ECU COURSE CATALOG

2025-2026 I.T. MANAGEMENT COURSES

ITM-3423   Web Development   3 Credits
THIS COURSE COVERS A WIDE ARRAY OF PROGRAMMING CONCEPTS USING CURRENT SOFTWARE DEVELOPMENT TOOLS, INCLUDING DATA STRUCTURES, RESOURCE MANAGEMENT, SECURITY, SOFTWARE DEVELOPMENT, AND WEB DEVELOPMENT. STUDENTS WILL ENGAGE IN A COMMUNITY OF SOFTWARE DEVELOPERS AND PRESENT A FINAL PROJECT TO THEIR PEERS. Required Previous: CMPSC-1113 with a grade of C or higher or departmental approval.

ITM-3473   Data Visualization   3 Credits
PROVIDES AN UNDERSTANDING OF THE ROLE OF ANALYTICS, VISUALIZATION, DASHBOARDING, AND BUSINESS INTELLIGENCE IN SUPPORT OF MANAGERIAL DECISION MAKING. Required Previous: BSEC-2603 or departmental approval.

ITM-3613   Data Communications and Computer Networks   3 Credits
DATA COMMUNICATIONS AND TELEPROCESSING SYSTEMS PRINCIPLES ARE EXAMINED IN DETAIL. MAJOR TOPICS INCLUDE HARDWARE, NETWORKS (LANS AND WANS), PROTOCOLS AND ARCHITECTURES, AND THE PLANNING AND MANAGEMENT OF DATA COMMUNICATIONS AND TELEPROCESSING SYSTEMS. THE MATERIAL COVERED IN THIS COURSE WILL INCLUDE MATERIAL TO PREPARE A STUDENT TO SEEK A+ AND NETWORK + CERTIFICATIONS. THIS COURSE NORMALLY OFFERED IN THE SPRING SEMESTER ONLY.

ITM-3823   Cybersecurity   3 Credits
THIS COURSE LOOKS AT PHILOSOPHICAL, THEORETICAL, AND APPLIED SCENARIOS AND INFRASTRUCTURES SUPPORTING THE FOUNDATIONS OF CURRENT CYBER SECURITY MEASURES AND SECURITY POLICIES. THIS COURSE WILL LOOK AT COMPLEX LEGAL, REGULATORY, AND POLICY-BASED ISSUES AND THEIR EFFECT ON SOCIAL, GOVERNMENT, AND ECONOMIC IMPLICATIONS. YOU WILL EXPLORE ISSUES AND IMPACTS OF PRIVACY, ECOMMERCE, INFORMATION SECURITY, SOCIAL EQUITY, CRIME, FREE SPEECH, AND TELECOMMUNICATIONS AND HOW THEY RELATE TO THE POLICIES OF CYB

ITM-3843   Cloud Management   3 Credits
TEACHES STUDENTS TO IMPLEMENT AND MAINTAIN CLOUD TECHNOLOGIES. REVIEWS THE THEORY AND APPLICATION OF CONFIGURATIONS RESIDING IN A PLATFORM UTILIZING CLOUD SOLUTIONS IN A WINDOWS AZURE ENVIRONMENT. STUDENTS WILL LEARN HOW TO MANAGE AZURE RESOURCES; CONFIGURE AND MANAGE STORAGE; CONFIGURE AND MANAGE VIRTUAL MACHINES AND NETWORKS; AND MANAGE IDENTITIES USING TOOLS WITHIN THE AZURE PLATFORM.

ITM-4653   Database Theory and Applications   3 Credits
DATABASE CONCEPTS AND STRUCTURES. FILE AND DATA MANAGEMENT PRINCIPLES UNDERLYING DATABASE CONSTRUCTION. FUNDAMENTAL TYPES OF DATABASE MODELS WITH EMPHASIS ON RELATIONAL DATABASES AND THE USE OF MICROSOFT SQL SERVER. PRACTICE IN ANALYSIS, DESIGN, DEVELOPMENT, AND OPTIMIZATION OF WORKING DATABASE APPLICATIONS WITH REGARD TO A VARIETY OF PROBLEMS. THIS COURSE NORMALLY OFFERED IN THE FALL SEMESTER ONLY. Required Previous: CMPSC-1113 or departmental approval.

ITM-4753   Software Development & Team Dynamics   3 Credits
THIS COURSE ADDRESSES SOFTWARE DEVELOPMENT METHODOLOGIES, TEAM DYNAMICS, AND EFFECTIVE COMMUNICATION AND DOCUMENTATION. STUDENTS WILL UTILIZE KNOWLEDGE AND SKILLS OBTAINED FROM DATABASE THEORY AND APPLICATIONS AND PROGRAMMING COURSES TO WORK WITH A TEAM TO ANALYZE PROBLEMS AND CREATE A SOFTWARE SOLUTION. THIS CAPSTONE COURSE WILL ALSO INCLUDE COLLEGE-TO-CAREER BUSINESS COMMUNICATION. Required Previous: ITM-4653; ITM-4753 must be taken in the last semester; or departmental approval.

ITM-H3823   Honors-Cybersecurity   3 Credits
THIS COURSE LOOKS AT PHILOSOPHICAL, THEORETICAL, AND APPLIED SCENARIOS AND INFRASTRUCTURES SUPPORTING THE FOUNDATIONS OF CURRENT CYBER SECURITY MEASURES AND SECURITY POLICIES. THIS COURSE WILL LOOK AT COMPLEX LEGAL, REGULATORY, AND POLICY-BASED ISSUES AND THEIR EFFECT ON SOCIAL, GOVERNMENT, AND ECONOMIC IMPLICATIONS. YOU WILL EXPLORE ISSUES AND IMPACTS OF PRIVACY, ECOMMERCE, INFORMATION SECURITY, SOCIAL EQUITY, CRIME, FREE SPEECH, AND TELECOMMUNICATIONS AND HOW THEY RELATE TO THE POLICIES OF CYB Required Previous: MIS-3433 with a grade of C or higher or departmental approval.

ITM-H4653   Honors-Database Theory and Applications   3 Credits
DATABASE CONCEPTS AND STRUCTURES. FILE AND DATA MANAGEMENT PRINCIPLES UNDERLYING DATABASE CONSTRUCTION. FUNDAMENTAL TYPES OF DATABASE MODELS WITH EMPHASIS ON RELATIONAL DATABASES AND THE USE OF MICROSOFT SQL SERVER. PRACTICE IN ANALYSIS, DESIGN, DEVELOPMENT, AND OPTIMIZATION OF WORKING DATABASE APPLICATIONS WITH REGARD TO A VARIETY OF PROBLEMS. THIS COURSE NORMALLY OFFERED IN THE FALL SEMESTER ONLY. Required Previous: MIS-3433 with a grade of C or higher or departmental approval.