Information Technology and Data Science

(Bachelor of Science)

The Information Technology & Data Science (ITADS) program introduces students to complex information problems topics faced in the knowledge economy. Students will learn essential qualitative and quantitative skills demanded by employers in a digital media environment. Beyond these essential practical skills, students are taught the interpersonal and managerial skills needed to collaborate and coordinate among external stakeholders to achieve a common goal. Internships in Information Technology & Data Science provide qualified students with opportunities for faculty-supervised experience in professional settings outside the classroom. A major in Information Technology & Data Science provides the kind of integrative knowledge that is required for professional careers in a new and emerging media environment.

There are three emphases for the major: Data Science, Game Studies, and Information Technology.

- The Data Science emphasis is focused on data tools and analytical methods. Students learn to interpret and communicate their findings through courses from the social sciences, computer science, statistics and management. In data science students are trained for deep analytical talent positions in areas such as healthcare, logistics, and insurance industries.
- The Game Studies emphasis offers a diverse range of sub-disciplines to develop students into well-rounded game professionals. Students can choose from classes in computer science, communication, psychology, art, business, and music to prepare for careers in game journalism, game studies, game ethics, programming and design.
- The Information Technology emphasis offers a solid grounding in computing, mathematics, and communication skills and then builds on that grounding with a broad array of theoretical and applied approaches to information technologies. Students also are expected to be thoroughly equipped with problem solving, collaborative, and presentational skills to prepare for careers in areas such as, systems analysis, human resources, marketing and sales.

Students may study abroad or at other campuses in the United States through UW-Green Bay's participation in international exchange programs and National Student Exchange. Travel courses are another option for obtaining academic credits and completing requirements. For more information, contact the Office of International Education at (920) 465-2190 or see https://www.uwgb.edu/international-education/.

Major Area of Emphasis (http://catalog.uwgb.edu/undergraduate/programs/information-technology-and-data-science/major/)

Students must complete requirements in one of the following areas of emphasis:

- Data Science
- Game Studies
- Information Technology

Curriculum Guide

The following is only an example of a four-year Information Technology & Data Science degree program and is subject to change without notice. Students should consult a Information Technology & Data Science program advisor to ensure that they have the most accurate and up-to-date information available about a particular four-year degree option.

An example: Four year plan for **Information Technology & Data Science Major** (Data Science emphasis)
120 credits necessary to graduate.
Plan is a representation and categories of classes can be switched. Check with your advisor.

Course	Title	Credits
Freshman		
Fall		
COMM 133	Fundamentals of Public Address	3
COMP SCI 201	Introduction to Computing & Internet Technologies	3
First Year Seminar		3
General Ed		3
General Ed		3
	Credits	**15**
Spring		
COMM 290	Communication Problems and Research Methods	3
COMP SCI 221	Database Design & Management	3
COMP SCI 256	Introduction to Software Design	3
General Ed		3

General Ed		3
	Credits	**15**
Sophomore		
Fall		
MATH 260	Introductory Statistics	4
COMP SCI 231	Introduction to IT Operations	3
General Ed		3
Elective		3
	Credits	**13**
Spring		
INFO SCI 302	Introduction to Data Science	3
COMM 308	Information and Communication Technologies	3
General Ed		3
Elective		3
	Credits	**12**
Junior		
Fall		
COMP SCI 316	Advanced Software Design	3
General Ed		3
Elective		3
Elective		3
Elective		3
	Credits	**15**
Spring		
COMP SCI 358	Data Communication and Computer Networks	3
INFO SCI 410	Analytics and Information Problems	3
COMP SCI 451	Database Systems and Big Data Processing	3
General Ed		3
Elective		3
Elective		3
	Credits	**18**
Senior		
Fall		
COMM, COMP SCI, or INFO SCI upper level courses		6
Elective		3
Elective		3
Elective		3
	Credits	**15**
Spring		
INFO SCI 412	Data Mining and Predictive Analytics	3
General Ed		3
Elective		3
Capstone		2
Elective		3
	Credits	**14**
	Total Credits	**117**

Faculty

Mary D Bina; Teaching Professor; B.F.A., University of Wisconsin - Milwaukee

Shauna M Froelich; Teaching Professor; JD, Marquette University

Bryan James Carr; Professor; Ph.D., University of Oklahoma

Phillip G Clampitt; Professor; Ph.D., University of Kansas

Katie Turkiewicz; Associate Professor; Ph.D., University of Wisconsin - Milwaukee, chair

Joseph Yoo; Associate Professor; Ph.D., University of Texas

Prakash Duraisamy; Assistant Professor; Ph.D., University of North Texas

Justin Kavlie; Assistant Professor; Ph.D., University of North Carolina