

APPLIED DATA AND INFORMATION - MINOR

College of Communication and Information
 School of Information
 www.kent.edu/iSchool

About This Program

The Applied Data and Information minor equips students with the essential knowledge and skills needed to thrive in a data-driven economy by taking a holistic approach to data science education. The program covers topics such as the data lifecycle, standards and best practices for data collection and management, data literacy, data user behavior and data ethics. With the minor, students are prepared for careers in data science within their respective major areas. Read more...

Contact Information

- School of Information Director: **Meghan Harper** | iSchool@kent.edu | 330-672-2782
- Speak with an Advisor

Program Delivery

- **Delivery:**
 - In person
- **Location:**
 - Kent Campus

Admission Requirements

Admission to a minor is open to students declared in a bachelor's degree, the A.A.B. or A.A.S. degree or the A.T.S. degree (not Individualized Program major). Students declared only in the A.A. or A.S. degree or the A.T.S. degree in Individualized Program may not declare a minor. Students may not pursue a minor and a major in the same discipline.

Program Requirements

Code	Title	Credit Hours
Minor Requirements		
LIS 20600	APPLIED DATA AND INFORMATION FUNDAMENTALS	3
LIS 40645	DATABASE FUNDAMENTALS FOR INFORMATION PROFESSIONALS	3
LIS 40646	RESEARCH DATA MANAGEMENT	3
Programming/Coding Elective, choose from the following: ¹		
EMAT 25310	CREATIVE CODING	3
IT 11002	VISUAL BASIC PROGRAMMING	
IT 20001	C++ PROGRAMMING	
IT 20011	JAVA PROGRAMMING	
Minor Electives, choose from the following: ²		
EMAT 32210	DATA IN EMERGING MEDIA AND TECHNOLOGY	6
EMAT 33310	HUMAN-COMPUTER INTERACTION	
LIS 30010	INFORMATION FLUENCY IN THE WORKPLACE AND BEYOND	
Minimum Total Credit Hours:		18

¹ Students who complete the following courses may have the course(s) applied toward the programming/coding elective: CS 13001 or CS 13011 and CS 13012

² Students who complete the following courses may have them applied toward the minor electives: BA 24056, UXD 40101, VCD 43007.

Graduation Requirements

Minimum Minor GPA	Minimum Overall GPA
2.000	2.000

- Minimum 6 credit hours in the minor must be upper-division coursework (30000 and 40000 level).
- Minimum 6 credit hours in the minor must be outside of the course requirements for any major or other minor the student is pursuing.
- Minimum 50 percent of the total credit hours for the minor must be taken at Kent State (in residence).

Program Learning Outcomes

Graduates of this program will be able to:

1. Explain the role and impact of data on people and society as well as the interdisciplinary and disciplinary nature of data science
2. Describe the information science approach to data in an applied area
3. Recognize various stages of data in the data lifecycle and what each stage entails
4. Obtain basic knowledge and skills associated with various stages of the data lifecycle
5. Identify and describe data standards, principles and best practices for collecting, curating, preserving and making data more accessible, discoverable, retrievable and usable
6. Describe research data management challenges and opportunities in archives, academic and public libraries and public life
7. Develop the skills to create actionable data management plans to support sustainable projects
8. Identify and describe issues and best practices in the creation, management, curation, access and reuse of research data.
9. Discuss human-centered, ethical and contextual considerations of data.

Full Description

The Applied Data and Information minor allows students to obtain and develop the fundamental knowledge and skills necessary to be competitive in today's workforce in an increasingly data-driven economy and society. Students gain essential skills in data literacy and fluency while also learning about relevant applications in their respective majors and fields of interest. Specifically, students learn about data science from an information science perspective to obtain a holistic understanding of data with some key data science elements such as the following:

- Data lifecycle, which covers the various stages of data, from initial data creation to data storage, data sharing and use and data archiving or deletion;
- Standards and best practices for data collection, description, representation and management to make data more accessible, discoverable, retrievable and usable;
- Data digitization, preservation and archiving;

- Interdisciplinary approaches to data science;
- Data literacy and competencies in general, as well as in applied disciplinary context;
- User behavior associated with data systems and systems that collect data; and
- Data ethics and policies for safe, fair and empowered use of data, etc.

Some common jobs that the minor prepares students for include such occupational titles as data scientist, data analyst, decision support, data manager, data science specialist, data science associate, data science research associate and data science consultant.