DEGREE REQUIREMENTS
Course requirements for all UNCW degrees include: (1) University Studies, (2) specific major requirements, and (3) sufficient elective hours for a combined total of a minimum of 124 hours.

(1) UNIVERSITY STUDIES
See University Studies sheet and/or information on the web at http://www.uncw.edu/uc/basic/basic.html

(2) MAJOR REQUIREMENTS – CIT (64 hours)

Core Courses (30 hours):
____ CIT 110 – Introduction to Information Technology (3) {prereq CIT 110}
____ CIT 204 – Digital Media (3) {prereq CIT 110}
____ CIT 225 – Platform Technologies (3) {prereq CSC 121 or CSC 131}
____ CIT 310 – Web Page Development (3) [cross listed as MIS 310] {prereq CIT 110 or MIS 213}
____ CIT 324 – Network Security Management (3) [cross listed as MIS 324] {prereq CIT 110 or MIS 213}
____ CIT 352 – Systems Administration (3) [cross listed as MIS 312] {prereq CIT 213 or MIS 213}
____ CIT 410 – Web Application Development (3) {prereq CIT 310}
____ CIT 411 – Information Systems Analysis (3) [cross listed as MIS 411] {prereq MIS 315}
____ CIT 425 – Human Computer Interfaces (3) {prereq CIT 310}
____ CIT 480 – IT Resource Planning and Management (3) {prereq CIT 411}

Required Courses (25 hours):
____ CIT 213 -- Introduction to Databases: Techniques and Technologies (3) {prereq CIT 110}
____ CIT 320 – Network Fundamentals (3) {prereq CIT 110 or MIS 213} or
   CSC 344 Computer Networks (3)
____ CSC 131 – Intro to Computer Science (4) [CSC 121 before Fall 2013] {prereq MAT 111 or MAT 115}
____ CSC 385 – Professional and Ethical Issues in Computer Science (3) {prereq ENG 101}
____ MAT 151 – Basic Calculus with Applications I (3) {prereq MAT 111 or MAT 115}
____ MIS 315 Management of Database Systems (3) {prereq MIS 213}
____ MIS 316 Business Application Development (3) {prereq MIS 216 or CSC 121 or CSC 131}
____ STT 215 – Introduction to Statistics (3) {prereq MAT 105} or
   QMM 280 – Statistical Analysis for Business and Economics (3) {prereq MAT 111}

Electives (9 hours):
____ Nine credit hours chosen from CIT or CSC or MIS at the 300-level or higher.
    1. _________ (Course: ____________________________)
    2. _________ (Course: ____________________________)
    3. _________ (Course: ____________________________)
COURSE TITLES AND DESCRIPTIONS

CIT 110 – Introduction to Information Technology (3) Information representation, the Internet and HTML, algorithmic thinking and programming, language translation, modeling and abstraction, algorithmic complexity and non-computability, machine architecture and parallel computation, networks and communication database principles, multimedia, social impacts of computing.

CIT 213 -- Introduction to Databases: Techniques and Technologies (3) A hands-on introduction to fundamental concepts of database management systems. Topics include advantages of using database management systems, data modeling, relational database design, query-building, security, privacy and ethical issues, and introductions to Web-based processing, Big Data concepts, and non-relational models as time permits.

CIT 204 – Digital Media (3) Introduction to technologies of the Internet. Issues in Web page design; graphics and animation; client/server concepts; collaborative computing and group work; network publishing; security and encryption; audio, video, and image compression; ethical issues and privacy; e-commerce; client-side Web programming; and dynamic Web page generation.

CIT 225 – Platform Technologies (3) Select, deploy, integrate and administer platforms or components to support the organization’s IT infrastructure. This course includes the fundamentals of hardware and software and how they integrate to form essential components of IT systems.

CIT 310 – [cross listed as MIS310] Web Page Development (3) Study of the design and creation of web pages. Topics include page structure, human computer interface design, style sheets, reusability, and design concepts. Also studied are client side scripting languages and Search Engine Optimization (SEO) techniques.

CIT 320 – Network Fundamentals (3) This course introduces the OSI model, network topologies, IP addressing, and subnet masks, simple routing techniques, and basic switching terminology. Topics include the basic functions of the seven layers of the OSI model, different classes of IP addressing and subnetting, router login scripts. Upon completion, students should be able to list the key internetworking functions of the OSI Networking Layer and how they are performed in a variety of router types.

CIT 324 – [cross listed as MIS324] Network Security Management (3) Examination of current standards of due care and best business practices in Information Security. Includes examination of security technologies, methodologies and practices. Focus is on evaluation and selection of optimal security posture. Topics include evaluation of security models, risk assessment, threat analysis, organizational technology evaluation, security implementation, disaster recovery planning and security policy formulation and implementation.

CIT 352 – [cross listed as MIS312] Systems Administration (3) Prerequisite: CIT 213 or MIS 213 or consent of instructor. Principles and application of computer hardware and software will be presented through lecture of the underpinnings, installation, configuration, and laboratory experiences. This course will provide the technology background for system developers to understand tradeoffs in architecture for effective use in a business environment. Networked computing systems and various operating systems will be covered.

CIT 410 – Web Application Development (3) A structured approach to building and maintaining dynamic and interactive Web sites. With an emphasis on application design and development, students will gain a thorough understanding of server-side scripting, form validation, and Web site security while advancing their understanding of database design principles and SQL. Students will create a database-driven Web-site by the end of the semester.

CIT 411 – [cross listed as MIS311] Information Systems Analysis (3) The general aim of this course is to examine the analysis and design of systems in business for routine business operations, management reporting, and decision support at various levels within the organization. The course will introduce some basic concepts, methodologies, techniques and tools that are commonly applied in this field.

CIT 425 – Human Computer Interfaces (3) This course is focused on human-computer interaction for information technology professionals and managers. The course will explore analysis and design of systems from the point of view of HCI. Students will be able to identify and understand the: variety of theoretical and methodological approaches to the study of HCI; costs and benefits of incorporating an HCI perspective into the system development life cycle; and, impact of social, economic, political and cultural factors on the design of user interfaces.

CIT 480 – IT Resource Planning and Management (3) Prerequisite: CIT 411. This course will explore the management and strategic alignment of IT resources within the organization. Topics include IT Strategy, IT alignment, planning and managing technology resources and integration of emerging technology into the organization.