

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

| Critical                           | Course Subject and Title   | Credit Hours | Min. Grade     | Major GPA | Attribute | Notes |
|------------------------------------|--|--------------|----------------|-----------|-----------|-------|
| <b>Semester One [16 Credits]</b>   |  |              |                |           |           |       |
| !                                  | <b>DSCI 10010 Society, Culture and the Digital Sciences</b> <sup>1</sup>     | 3            |                | ■         |           |       |
|                                    | <b>DSCI 10310 My Story on the Web</b>  | 3            |                | ■         |           |       |
|                                    | PSYC 11762 General Psychology  | 3            |                | ■         | DD/KSS    |       |
|                                    | UC 10097 Destination Kent State: First Year Experience <sup>2</sup>          | 1            |                |           |           |       |
|                                    | Kent Core Requirement  | 3            |                |           |           |       |
|                                    | Kent Core Requirement  | 3            |                |           |           |       |
| <b>Semester Two [15 Credits]</b>   |  |              |                |           |           |       |
| !                                  | <b>DSCI 10410 Information Ethics and Social Responsibility</b> <sup>3</sup>  | 3            |                | ■         |           |       |
| !                                  | <b>DSCI 13210 Design Processes and Principles</b> <sup>3</sup>               | 3            |                | ■         |           |       |
| !                                  | <b>MIS 24053 Introduction to Computer Applications</b>                       | 3            |                | ■         |           |       |
|                                    | Kent Core Requirement  | 3            |                |           |           |       |
|                                    | Kent Core Requirement  | 3            |                |           |           |       |
| <b>Semester Three [15 Credits]</b> |  |              |                |           |           |       |
| !                                  | <b>MIS 24065 Web Programming</b>   | 3            |                | ■         |           |       |
|                                    | DSCI 23410 Cognition in Technology <sup>1</sup>                              | 3            |                | ■         |           |       |
|                                    | VCD 14001 Visual Design Literacy   | 3            |                | ■         |           |       |
|                                    | Kent Core Requirement  | 3            |                |           |           |       |
|                                    | Kent Core Requirement  | 3            |                |           |           |       |
| <b>Semester Four [15 Credits]</b>  |  |              |                |           |           |       |
| !                                  | <b>DSCI 15310 Computational Thinking and Programming</b>                     | 3            |                | ■         |           |       |
| !                                  | <b>DSCI 34410 Digital Information Management and Processing</b> <sup>3</sup> | 3            |                | ■         |           |       |
|                                    | DSCI 33310 Human-Computer Interaction <sup>3</sup>                           | 3            |                | ■         |           |       |
|                                    | Kent Core Requirement  | 3            |                |           |           |       |
|                                    | Kent Core Requirement  | 3            |                |           |           |       |
| <b>Semester Five [15 Credits]</b>  |  |              |                |           |           |       |
| !                                  | <b>DSCI 41610 Digital Systems Security</b> <sup>1</sup>                      | 3            |                | ■         |           |       |
| !                                  | <b>MIS 44043 Database Management Systems</b>                                 | 3            |                | ■         |           |       |
|                                    | PSYC 40445 Cognitive Psychology  | 3            |                | ■         |           |       |
|                                    | Kent Core Requirement  | 3            |                |           |           |       |
|                                    | Kent Core Requirement  | 3            |                |           |           |       |
| <b>Semester Six [15 Credits]</b>   |  |              |                |           |           |       |
| !                                  | <b>DSCI 41510 Project Management and Team Dynamics</b> <sup>3</sup>          | 3            | C <sup>5</sup> | ■         | WIC       |       |
| !                                  | <b>TECH 46411 Requirements Engineering and Analysis</b>                      | 3            |                | ■         |           |       |
|                                    | Kent Core Requirement  | 3            |                |           |           |       |
|                                    | Approved Electives in Digital Science or Related Area <sup>6</sup>           | 3            |                | ■         |           |       |
|                                    | General Electives <sup>4</sup>   | 3            |                |           |           |       |
| <b>Semester Seven [15 Credits]</b> |  |              |                |           |           |       |
| !                                  | <b>DSCI 40910 Capstone in Digital Sciences</b> <sup>1</sup>                  | 3            |                | ■         | ELR       |       |
|                                    | ITEC 47427 Technology and Learning   | 3            |                | ■         |           |       |
|                                    | Approved Electives in Digital Sciences or Related Area <sup>6</sup>          | 3            |                | ■         |           |       |
|                                    | General Electives <sup>4</sup>   | 6            |                |           |           |       |
| <b>Semester Eight [14 Credits]</b> |  |              |                |           |           |       |
|                                    | Approved Electives in Digital Sciences or Related Area <sup>6</sup>          | 3            |                | ■         |           |       |
|                                    | General Electives <sup>4</sup>   | 11           |                |           |           |       |

### Graduation Requirements Summary

| Minimum Total Hours | Minimum Upper-Division Hours<br>30000 – 40000 level course | Minimum Kent Core Hours | Minimum   |             |
|---------------------|--|-------------------------|-----------|-------------|
|                     |  |                         | Major GPA | Overall GPA |
| 120                 | 39   | 36                      | 2.000     | 2.000       |

1. Offered in fall only.
2. UC 10097 is not required of transfer students with 25 credits (excluding College Credit Plus) or students age 21+ at time of admission.
3. Offered in spring only.
4. Total credit hours depend on meeting minimum 120 credit hours and minimum 39 upper-division hours.
5. Minimum C (2.000) grade required in DSCI 41510 to fulfill the writing-intensive requirement.

6. Approved Electives in Digital Sciences or Related Area (9 credit hours)

| <b>Choose from the following pre-approved electives or consult with a DSCI advisor for alternatives:</b> |   |
|--|---|
| CADT 22005 Multimedia and Game Design (2)  | ENG 20002 Introduction to Technical Writing (3)                                     |
| COMM 21008 Social Media Strategies (3)   | ENG 30062 Principles of Technical Writing (3)                                       |
| COMM 26001 Public Communication in Society (3)   | ENG 30063 Professional Writing (3)  |
| COMM 35600 Communication in Small Groups and Teams (3)   | ENTR 27056 Introduction to Entrepreneurship (3)                                     |
| COMM 41000 Sports Communication (3)  | GEOG 29160 Mapping our World (3)  |
| COMM 43000 Communication Technology and Human Interaction (3)  | GEOG 49070 Geographic Information Science (4)                                       |
| COMM 45006 Media Use and Effects (3)   | GEOG 49076 Spatial Programming (3)  |
| COMM 45957 Language, Meaning and Cognition (3)   | GEOG 49080 Advanced Geographic Information Science (3)                              |
| COMT 20021 C Sharp Programming (3)   | GEOG 49085 Web and Mobile Geographic Information Science (3)                        |
| COMT 21200 Ethical Hacking (3)   | GEOG 49162 Cartography and Geovisualization (3)                                     |
| COMT 36302 Advanced C Sharp Programming (3)  | GEOG 49163 Cartography and Geovisualization Laboratory (1)                          |
| COMT 36308 Ergonomics in Computer Systems (3)  | ITEC 47413 Digital Video in Education (3)   |
| COMT 36310 Multimedia Development Tools (3)  | ITEC 47427 Technology and Learning (3)  |
| COMT 36318 Survey of Information Security, Internet Fraud and Computer Forensics (3)                     | ITEC 47430 Computer Applications in Education (3)                                   |
| COMT 36320 Computer Forensics (3)  | JMC 20001 Media, Power and Culture (3)  |
| COMT 36321 Network Forensics (3)   | JMC 21001 Principles of Advertising (3)   |
| COMT 36330 Local Area Network Security Fundamentals (3)  | JMC 21008 Social Media Strategies (3)   |
| COMT 42000 Social Media Security (3)   | JMC 28001 Principles of Public Relations (3)  |
| CS 10001 Computer Literacy (3)   | MIS 24163 Principles of Management (3) <sup>1</sup>                                 |
| CS 10051 Introduction to Computer Science (4) <sup>KMC</sup>   | MIS 34036 Enterprise Systems and Business Processes (3)                             |
| CS 13001 Computer Science I-Programming and Problem Solving (4)  | MIS 34054 Using Information Systems for Solving Business Problems (3)               |
| CS 13011 Computer Science IA - Procedural Programming (2)  | MIS 34060 Operations Management (3)   |
| CS 13012 Computer Science IB - Object Oriented Programming (2)   | MIS 34068 System Analysis and Design (3)  |
| CS 13401 User Level Computer Security (3)  | MIS 34070 Programming Theory and Applications (3)                                   |
| CS 23001 Computer Science II-Data Structures and Abstraction (4)   | MIS 34158 Managerial and Technological Aspects of Healthcare Systems Management (3) |
| CS 23022 Discrete Structures for Computer Science (3)  | MIS 34165 Dynamics of Leadership (3)  |
| CS 33007 Introduction to Database System Design (3)  | MIS 44042 Network Theory and Applications (3)                                       |
| CS 33101 Structure of Programming Languages (3)  | MIS 44043 Database Management Systems (3)   |
| CS 33211 Operating Systems (3)   | MIS 44045 Information Systems Management (3)  |
| CS 33223 Unix Tools (3)  | MIS 44049 Network Management and Cybersecurity (3)                                  |
| CS 33901 Software Engineering (3)  | MIS 44062 Supply Chain Management (3)   |
| CS 35101 Computer Architecture (3)   | PSYC 11762 General Psychology (3) <sup>KSS</sup>                                    |
| CS 43202 Systems Administration (3)  | PSYC 40445 Cognitive Psychology (3)   |
| CS 43203 Systems Programming (3)   | TECH 10001 Information Technology (3)   |
| CS 46101 Design and Analysis of Algorithms (3)   | TECH 26010 Introduction to Computer Engineering Technology (3)                      |
| DSCI 10310 My Story on the Web (3)   | TECH 26301 Networking Hardware I (3)  |
| DSCI 19995 Special Topics in Digital Sciences (1-4)  | TECH 33010 Computer Hardware (3)  |
| DSCI 23410 Cognition in Technology (3)   | TECH 36302 Networking Hardware II (3)   |
| DSCI 26010 Telecommunication Infrastructure (3)  | TECH 43050 Inventive Problem Solving (3)  |
| DSCI 29995 Special Topics in Digital Sciences (1-4)  | TECH 43222 Computer Hardware Engineering and Architecture (3)                       |
| DSCI 31010 Enterprise Architecture (3)   | TECH 46312 Wireless Network and Telecommunication Systems (3)                       |
| DSCI 33310 Human-Computer Interaction (3)  | TECH 46330 Visual Basic Programming in Engineering Technology (3)                   |
| DSCI 39995 Special Topics in Digital Sciences (1-4)  | TECH 46350 Network Management and Design Technology (3)                             |
| DSCI 49910 Emerging Technologies in Digital Sciences (1-3)   | VCD 14001 Visual Design Literacy (3)  |
| DSCI 49992 Internship in Digital Sciences (1-6)  | VCD 14002 Communicating with Color (3)  |
| DSCI 49995 Special Topics in Digital Sciences (1-4)  | VCD 34004 Visual Ethics (3)   |
| DSCI 49996 Individual Investigation in Digital Sciences (1-3)  | VCD 37000 Visual Design for Media: Advanced (3)                                     |

1. Equivalent to BMRT 11009 Introduction to Management Technology

**University Requirements:** Bachelor's degree-seeking students must meet Kent Core (general education requirements), diversity, writing-intensive and experiential learning requirements. For more information about these requirements, please read the following sections in the University Catalog: Kent Core – [www.kent.edu/catalog/kent-core](http://www.kent.edu/catalog/kent-core); Diversity Course Requirement – [www.kent.edu/catalog/diversity](http://www.kent.edu/catalog/diversity); Writing-Intensive Course Requirement – [www.kent.edu/catalog/wic](http://www.kent.edu/catalog/wic); Experiential Learning Requirement – [www.kent.edu/catalog/elr](http://www.kent.edu/catalog/elr).

**Attribute Legend:** **DD** Diversity–Domestic; **DG** Diversity–Global; **ELR** Experiential Learning; **KAD** Kent Core Additional; **KBS** Kent Core Basic Sciences; **KCM** Kent Core Composition; **KFA** Kent Core Fine Arts; **KHU** Kent Core Humanities; **KMC** Kent Core Mathematics and Critical Reasoning; **KSS** Kent Core Social Sciences; **WIC** Writing Intensive