

Roadmap: Digital Sciences - Digital Systems Telecommunication Networks
- Bachelor of Science

[DS-BS-DS-DSTN] School of Digital Sciences Catalog Year: 2012-2013

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

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Course Subject and Title	Credit Hours	Upper Div.	Min. Grade	Major GPA	Important Notes
Semester One: [16 Credit Hours]					
DSCI 10010 Society, Culture and the Digital Sciences	3				Offered in fall only
DSCI 10310 My Story on the Web	3				
US 10097 Destination Kent State: First Year Experience	1				Not required for transfer students with 25 credits
Kent Core Requirement	3				See Kent Core Summary on page 2
Kent Core Requirement	3				See Kent Core Summary on page 2
Approved Elective in Digital Sciences or Related Area	3			•	Recommended: TECH 10001
Semester Two: [15 Credit Hours]					
DSCI 10410 Information Ethics and Social Responsibility	3				Offered in spring only
DSCI 13210 Design Processes and Principles	3				Offered in spring only
MIS 24053 Introduction to Computer Applications	3			-	
DSCI 16010 Telecommunications Infrastructure	3				Offered in spring only
Kent Core Requirement	3				See Kent Core Summary on page 2
Semester Three: [15 Credit Hours]					
MIS 24065 Web Programming	3				
TECH 26301 Networking Hardware I	3			•	
Kent Core Requirement	3				See Kent Core Summary on page 2
Kent Core Requirement	3				See Kent Core Summary on page 2
Kent Core Requirement	3				See Kent Core Summary on page 2
Semester Four: [15Credit Hours]					
DSCI 24410 Digital Information Management and	3				Offered in spring only
Processing DSCI 15310 Computational Thinking and Programming	3			_	, , , , , , , , , , , , , , , , , , ,
TECH 36302 Networking Hardware II	3	_			
Kent Core Requirement	3				See Kent Core Summary on page 2
Kent Core Requirement	3				See Kent Core Summary on page 2
Semester Five: [15 Credit Hours]	0				Oce None Outsimary on page 2
DSCI 31610 Digital Systems Security	3	_		_	Offered in fall only
MIS 44043 Database Management Systems	3	-		-	Officied in rail only
TECH 46330 Visual Basic Programming in Engineering					
Technology	3				
Kent Core Requirement	3				See Kent Core Summary on page 2
Kent Core Requirement	3				See Kent Core Summary on page 2
Semester Six: [15 Credit Hours]					
DSCI 31510 Global Project Management and Team Dynamics	3		С		Fulfills writing-intensive course requirement; offered in spring only
TECH 36411 Requirements Engineering and Analysis	3				
TECH 46312 Wireless Network and Telecommunication Systems	3	•		•	
Kent Core Requirement	+				See Kent Core Summary on page 2
	3				
Approved Elective in Digital Sciences or Related Area	3				Consult DSCI advisor
					Consult DSCI advisor
Semester Seven: [15 Credit Hours]					Consult DSCI advisor  Offered in fall only
	3	•			
Semester Seven: [15 Credit Hours]  DSCI 40910 Capstone in Digital Sciences	3				



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Critical requirements are boldface in shaded areas

Course Subject and Title		Upper Div.	Min. Grade	Major GPA	Important Notes		
Semester Eight: [15 Credit Hours]							
Approved Elective in Digital Sciences or Related Area	3				Consult DSCI advisor		
General Electives (9 credits upper division)	12	-			Number of credits required depends on meeting minimum 121 credit hours and 39 upper-division credit hours		

# **Graduation Requirements Summary**

Minimum	Minimum Upper-	Minimum	Global / Domestic	Writing-	Experiential	Mini	mum
Total Hours	Division Hours	Kent Core Hours	Diversity Course	Intensive	Learning	Major GPA	Overall GPA
121	39	36	Kent Core or general electives	DSCI 31510	Visit kent.edu/catalog/elr	2.000	2.000

**Kent Core Summary** 

Kent Core Categories	Important Notes	Remaining Credit Hours
Composition (6-8 credit hours) ENG 11002, 11011, 21011; HONR 10197, 10297	Enrollment based on placement test	6-8
Mathematics and Critical Reasoning (3-5 credit hours)	Enrollment based on placement test	3-5
Humanities and Fine Arts (9 credit hours) Minimum one course from humanities in Arts and Sciences and minimum one course from fine arts	May fulfill diversity requirement	9
Social Sciences (6 credit hours)  Must be selected from two curricular areas	May fulfill diversity requirement	6
Basic Sciences (6-7 credit hours) Must include one laboratory		6-7
Additional (6 credit hours)  Must be selected from two Kent Core categories	May fulfill diversity requirement	6

Approved electives in Digital Sciences or related area (9 credit hours):

		,	
COMM 43000 Communication Technology and Human Interaction	3	MIS 24163 Principles of Management	3
CS 10001 Computer Literacy	3	MIS 34036 Enterprise Systems	3
CS 10051 Introduction to Computer Science	4	MIS 34054 Using Information Systems for Solving Business Problems	3
CS 13001 Computer Science I-Programming and Problem Solving	4	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 34161 Managerial and Technological Aspects of Healthcare	3
CS 23022 Discrete Structures for Computer Science	3	Systems Management	3
CS 33007 Introduction to Database System Design	3	MIS 44042 Network Theory and Applications	3
CS 33223 Unix Tools	3	MIS 44043 Database Management Systems	3
CS 33901 Software Engineering	3	MIS 44045 Information Systems Management	3
CS 35101 Computer Architecture	3	MIS 44062 Supply Chain Management	3
CS 38101 Introduction to Game Programming	3	PSYC 11762 General Psychology	3
DSCI 10310 My Story on the Web	3	PSYC 30445 Cognitive Psychology	3
DSCI 13410 Cognition in Technology	3	TECH 10001 Information Technology	3
DSCI 15310 Computational Thinking and Programming	3	TECH 26301 Networking Hardware I	3
DSCI 16010 Telecommunication Infrastructure	3	TECH 26310 Web Design and Development	3
DSCI 21010 Enterprise Architecture	3	TECH 33030 Computer Peripherals and Special Use Hardware	3
DSCI 23310 Human-Computer Interaction	3	TECH 33222 Digital Design for Computer Engineering	3
GEOG 49070 Geographic Information Science	3	TECH 36302 Networking Hardware II	3
GEOG 49080 Advanced Geographic Information Science	3	TECH 43050 Inventive Problem Solving	3
ITEC 47413 Digital Video in Education	3	TECH 46312 Wireless Network and Telecommunication Systems	3
ITEC 47427 Technology and Learning	3	TECH 46330 Visual Basic Programming in Engineering Technology	3
ITEC 47430 Computer Applications in Education	3	TECH 46350 Network Management and Design Technology	3
JMC 22004 Visual Storytelling	3	VCD 14001 Visual Design Literacy	3
JMC 40036 Non-Linear Video Editing	3	VCD 37000 Visual Design for Media: Advanced	3
JMC 46056 Cybermedia Production	3	K-Fulfills Kent Core requirer	ment
<u> </u>			

## Kent Core

Students must complete a minimum 36 credit hours of the Kent Core. Certain courses required in programs and in student's major field may also fulfill the Kent Core. Honors equivalents shall satisfy the Kent Core. None of the courses on the Kent Core list may be taken with a pass/fail grade. Visit <a href="www.kent.edu/catalog/kent-core">www.kent.edu/catalog/kent-core</a> for course list.



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## **Diversity Course Requirement**

Students must complete a two-course diversity requirement, consisting of one with a domestic (U.S.) focus and one with a global focus. One course must come from the Kent Core. The second course may be taken as a second Kent Core, within a major or minor, or as a general elective; or, with dean's approval, by completing one semester of study in another country. Visit <a href="https://www.kent.edu/catalog/diversity">www.kent.edu/catalog/diversity</a> for course list.

### Writing-Intensive Course Requirement

Students must complete a one-course writing-intensive requirement in their major and earn minimum C (2.000) grade. Visit <a href="www.kent.edu/catalog/wic">www.kent.edu/catalog/wic</a> for course list.

## **Experiential Learning Requirement (ELR)**

To provide students with direct engagement in learning experiences that promote academic relevance, meaning and an understanding of real-world issues, students must complete this requirement at Kent State, either as a for-credit course or as a non-credit, non-course experience approved by the appropriate faculty member. Visit www.kent.edu/catalog/elr for course list.

#### **Upper-Division Requirement**

Students must complete a minimum 39 upper-division (numbered 30000 to 49999) credit hours of coursework. Programs in the College of Arts and Sciences require a minimum of 42 hours of upper-division coursework.