 480 Honors introdution to Structured Programming

CISP 350 Database Programming

CISW 300 Web Publishing

CISW 310 Advanced Web Publishing

CISW 360 Beginning Flash

CISW 400 Client-side Web Scripting

CISW 370 Designing Accessible Web Sites

CISW 410 Middleware Web Scripting

CISW 420 Server-side Web Scripting

CISW 304 Cascading Style Sheets

CISW 350

CISW 355 Web Imaging Projects

CISW 405 ActionScript for Flash

CISW 410 Middleware Web Scripting

CISW 411 Middleware Scripting Database Web Applications

CISW 442 Web Publishing with XML

Web Publishing Certificate

This certificate offers a program of study for students seeking jobs in the fields of web publishing, design, and development. It provides opportunities to develop the necessary skills for creating and maintaining large web sites for industry, government, and nonprofit agencies. General development of web publishing skills, including a thorough grounding in the HyperText Markup Language (HTML), Internet protocols, and web standards, is emphasized.

CISC 310 Introduction to Computer Information Science

CISC 320 Operating Systems

CISC 323 Linux Operating Systems

CISW 300 Web Publishing

CISW 304 Cascading Style Sheets

CISW 350 Imaging for the Web

CISW 370 Designing Accessible Web Sites

CISW 310 Advanced Web Publishing

CISW 400 Client-side Web Scripting

CISW 410 Middleware Web Scripting

CISW 420 Server-side Web Scripting

ARTNM 402 Intermediate Web Design

CISW 321 Web Site Development using Dreamweaver

CISW 355 Web Imaging Projects

CISW 360 Beginning Flash

CISW 442 Web Publishing with XML

Technical Communications Degree

The Technical Communications degree program is an interdisciplinary course of study designed to prepare students for employment as professional writers and communicators in a variety of media intended to instruct and inform audiences. The degree program includes substantial course work in writing, information design, editing, page design, online help development, web site creation, and the use of industry standard applications.

CISA 305 Beginning Word Processing

CISW 300 Web Publishing

ENGWR 342 Introduction to Technical/Professional Communication

ENGWR 344 Technical/Professional Communication: Writing Reports

ENGWR 344 Technical/Professional Communication: Writing Report

ENGWR 350 Technical/Professional Communication: Proposal/Writing

ENGWR 352 Technical/Professional Communication: Writing Technical Manuals

ENGWR 353 Technical/Professional Communication: Developing Help Systems

JOUR 300 Newswriting and Reporting

ARTNM 328 Digital Photo Imagery - PhotoShop Basics

ARTNM 330 Intermediate Digital Photo Imagery

ARTNM 352 Design for Publication

CISA 330 Desktop Publishing

CISA 331 Intermediate Desktop Publishing

ARTNM 401 Introduction to Web Development and Design

CISW 307 Introduction to Web Development and Design

ARTNM 402 Intermediate Web Design

ARTNM 404 Interactive Multimedia Basics

CISW 310 Advanced Web Publishing

Technical Communications Certificate

The Technical Communications certificate offers an interdisciplinary program of courses in writing, Art/New Media, and Computer Information Systems to prepare students for a variety of technical writing and professional communication careers. The certificate includes the theory, writing skills, design background, and computer applications knowledge needed for jobs in technical communication.

ARTNM 352 Design for Publication

CISA 330 Desktop Publishing

CISA 331 Intermediate Desktop Publishing

CISA 305 Beginning Word Processing

CISW 300 Web Publishing

ENGWR 342 Introduction to Technical/Professional Communication

ENGWR 352 Technical/Professional Communication: Writing Technical Manuals

ENGWR 353 Technical/Professional Communication: Developing Help Systems

ARTNM 328 Digital Photo Imagery - PhotoShop Basics

ARTNM 330 Intermediate Digital Photo Imagery

ARTNM 401 Introduction to Web Development and Design

ARTNM 402 Intermediate Web Design

ARTNM 404 Interactive Multimedia Basics

CISW 307 Introduction to Web Development and Design

CISW 310 Advanced Web Publishing

Engineering Technology Degree and Certificate

This degree and certificate emphasizes the knowledge and skills required for entry level success in the engineering professions. These include a basic preparation within the scientific fields including physics, mathematics, chemistry, and material sciences. These sciences are applied to technical analysis and graphic communication standards and practices. In addition, projects include environmental and sustainable design issues, product economics, and legal considerations. Current computer technologies and various analytical design and documentation software are emphasized throughout the program.

CHEM 305 Introduction to Chemistry

CHEM 310 Chemical Calculations

CISA 315 Introduction to Electronic Spreadsheets

CISA 316 Intermediate Electronic Spreadsheets

DESGN 300 Introduction to Design Resources

ENGR 307 Industrial Materials Testing

DESGN 302 Technical Documentation with CADD

DESGN 310 Graphic Analysis and Documentation

ENGR 312 Engineering Graphics

DESGN 328 Engineering Modeling and Design

DESGN 330 Engineering Systems and Design

ENGR 320 Manufacturing Processes

DESGN 340 Architecture and Construction

DESGN 360 Commercial Engineering Design and Drafting

DESGN 350 Surveying and Land Planning

ENGR 310 Engineering Survey Measurements

MATH 330 Trigonometry

PHYS 310 Conceptual Physics

PHYS 350 General Physics

ENGR 300 Introduction to Engineering

ENGR 305 Basic Technical Drawing

ENGR 307 Industrial Materials Testing

ENGR 310 Engineering Survey Measurements

ENGR 312 Engineering Graphics

ENGR 320 Manufacturing Processes

ENGR 401 Introduction to Electrical Circuits and Devices

ENGR 413 Properties of Materials

ENGR 420 Statics

ENGR 430 Dynamics

Engineering: Transfer Option

The purpose of the program is to provide academic preparation for transfer to California State University, Sacramento for the Engineering Construction Management Program or the Mechanical Engineering Technology Program. At the completion of the courses in the option, a student will obtain an A.S. Degree and have many of the courses required for transfer. Please check the current Articulation Agreement by Major at www.assist.org

DESGN 100 Introduction to Computer Aided Drafting Design (CADD)

DESGN 302 Technical Documentation with CADD

DESGN 340 Architecture and Construction

DESGN 360 Commercial Engineering Design and Drafting

DESGN 350 Surveying and Land Planning

ENGR 310 Engineering Survey Measurements

MATH 350 Calculus for the Life and Social Sciences I

MATH 351 Calculus for the Life and Social Sciences II

PHYS 350 General Physics

PHYS 360 General Physics

* Construction Management Option

ACCT 301 Financial Accounting

ACCT 311 Managerial Accounting

BIOL 303 Survey of Biology

BUS 340 Business Law

CISA 305 Beginning Word Processing

CISA 315 Introduction to Electronic Spreadsheets

CISC 320 Operating Systems

DESGN 310 Graphic Analysis and Documentation

ENGR 307 Industrial Materials Testing

ENGR 413 Properties of Materials

ENGR 420 Statics

ENGWR 300 College Composition

SPEECH 311 Argumentation and Debate

* Mechanical Engineering Technology Option

CHEM 305 Introduction to Chemistry

CHEM 400 General Chemistry

CISA 315 Introduction to Electronic Spreadsheets

CISA 316 Intermediate Electronic Spreadsheets

DESGN 300 Introduction to Design Resources

ENGR 307 Industrial Materials Testing

DESGN 328 Engineering Modeling and Design

DESGN 310 Graphic Analysis and Documentation

ENGR 312 Engineering Graphics (3)

DESGN 330 Engineering Systems and Design

ENGR 320 Manufacturing Processes

Electronic Systems Technology Degree and Certificate

The Electronics Systems Technology Degree or Certificate combines broad-based electronic and telecommunications training with specialty areas such as robotics, fiber optics, programmable interface controllers (PICs), and stamp micro-controllers.

*1st Semester - Basic Certificate*

ET 115 Fiber Optics and Telecommunication Cabling

ET 302 Principles of Electricity and Electronics

ET 308 Technical Soldering Practices and Techniques

*Second Semester - Advanced Certificate:*

ET 312 Mathematics for Circuit Analysis

ET 322 Semiconductors and Nanotechnology

*Following Semesters:*

ET 112 Communications Units

ET 253 Industrial Communication Systems Support

ET 335 Integrated Circuits with Computer Applications

ET 380 Introduction to Electronic Communications

ET 420 Microcontrollers and Digital Signal Processors

Solar Energy Systems Design, Estimation, and Sales Certificate

The Solar Energy Systems Design, Estimation, and Sales certificate provides training in all aspects of solar photovoltaic (PV) system design, cost estimation, sales, and installation. It also includes training in oral presentations and management skills. The courses included in the certificate also qualify students to take the North American Board of Certified Energy Practitioners (NABCEP) PV Entry Level Certificate of Knowledge Exam.

ET 302 Principles of Electricity and Electronics

ENERGY 140 Electrical Applications for Solar Installers

ENERGY 141 Electrical & Mechanical Applications for Solar Installers

ENERGY 142 NABCEP (North American Board of Certified Energy Practitioners) Entry Level Test Review

ENERGY 143 Solar Photovoltaic Systems Design, Installation, and Troubleshooting

BUS 350 Small Business Management/Entrepreneurship

SPEECH 301 Public Speaking

Solar Energy Technology Certificate

The Solar Energy Technology certificate provides training in all aspects of Solar Photovoltaic (PV) System design, installation, troubleshooting and repair. The courses included in the certificate also qualify students to take the North American Board of Certified Energy Practitioners (NABCEP) PV Entry Level Certificate of Knowledge Exam.

ET 302 Principles of Electricity and Electronics

ENERGY 140 Electrical Applications for Solar Installers

ENERGY 141 Electrical & Mechanical Applications for Solar Installers

ENERGY 142 NABCEP (North American Board of Certified Energy Practitioners) Entry Level Test Review

ENERGY 143 Solar Photovoltaic Systems Design, Installation, and Troubleshooting