

DIGITAL SCIENCES - B.S.

College of Communication and Information

School of Digital Sciences
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Description

The Bachelor of Science degree in Digital Sciences is designed to provide students with the ability to adapt and succeed in a rapidly changing digital world. The program provides a broad overview of digital technologies, often from multiple points of view. For example, a student may study the content and visual layout of a web page with a journalism professor and later study the programming aspects of a web page with a business professor. A course with an architect adds more material on design, and a course with a computer scientist adds additional programming skills. This multidisciplinary skill set adds the flexibility needed for many of today's careers.

Building on this broad overview, the program adds further depth in technical topics, societal issues, and project management. Students gain additional technical competency by studying information management, database systems, and digital security. Finally, students learn how to work on a team by studying requirements engineering, project management, and team dynamics.

The program culminates with a multidisciplinary group capstone project. Students put theory into practice in this integrative experience by applying their new knowledge and skills on a large group project. Moreover, this capstone class meets concurrently with a class in another major, with each group contributing their disciplinary expertise to create a richer product than either group could create individually. As a result, both sets of students receive practical experience working on a diverse project team, much as they will do later in the workplace.

The Digital Sciences major includes the following optional concentrations:

- The **Digital Systems Analysis** concentration focuses on the business data and software applications needed by an organization and the planning and management of a computer information system to meet those needs.
- The **Digital Systems Interaction** concentration focuses on the educational and interactive applications needed by an organization and the improvement of the user's interaction with those applications.
- The **Digital Systems Management** concentration focuses on the technical leadership needed by an organization and the management of the computer information system and infrastructure to support the goals of the business.
- The **Digital Systems Software Development** concentration focuses on the website and software applications needed by an organization and the design and maintenance of a user interface and software system to meet those needs.
- The **Digital Systems Telecommunication Networks** concentration focuses on the communication infrastructure needed by

an organization and the design and management of a telecommunication system and computer network to meet those needs.

Students may declare the Digital Sciences major without a concentration. That course of study is ideal for students interested in other career paths within digital sciences.

Programs in the College of Communication and Information are, by nature, innovative, interdisciplinary and collaborative, which is critical to both professional and scholarly disciplines. Students are educated to work at the intersections of communication, information and technology. Through a core of diverse theory- and practice-based courses, students learn basic concepts that apply across the range of college programs and develop a sense of professional expectations and build toward interdisciplinary thinking and application.

FULLY OFFERED AT:

- Kent Campus

Admission Requirements

The university affirmatively strives to provide educational opportunities and access to students with varied backgrounds, those with special talents and adult students who graduated from high school three or more years ago.

Freshman Students on the Kent Campus: The freshman admission policy on the Kent Campus is selective. Admission decisions are based upon the following: cumulative grade point average, ACT and/or SAT scores, strength of high school college preparatory curriculum and grade trends. The Admissions Office at the Kent Campus may defer the admission of students who do not meet admissions criteria but who demonstrate areas of promise for successful college study. Deferred applicants may begin their college coursework at one of seven regional campuses of Kent State University. For more information on admissions, including additional requirements for some academic programs, visit the admissions website for new freshmen.

Freshman Students on the Regional Campuses: Kent State campuses at Ashtabula, East Liverpool, Geauga, Salem, Stark, Trumbull and Tuscarawas, as well as the Regional Academic Center in Twinsburg, have open enrollment admission for students who hold a high school diploma, GED or equivalent.

English Language Proficiency Requirements for International Students: All international students must provide proof of English language proficiency (unless they meet specific exceptions) by earning a minimum 525 TOEFL score (71 on the Internet-based version), minimum 75 MELAB score, minimum 6.0 IELTS score or minimum 48 PTE score, or by completing the ESL level 112 Intensive Program. For more information on international admission, visit the Office of Global Education's admission website.

Transfer, Transitioning and Former Students: For more information about admission criteria for transfer, transitioning and former students, please visit the admissions website.

Program Learning Outcomes

Graduates of this program will be able to:

1. Demonstrate broad interdisciplinary knowledge and understanding of digital sciences across traditional college and professional boundaries
2. Work with technical, business and design professionals and Integrate material from these various disciplines
3. Adapt their thinking based on how different societies, cultures, genders, ethnic groups and professions approach technology and information and use it in different ways
4. Demonstrate competence with a broad range of digital technologies
5. Apply multiple approaches to a problem as practiced by different professions
6. Demonstrate theoretical and practical understanding of web page design, web programming, computational thinking, database systems, information management and digital systems security
7. Apply design thinking to technological problems
8. Demonstrate familiarity with design thinking and the relationship between design and technology
9. Help web designers and programmers make their technology easier to use
10. Apply critical evaluation and problem solving skills to organizational needs
11. Analyze customer needs, consider the impact on various diverse groups or cultures, evaluate solutions from a variety of technical and design viewpoints and solve a variety of technical and design problems.
12. Demonstrate effective communication skills, both verbally and in written form, by communicating as individuals or as part of a project team, in addition to communicating with technical, business and design professionals
13. Participate in and lead multidisciplinary project teams
14. Demonstrate theoretical and practical understanding of requirements engineering, project management and team dynamics

University Requirements

All students in a bachelor's degree program at Kent State University must complete the following university requirements for graduation.

NOTE: University requirements may be fulfilled in this program by specific course requirements. Please see Program Requirements for details.

Destination Kent State: First Year Experience	1
Course is not required for students with 25 transfer credits, excluding College Credit Plus, or age 21+ at time of admission.	
Diversity Domestic/Global (DIVD/DIVG)	2 courses
Students must successfully complete one domestic and one global course, of which one must be from the Kent Core.	
Experiential Learning Requirement (ELR)	varies
Students must successfully complete one course or approved experience.	
Kent Core (see table below)	36-37
Writing-Intensive Course (WIC)	1 course
Students must earn a minimum C grade in the course.	
Upper-Division Requirement	39 (or 42)
Students must successfully complete 39 upper-division (numbered 30000 to 49999) credit hours to graduate. Students in a B.A. and/or B.S. degree in the College of Arts and Sciences must complete 42 upper-division credit hours.	
Total Credit Hour Requirement	120

Some bachelor's degrees require students to complete more than 120 credit hours.

Kent Core Requirements

Kent Core Composition (KCOMP)	6
Kent Core Mathematics and Critical Reasoning (KMCR)	3
Kent Core Humanities and Fine Arts (KHUM/KFA) (min one course each)	9
Kent Core Social Sciences (KSS) (must be from two disciplines)	6
Kent Core Basic Sciences (KBS/KLAB) (must include one laboratory)	6-7
Kent Core Additional (KADL)	6
Total Credit Hours:	36-37

Program Requirements

Major Requirements

Code	Title	Credit Hours
Major Requirements (courses count in major GPA)		
DSCI 13210	DESIGN PROCESSES AND PRINCIPLES	3
DSCI 15310	COMPUTATIONAL THINKING AND PROGRAMMING	3
DSCI 33310	HUMAN-COMPUTER INTERACTION	3
DSCI 34410	DIGITAL INFORMATION MANAGEMENT AND PROCESSING	3
DSCI 40910	CAPSTONE IN DIGITAL SCIENCES (ELR)	3
DSCI 41510	PROJECT MANAGEMENT AND TEAM DYNAMICS (WIC) ¹	3
DSCI 41610	DIGITAL SYSTEMS SECURITY	3
DSCI 49992	INTERNSHIP IN DIGITAL SCIENCES (ELR)	1
MIS 24053	INTRODUCTION TO COMPUTER APPLICATIONS	3
MIS 24065	WEB PROGRAMMING	3
TECH 46411	REQUIREMENTS ENGINEERING AND ANALYSIS	3
Additional Requirements (courses do not count in major GPA)		
UC 10097	DESTINATION KENT STATE: FIRST YEAR EXPERIENCE	1
College of Communication and Information Core Electives, choose from the following:		9
CCI 12001	PHOTOGRAPHY	
COMM 15000	INTRODUCTION TO HUMAN COMMUNICATION (KADL)	
COMM/JMC 21008	SOCIAL MEDIA STRATEGIES	
COMM 35852	INTERCULTURAL COMMUNICATION (DIVG)	
JMC 20001	MEDIA, POWER AND CULTURE (DIVD) (KSS)	
LIS 30010	INFORMATION FLUENCY IN THE WORKPLACE AND BEYOND	
UXD 20001	INTRODUCTION TO USER EXPERIENCE DESIGN	
VCD 13000	DESIGN: PRINCIPLES, PROCESSES AND PRACTICE	
Kent Core Composition		6
Kent Core Mathematics and Critical Reasoning		3
Kent Core Humanities and Fine Arts (minimum one course from each)		9
Kent Core Social Sciences (must be from different categories)		6
Kent Core Basic Sciences (must include one laboratory)		6-7
Kent Core Additional		6
General Electives (total credit hours depends on earning 120 credit hours, including 39 upper-division credit hours)		23

Additional Requirements or Concentrations

Choose from the following:	20
Additional Requirements for Students Not Declaring a Concentration	
Digital Systems Analysis Concentration	
Digital Systems Interaction Concentration	
Digital Systems Management Concentration	
Digital Systems Software Development Concentration	
Digital Systems Telecommunication Networks Concentration	
Minimum Total Credit Hours:	120

¹ Minimum C grade is required to fulfill the writing-intensive requirement.

Additional Requirements for Students Not Declaring a Concentration

[BS-DS]

Code	Title	Credit Hours
Major Requirements (courses count in major GPA)		
MIS 44043	DATABASE MANAGEMENT SYSTEMS	3
Digital Sciences (DSCI) Electives, choose from the following: ¹		6
DSCI 10010	SOCIETY, CULTURE AND THE DIGITAL SCIENCES	
DSCI 10310	MY STORY ON THE WEB	
DSCI 10410	INFORMATION ETHICS AND SOCIAL RESPONSIBILITY	
DSCI 19995	SPECIAL TOPICS IN DIGITAL SCIENCES	
DSCI 23410	COGNITION IN TECHNOLOGY	
DSCI 26010	TELECOMMUNICATION INFRASTRUCTURE	
DSCI 29995	SPECIAL TOPICS IN DIGITAL SCIENCES	
DSCI 31010	ENTERPRISE ARCHITECTURE	
DSCI 33310	HUMAN-COMPUTER INTERACTION	
DSCI 39995	SPECIAL TOPICS IN DIGITAL SCIENCES	
DSCI 49910	EMERGING TECHNOLOGIES IN DIGITAL SCIENCES	
DSCI 49992	INTERNSHIP IN DIGITAL SCIENCES (ELR)	
DSCI 49995	SPECIAL TOPICS IN DIGITAL SCIENCES	
DSCI 49996	INDIVIDUAL INVESTIGATION IN DIGITAL SCIENCES	
Approved Electives in Digital Sciences or Related Area ¹		9
CCI 46001	RESPONSIVE WEB DESIGN	
CCI 46002	ADVANCED RESPONSIVE WEB DESIGN	
COMM 21008	SOCIAL MEDIA STRATEGIES	
COMM 26001	PUBLIC COMMUNICATION IN SOCIETY	
COMM 35600	COMMUNICATION IN SMALL GROUPS AND TEAMS	
COMM 41000	SPORTS COMMUNICATION	
COMM 43000	COMMUNICATION TECHNOLOGY AND HUMAN INTERACTION	
COMM 45006	MEDIA USE AND EFFECTS	
COMM 45957	LANGUAGE, MEANING AND COGNITION	
CRIM 46800	INTELLIGENCE AND NATIONAL SECURITY	
CRIM 46803	INFORMATION AND CYBER SECURITY	
CS 10001	COMPUTER LITERACY	
CS 10051	INTRODUCTION TO COMPUTER SCIENCE (KMCR)	

CS 13001	COMPUTER SCIENCE I: PROGRAMMING AND PROBLEM SOLVING
CS 13011	COMPUTER SCIENCE IA: PROCEDURAL PROGRAMMING
CS 13012	COMPUTER SCIENCE IB: OBJECT ORIENTED PROGRAMMING
CS 13401	USER LEVEL COMPUTER SECURITY
CS 23001	COMPUTER SCIENCE II: DATA STRUCTURES AND ABSTRACTION
CS 23022	DISCRETE STRUCTURES FOR COMPUTER SCIENCE
CS 33007	INTRODUCTION TO DATABASE SYSTEM DESIGN
CS 33101	STRUCTURE OF PROGRAMMING LANGUAGES
CS 33211	OPERATING SYSTEMS
CS 33223	UNIX TOOLS
CS 33901	SOFTWARE ENGINEERING
CS 35101	COMPUTER ARCHITECTURE
CS 43202	SYSTEMS ADMINISTRATION
CS 43203	SYSTEMS PROGRAMMING
CS 46101	DESIGN AND ANALYSIS OF ALGORITHMS
DSCI 10010	SOCIETY, CULTURE AND THE DIGITAL SCIENCES
DSCI 10310	MY STORY ON THE WEB
DSCI 10410	INFORMATION ETHICS AND SOCIAL RESPONSIBILITY
DSCI 19995	SPECIAL TOPICS IN DIGITAL SCIENCES
DSCI 23410	COGNITION IN TECHNOLOGY
DSCI 26010	TELECOMMUNICATION INFRASTRUCTURE
DSCI 29995	SPECIAL TOPICS IN DIGITAL SCIENCES
DSCI 31010	ENTERPRISE ARCHITECTURE
DSCI 33310	HUMAN-COMPUTER INTERACTION
DSCI 39995	SPECIAL TOPICS IN DIGITAL SCIENCES
DSCI 49910	EMERGING TECHNOLOGIES IN DIGITAL SCIENCES
DSCI 49992	INTERNSHIP IN DIGITAL SCIENCES (ELR)
DSCI 49995	SPECIAL TOPICS IN DIGITAL SCIENCES
DSCI 49996	INDIVIDUAL INVESTIGATION IN DIGITAL SCIENCES
ENG 20002	INTRODUCTION TO TECHNICAL WRITING
ENG 30062	PRINCIPLES OF TECHNICAL WRITING
ENG 30063	PROFESSIONAL WRITING
ENTR 27056	INTRODUCTION TO ENTREPRENEURSHIP
ETEC 47427	TECHNOLOGY AND LEARNING
GEOG 29160	MAPPING OUR WORLD
GEOG 49070	GEOGRAPHIC INFORMATION SCIENCE
GEOG 49076	SPATIAL PROGRAMMING
GEOG 49080	ADVANCED GEOGRAPHIC INFORMATION SCIENCE
GEOG 49085	WEB AND MOBILE GEOGRAPHIC INFORMATION SCIENCE
GEOG 49162	CARTOGRAPHY AND GEOVISUALIZATION
GEOG 49163	CARTOGRAPHY AND GEOVISUALIZATION LABORATORY
IT 20021	C# PROGRAMMING
IT 21200	ETHICAL HACKING
IT 36302	ADVANCED C# PROGRAMMING
IT 36308	ERGONOMICS IN COMPUTER SYSTEMS
IT 36309	PROGRAMMING MOBILE APPLICATIONS

IT 36310	MULTIMEDIA DEVELOPMENT TOOLS
IT 36318	SURVEY OF INFORMATION SECURITY, INTERNET FRAUD AND COMPUTER FORENSICS (WIC)
IT 36320	COMPUTER FORENSICS
IT 36321	NETWORK FORENSICS
IT 36322	SOCIAL MEDIA AND MOBILE DEVICE FORENSICS
IT 36330	LOCAL AREA NETWORK SECURITY FUNDAMENTALS
IT 42000	SOCIAL MEDIA SECURITY
IT 42002	WIRELESS AND MOBILE DEVICE SECURITY
JMC 20001	MEDIA, POWER AND CULTURE (DIVD) (KSS)
JMC 21001	PRINCIPLES OF ADVERTISING
JMC 21008	SOCIAL MEDIA STRATEGIES
JMC 28001	PRINCIPLES OF PUBLIC RELATIONS
MAGC 22005	MULTIMEDIA AND GAME DESIGN
MIS 24163	PRINCIPLES OF MANAGEMENT
MIS 34036	ENTERPRISE SYSTEMS AND BUSINESS PROCESSES
MIS 34054	USING INFORMATION SYSTEMS FOR SOLVING BUSINESS PROBLEMS
MIS 34060	OPERATIONS MANAGEMENT
MIS 34068	SYSTEMS ANALYSIS AND DESIGN
MIS 34070	PROGRAMMING THEORY AND APPLICATIONS
MIS 34158	MANAGERIAL AND TECHNOLOGICAL ASPECTS OF HEALTHCARE SYSTEMS MANAGEMENT
MIS 34165	DYNAMICS OF LEADERSHIP
MIS 44042	NETWORK THEORY AND APPLICATIONS
MIS 44043	DATABASE MANAGEMENT SYSTEMS
MIS 44045	INFORMATION SYSTEMS MANAGEMENT
MIS 44049	NETWORK MANAGEMENT AND CYBERSECURITY
MIS 44062	SUPPLY CHAIN MANAGEMENT
PSYC 11762	GENERAL PSYCHOLOGY (DIVD) (KSS)
PSYC 40445	COGNITIVE PSYCHOLOGY
TECH 10001	INFORMATION TECHNOLOGY
TECH 26010	INTRODUCTION TO COMPUTER ENGINEERING TECHNOLOGY
TECH 26301	NETWORKING HARDWARE I
TECH 33010	COMPUTER HARDWARE
TECH 36302	NETWORKING HARDWARE II
TECH 43050	INVENTIVE PROBLEM SOLVING
TECH 43060	MANAGEMENT OF TECHNOLOGY INNOVATION
TECH 43222	COMPUTER HARDWARE ENGINEERING AND ARCHITECTURE
TECH 46312	WIRELESS NETWORK AND TELECOMMUNICATION SYSTEMS
TECH 46330	VISUAL BASIC PROGRAMMING IN ENGINEERING TECHNOLOGY
TECH 46350	NETWORK MANAGEMENT AND DESIGN TECHNOLOGY
VCD 13000	DESIGN: PRINCIPLES, PROCESSES AND PRACTICE
or VCD 14001	VISUAL DESIGN LITERACY
VCD 14002	COMMUNICATING WITH COLOR
VCD 34004	VISUAL ETHICS
VCD 37000	VISUAL DESIGN FOR MEDIA: ADVANCED

Additional Requirements (courses do not count in major GPA)

General Electives	2
Minimum Total Credit Hours:	20

¹ Requests for consideration of other courses approved electives should be submitted to the student's advisor in the School of Digital Sciences. In order to meet upper-division requirement, one or more courses may need to be upper-division.

Digital Systems Analysis Concentration Requirements [BS-DS-DSA]

Code	Title	Credit Hours
Concentration Requirements (courses count in major GPA)		
DSCI 10310	MY STORY ON THE WEB	3
DSCI 31010	ENTERPRISE ARCHITECTURE	3
MIS 34054	USING INFORMATION SYSTEMS FOR SOLVING BUSINESS PROBLEMS	3
MIS 34068	SYSTEMS ANALYSIS AND DESIGN	3
MIS 44043	DATABASE MANAGEMENT SYSTEMS	3
MIS 44045	INFORMATION SYSTEMS MANAGEMENT	3
Additional Requirements (courses do not count in major GPA)		
General Electives		2
Minimum Total Credit Hours:		20

Digital Systems Interaction Concentration Requirements [BS-DS-DSIN]

Code	Title	Credit Hours
Concentration Requirements (courses count in major GPA)		
DSCI 10310	MY STORY ON THE WEB	3
ETEC 47400	TRENDS IN EDUCATIONAL TECHNOLOGY	3
MIS 44043	DATABASE MANAGEMENT SYSTEMS	3
UXD 20001	INTRODUCTION TO USER EXPERIENCE DESIGN	3
UXD 40104	USABILITY	3
VCD 13000	DESIGN: PRINCIPLES, PROCESSES AND PRACTICE	3
or VCD 14001	VISUAL DESIGN LITERACY	
or VCD 37000	VISUAL DESIGN FOR MEDIA: ADVANCED	
Additional Requirements (courses do not count in major GPA)		
General Electives		2
Minimum Total Credit Hours:		20

Digital Systems Management Concentration Requirements

[BS-DS-DSMT]

Code	Title	Credit Hours
Concentration Requirements (courses count in major GPA)		
DSCI 26010	TELECOMMUNICATION INFRASTRUCTURE	3
DSCI 31010	ENTERPRISE ARCHITECTURE	3
MIS 24163	PRINCIPLES OF MANAGEMENT	3
MIS 34165	DYNAMICS OF LEADERSHIP	3
or MIS 44062	SUPPLY CHAIN MANAGEMENT	
MIS 44043	DATABASE MANAGEMENT SYSTEMS	3
MIS 44045	INFORMATION SYSTEMS MANAGEMENT	3
Additional Requirements (courses do not count in major GPA)		

General Electives	2
Minimum Total Credit Hours:	20

Digital Systems Software Development Concentration Requirements

[BS-DS-DSSD]

Code	Title	Credit Hours
Concentration Requirements (courses count in major GPA)		
CS 13011 & CS 13012 or CS 13001	COMPUTER SCIENCE IA: PROCEDURAL PROGRAMMING and COMPUTER SCIENCE IB: OBJECT ORIENTED PROGRAMMING COMPUTER SCIENCE I: PROGRAMMING AND PROBLEM SOLVING	4
CS 23001	COMPUTER SCIENCE II: DATA STRUCTURES AND ABSTRACTION	4
CS 23022	DISCRETE STRUCTURES FOR COMPUTER SCIENCE	3
CS 33007 or MIS 44043	INTRODUCTION TO DATABASE SYSTEM DESIGN DATABASE MANAGEMENT SYSTEMS	3
CS 33901	SOFTWARE ENGINEERING	3
DSCI 10310	MY STORY ON THE WEB	3
Minimum Total Credit Hours:		20

Digital Systems Telecommunication Networks Concentration Requirements

[BS-DS-DSTN]

Code	Title	Credit Hours
Concentration Requirements (courses count in major GPA)		
DSCI 10310	MY STORY ON THE WEB	3
DSCI 26010	TELECOMMUNICATION INFRASTRUCTURE	3
MIS 44043	DATABASE MANAGEMENT SYSTEMS	3
TECH 26301	NETWORKING HARDWARE I	3
TECH 36302	NETWORKING HARDWARE II	3
TECH 46312 or TECH 46350	WIRELESS NETWORK AND TELECOMMUNICATION SYSTEMS NETWORK MANAGEMENT AND DESIGN TECHNOLOGY	3
Additional Requirements (courses do not count in major GPA)		
General Electives		2
Minimum Total Credit Hours:		20

Graduation Requirements

Minimum Major GPA	Minimum Overall GPA
2.000	2.000

Digital Sciences – B.S. Roadmaps

- Digital Sciences Major (no concentration)
- Digital Systems Analysis Concentration
- Digital Systems Interaction Concentration
- Digital Systems Management Concentration
- Digital Systems Software Development Concentration
- Digital Systems Telecommunication Networks Concentration

Digital Sciences Major (No Concentration)

This roadmap is a recommended semester-by-semester plan of study for this major. However, courses designated as critical (!) must be completed in the semester listed to ensure a timely graduation.

Course	Title	Credits
Semester One		
UC 10097	DESTINATION KENT STATE: FIRST YEAR EXPERIENCE	1
Approved Electives in Digital Sciences or Related Area		3
College of Communication and Information Core Electives		3
Kent Core Requirement		3
Kent Core Requirement		3
General Electives		2
Credit Hours		15
Semester Two		
DSCI 13210	DESIGN PROCESSES AND PRINCIPLES	3
! MIS 24053	INTRODUCTION TO COMPUTER APPLICATIONS	3
College of Communication and Information Core Electives		3
Kent Core Requirement		3
Kent Core Requirement		3
Credit Hours		15
Semester Three		
! MIS 24065	WEB PROGRAMMING	3
Digital Sciences (DSCI) Electives		3
College of Communication and Information Core Electives		3
Kent Core Requirement		3
Kent Core Requirement		3
Credit Hours		15
Semester Four		
! DSCI 15310	COMPUTATIONAL THINKING AND PROGRAMMING	3
DSCI 33310	HUMAN-COMPUTER INTERACTION	3
DSCI 34410	DIGITAL INFORMATION MANAGEMENT AND PROCESSING	3
Kent Core Requirement		3
Kent Core Requirement		3
Credit Hours		15
Semester Five		
! MIS 44043	DATABASE MANAGEMENT SYSTEMS	3
! TECH 46411	REQUIREMENTS ENGINEERING AND ANALYSIS	3
Digital Sciences (DSCI) Electives		3
Kent Core Requirement		3
General Electives		3
Credit Hours		15
Semester Six		
! DSCI 41510	PROJECT MANAGEMENT AND TEAM DYNAMICS (WIC)	3
DSCI 49992	INTERNSHIP IN DIGITAL SCIENCES (ELR)	1
Approved Electives in Digital Sciences or Related Area		3
Kent Core Requirement		3
Kent Core Requirement		3
General Electives		2
Credit Hours		15
Semester Seven		
DSCI 40910	CAPSTONE IN DIGITAL SCIENCES (ELR)	3
DSCI 41610	DIGITAL SYSTEMS SECURITY	3

Approved Electives in Digital Sciences or Related Area	3
Kent Core Requirement	3
General Electives	3
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Credit Hours	15
Semester Eight	
General Electives	15
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Credit Hours	15
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Minimum Total Credit Hours:	120

Digital Systems Analysis Concentration

This roadmap is a recommended semester-by-semester plan of study for this major. However, courses designated as critical (!) must be completed in the semester listed to ensure a timely graduation.

Course	Title	Credits
Semester One		
DSCI 10310	MY STORY ON THE WEB	3
UC 10097	DESTINATION KENT STATE: FIRST YEAR EXPERIENCE	1
College of Communication and Information Core Electives		3
Kent Core Requirement		3
Kent Core Requirement		3
General Electives		2
Credit Hours		15
Semester Two		
DSCI 13210	DESIGN PROCESSES AND PRINCIPLES	3
! MIS 24053	INTRODUCTION TO COMPUTER APPLICATIONS	3
College of Communication and Information Core Electives		3
Kent Core Requirement		3
Kent Core Requirement		3
Credit Hours		15
Semester Three		
! MIS 24065	WEB PROGRAMMING	3
College of Communication and Information Core Electives		3
Kent Core Requirement		3
Kent Core Requirement		3
Kent Core Requirement		3
Credit Hours		15
Semester Four		
! DSCI 15310	COMPUTATIONAL THINKING AND PROGRAMMING	3
DSCI 33310	HUMAN-COMPUTER INTERACTION	3
DSCI 34410	DIGITAL INFORMATION MANAGEMENT AND PROCESSING	3
Kent Core Requirement		3
Kent Core Requirement		3
Credit Hours		15
Semester Five		
! DSCI 31010	ENTERPRISE ARCHITECTURE	3
MIS 34068	SYSTEMS ANALYSIS AND DESIGN	3
! MIS 44043	DATABASE MANAGEMENT SYSTEMS	3
! TECH 46411	REQUIREMENTS ENGINEERING AND ANALYSIS	3
General Electives		3
Credit Hours		15
Semester Six		
! DSCI 41510	PROJECT MANAGEMENT AND TEAM DYNAMICS (WIC)	3
DSCI 49992	INTERNSHIP IN DIGITAL SCIENCES (ELR)	1
MIS 34054	USING INFORMATION SYSTEMS FOR SOLVING BUSINESS PROBLEMS	3
Kent Core Requirement		3
Kent Core Requirement		3
General Electives		2
Credit Hours		15
Semester Seven		
DSCI 40910	CAPSTONE IN DIGITAL SCIENCES (ELR)	3

DSCI 41610	DIGITAL SYSTEMS SECURITY	3
! MIS 44045	INFORMATION SYSTEMS MANAGEMENT	3
Kent Core Requirement		3
General Electives		3
Credit Hours		15
Semester Eight		
General Electives		15
Credit Hours		15
Minimum Total Credit Hours:		120

Digital Systems Interaction Concentration

This roadmap is a recommended semester-by-semester plan of study for this major. However, courses designated as critical (!) must be completed in the semester listed to ensure a timely graduation.

Course	Title	Credits
Semester One		
DSCI 10310	MY STORY ON THE WEB	3
UC 10097	DESTINATION KENT STATE: FIRST YEAR EXPERIENCE	1
College of Communication and Information Core Electives		3
Kent Core Requirement		3
Kent Core Requirement		3
General Electives		2
Credit Hours		15
Semester Two		
DSCI 13210	DESIGN PROCESSES AND PRINCIPLES	3
! MIS 24053	INTRODUCTION TO COMPUTER APPLICATIONS	3
College of Communication and Information Core Electives		3
Kent Core Requirement		3
Kent Core Requirement		3
Credit Hours		15
Semester Three		
! MIS 24065	WEB PROGRAMMING	3
VCD 13000	DESIGN: PRINCIPLES, PROCESSES AND PRACTICE	3
or		
VCD 14001	or VISUAL DESIGN LITERACY	
or	or VISUAL DESIGN FOR MEDIA: ADVANCED	
VCD 37000		
College of Communication and Information Core Electives		3
Kent Core Requirement		3
Kent Core Requirement		3
Credit Hours		15
Semester Four		
! DSCI 15310	COMPUTATIONAL THINKING AND PROGRAMMING	3
DSCI 33310	HUMAN-COMPUTER INTERACTION	3
DSCI 34410	DIGITAL INFORMATION MANAGEMENT AND PROCESSING	3
Kent Core Requirement		3
Kent Core Requirement		3
Credit Hours		15
Semester Five		
! MIS 44043	DATABASE MANAGEMENT SYSTEMS	3
! TECH 46411	REQUIREMENTS ENGINEERING AND ANALYSIS	3
UXD 20001	INTRODUCTION TO USER EXPERIENCE DESIGN	3
Kent Core Requirement		3
Kent Core Requirement		3
Credit Hours		15
Semester Six		
! DSCI 41510	PROJECT MANAGEMENT AND TEAM DYNAMICS (WIC)	3
DSCI 49992	INTERNSHIP IN DIGITAL SCIENCES (ELR)	1
UXD 40104	USABILITY	3
Kent Core Requirement		3
General Electives		5
Credit Hours		15

Semester Seven

DSCI 40910	CAPSTONE IN DIGITAL SCIENCES (ELR)	3
DSCI 41610	DIGITAL SYSTEMS SECURITY	3
ETEC 47400	TRENDS IN EDUCATIONAL TECHNOLOGY	3
General Electives		6
Credit Hours		15

Semester Eight

Kent Core Requirement		3
General Electives		12
Credit Hours		15
Minimum Total Credit Hours:		120

Digital Systems Management Concentration

This roadmap is a recommended semester-by-semester plan of study for this major. However, courses designated as critical (!) must be completed in the semester listed to ensure a timely graduation.

Course	Title	Credits
Semester One		
UC 10097	DESTINATION KENT STATE: FIRST YEAR EXPERIENCE	1
College of Communication and Information Core Electives		3
Kent Core Requirement		3
Kent Core Requirement		3
Kent Core Requirement		3
General Electives		5
Credit Hours		18
Semester Two		
! DSCI 13210	DESIGN PROCESSES AND PRINCIPLES	3
! MIS 24053	INTRODUCTION TO COMPUTER APPLICATIONS	3
College of Communication and Information Core Electives		3
Kent Core Requirement		3
Kent Core Requirement		3
Credit Hours		15
Semester Three		
! MIS 24065	WEB PROGRAMMING	3
MIS 24163	PRINCIPLES OF MANAGEMENT	3
College of Communication and Information Core Electives		3
Kent Core Requirement		3
Kent Core Requirement		3
Credit Hours		15
Semester Four		
! DSCI 15310	COMPUTATIONAL THINKING AND PROGRAMMING	3
DSCI 26010	TELECOMMUNICATION INFRASTRUCTURE	3
DSCI 33310	HUMAN-COMPUTER INTERACTION	3
DSCI 34410	DIGITAL INFORMATION MANAGEMENT AND PROCESSING	3
Kent Core Requirement		3
Credit Hours		15
Semester Five		
! DSCI 31010	ENTERPRISE ARCHITECTURE	3
! MIS 44043	DATABASE MANAGEMENT SYSTEMS	3
TECH 46411	REQUIREMENTS ENGINEERING AND ANALYSIS	3
Kent Core Requirement		3
Credit Hours		12
Semester Six		
! DSCI 41510	PROJECT MANAGEMENT AND TEAM DYNAMICS (WIC)	3
DSCI 49992	INTERNSHIP IN DIGITAL SCIENCES (ELR)	1
Kent Core Requirement		3
Kent Core Requirement		3
General Electives		5
Credit Hours		15
Semester Seven		
DSCI 40910	CAPSTONE IN DIGITAL SCIENCES (ELR)	3
DSCI 41610	DIGITAL SYSTEMS SECURITY	3
! MIS 44045	INFORMATION SYSTEMS MANAGEMENT	3
Kent Core Requirement		3

General Electives	3
Credit Hours	15
Semester Eight	
MIS 34165	DYNAMICS OF LEADERSHIP
or	or SUPPLY CHAIN MANAGEMENT
MIS 44062	
General Electives	12
Credit Hours	15
Minimum Total Credit Hours:	120

Digital Systems Software Development Concentration

This roadmap is a recommended semester-by-semester plan of study for this major. However, courses designated as critical (!) must be completed in the semester listed to ensure a timely graduation.

Course	Title	Credits
Semester One		
DSCI 10310	MY STORY ON THE WEB	3
UC 10097	DESTINATION KENT STATE: FIRST YEAR EXPERIENCE	1
College of Communication and Information Core Electives		3
Kent Core Requirement		3
Kent Core Requirement		3
General Electives		2
Credit Hours		15
Semester Two		
DSCI 13210	DESIGN PROCESSES AND PRINCIPLES	3
! DSCI 15310	COMPUTATIONAL THINKING AND PROGRAMMING	3
! MIS 24053	INTRODUCTION TO COMPUTER APPLICATIONS	3
College of Communication and Information Core Electives		3
Kent Core Requirement		3
Credit Hours		15
Semester Three		
! CS 13011 & CS 13012 or CS 13001	COMPUTER SCIENCE IA: PROCEDURAL PROGRAMMING and COMPUTER SCIENCE IB: OBJECT ORIENTED PROGRAMMING or COMPUTER SCIENCE I: PROGRAMMING AND PROBLEM SOLVING	4
! MIS 24065	WEB PROGRAMMING	3
College of Communication and Information Core Electives		3
Kent Core Requirement		3
Kent Core Requirement		3
Credit Hours		16
Semester Four		
! CS 23001	COMPUTER SCIENCE II: DATA STRUCTURES AND ABSTRACTION	4
! CS 23022	DISCRETE STRUCTURES FOR COMPUTER SCIENCE	3
DSCI 33310	HUMAN-COMPUTER INTERACTION	3
DSCI 34410	DIGITAL INFORMATION MANAGEMENT AND PROCESSING	3
Kent Core Requirement		3
Credit Hours		16
Semester Five		
CS 33901	SOFTWARE ENGINEERING	3
! DSCI 41510	PROJECT MANAGEMENT AND TEAM DYNAMICS (WIC)	3
Kent Core Requirement		3
Kent Core Requirement		3
Kent Core Requirement		3
Credit Hours		15
Semester Six		
! CS 33007 or MIS 44043	INTRODUCTION TO DATABASE SYSTEM DESIGN or DATABASE MANAGEMENT SYSTEMS	3
DSCI 49992	INTERNSHIP IN DIGITAL SCIENCES (ELR)	1
! TECH 46411	REQUIREMENTS ENGINEERING AND ANALYSIS	3

Kent Core Requirement	3	
General Elective	5	
Credit Hours	15	
Semester Seven		
DSCI 40910	CAPSTONE IN DIGITAL SCIENCES (ELR)	3
DSCI 41610	DIGITAL SYSTEMS SECURITY	3
Kent Core Requirement		3
Kent Core Requirement		3
General Electives		3
Credit Hours		15
Semester Eight		
General Electives		13
Credit Hours		13
Minimum Total Credit Hours:		120

Digital Systems Telecommunication Networks Concentration

This roadmap is a recommended semester-by-semester plan of study for this major. However, courses designated as critical (!) must be completed in the semester listed to ensure a timely graduation.

Course	Title	Credits
Semester One		
DSCI 10310	MY STORY ON THE WEB	3
UC 10097	DESTINATION KENT STATE: FIRST YEAR EXPERIENCE	1
College of Communication and Information Core Electives		3
Kent Core Requirement		3
Kent Core Requirement		3
General Electives		2
Credit Hours		15
Semester Two		
DSCI 13210	DESIGN PROCESSES AND PRINCIPLES	3
! DSCI 26010	TELECOMMUNICATION INFRASTRUCTURE	3
! MIS 24053	INTRODUCTION TO COMPUTER APPLICATIONS	3
College of Communication and Information Core Electives		3
Kent Core Requirement		3
Credit Hours		15
Semester Three		
! MIS 24065	WEB PROGRAMMING	3
! TECH 26301	NETWORKING HARDWARE I	3
College of Communication and Information Core Electives		3
Kent Core Requirement		3
Kent Core Requirement		3
Credit Hours		15
Semester Four		
! DSCI 15310	COMPUTATIONAL THINKING AND PROGRAMMING	3
DSCI 33310	HUMAN-COMPUTER INTERACTION	3
DSCI 34410	DIGITAL INFORMATION MANAGEMENT AND PROCESSING	3
! TECH 36302	NETWORKING HARDWARE II	3
Kent Core Requirement		3
Credit Hours		15
Semester Five		
! MIS 44043	DATABASE MANAGEMENT SYSTEMS	3
! TECH 46411	REQUIREMENTS ENGINEERING AND ANALYSIS	3
Kent Core Requirement		3
Kent Core Requirement		3
General Electives		3
Credit Hours		15
Semester Six		
! DSCI 41510	PROJECT MANAGEMENT AND TEAM DYNAMICS (WIC)	3
DSCI 49992	INTERNSHIP IN DIGITAL SCIENCES (ELR)	1
TECH 46312	WIRELESS NETWORK AND TELECOMMUNICATION SYSTEMS	3
or		
TECH 46350	or NETWORK MANAGEMENT AND DESIGN TECHNOLOGY	
Kent Core Requirement		3
Kent Core Requirement		3
General Electives		2
Credit Hours		15

Semester Seven

DSCI 40910	CAPSTONE IN DIGITAL SCIENCES (ELR)	3
DSCI 41610	DIGITAL SYSTEMS SECURITY	3
Kent Core Requirement		3
General Electives		6
Credit Hours		15

Semester Eight

Kent Core Requirement		3
General Electives		12
Credit Hours		15

Minimum Total Credit Hours: 120