



## Information Science

### FROM STUDY TO SKILLS

The Bachelor of Science in Information program is housed in the University of Michigan School of Information (UMSI) and is an upper-level program for juniors and seniors. UMSI takes a unique interdisciplinary approach to the study of information, exploring both the social and technical aspects of the digital revolution. Students will examine major issues at the intersection of people, information, and technology. During the course of the program, you can expect to study issues such as: Does social media enhance or undermine human relationships? What is the role of digital media in emergency situations? How are scientists using massive sets of data to track global phenomena like climate change?

Upon successful admission to the BSI program, your upper-division coursework will include required core courses, a project-based capstone course that tests your knowledge and skill, a path to focus your work and prepare you for your future, and electives to round out your education.

Given the unique skill set and interdisciplinary background you will develop as a BSI student, there are a wide variety of career paths you could pursue. Students can expect to find jobs in fields such as technology, business, corporate, government, consulting, entertainment, healthcare, education, non-profit and research. Some may continue their studies in graduate programs.

Related fields include Statistics, Mathematics, Computer Science, Informatics, Survey Research/Survey Methodology, Engineering, Communication Studies, and Art and Design.

#### Paths of Study

A path is an area of concentration in advanced courses that allows students to claim a specific identity, often defined in terms of career opportunities. The first two paths approved for the degree are the information analysis path and the user experience design path.

#### Information analysis path

Students opting for the information analysis path will complete courses that allow them to identify and articulate questions that matter to stakeholders, gather data that are essential to answering the questions, find answers that are grounded in empirical evidence, and present these answers in a convincing way.

#### User experience design path

Students opting for the user experience design path will complete courses that allow them to design, build, and evaluate compelling interactive systems. The philosophy of the path is user-centered design—that is, that designers of computing systems need to take account of and even prioritize the needs and experiences of the system’s users.

### SKILLS AND ABILITIES

#### Computational/Technical Skills

- Computer modeling
- Programming
- Operating computer simulations
- Web development
- User experience design
- Graphic design

#### Communication/Presentation Skills

- Ability to communicate abstract concepts
- Ability to transition between written text and computations/formulas
- Ability to describe processes in non-technical language/explain theories and ideas/summarize findings

#### Interpersonal Skills

- Online community building
- Ability to work in collaboration/be a team player
- Relationship management/interpersonal skills
- Motivated/enthusiastic approach to work

#### Entrepreneurial Skills

- Leadership
- Ability to take initiative
- High level of motivation
- Out of the box thinking
- Risk-taker
- Resilience
- Visionary/strategic thinking

## Analytical/Problem Solving Skills

Ability to be creative  
Detail oriented  
Applying methods to problems  
Developing theories  
Recognizing types of problems  
Perceiving patterns and structures  
Identifying relationships between problems/solutions

## Communication/Presentation Skills

Numerical simulation  
Analyzing statistics

Design programs/systems for processing data  
Applying quantitative analysis  
Mathematical modeling and analysis  
Designing questionnaires  
Developing sample forms  
Applying statistical packages  
Interpreting data from tables/charts  
Projecting from data  
Categorizing data  
Modeling complex systems  
Information visualization

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## BUILDING YOUR SKILLS OUTSIDE THE CLASSROOM

Employers seek out individuals who can demonstrate excellent verbal and written communication skills, teamwork and interpersonal skills, initiative, and a strong work ethic. Student organizations and campus employment offer valuable opportunities to add to the skills you are developing in class. Other options include study abroad, Alternative Spring Break, part-time jobs, or volunteering in the community. Finally, a summer internship may be the best way to test out a career field and develop marketable skills.

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## FROM SKILLS TO CAREER

BSI students develop both general and technical skills applicable to a wide variety of careers in government, healthcare, research, business, and non-profit organizations. UMSI graduates are in high demand. Below is a sample list of career opportunities for BSI grads:

User Experience Designer	Analytics Specialist	Social Media Strategist	Quality Assurance/Business Analyst
User Experience Researcher	Search Engine Optimization Analyst	Product Manager	Marketing Research Analyst
Web Architect	IT Consultant	Online Community Manager	Data Analysis Consultant
Website Consultant	Database Designer	Technology Product Manager	
Business Technology Analyst	Digital Marketing Associate	Web Analyst	
Data Analyst		Sales and Training Analyst	

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## DEGREE REQUIREMENTS

There are four prerequisite courses: SI 110, SI 106, STATS 250, and the First-Year Writing Requirement. Additionally ORGSTUDY 201 is recommended, but not required. BSI students must complete 60 credit hours while enrolled in the School of Information during their junior and senior year, with 45 of the 60 credits being completed within the School of Information. There are three required core courses (SI 206, SI 301, SI 310).

There are currently two focus areas within the BSI program: Designing for the User Experience (UX) and Information Analytics. Students utilize their advanced and elective courses to specialize in one of these tracks.

### Bachelor of Science in Information

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Website: <https://si.umich.edu/content/bsi>  
Facebook: <https://facebook.com/UMSI.undergrad>

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## NEXT STEPS / RESOURCES

For more information about careers in information, including graduate study, see:

<https://si.umich.edu/careers/careers-information>

To identify internships or job opportunities, visit UMSI's iTrack: [umsi.info/iTrack](https://umsi.info/iTrack), or the Career Center's Handshake: <https://careercenter.umich.edu/content/introducing-handshake>

To begin connecting to professionals in fields that interest you, create your own LinkedIn account:

<https://careercenter.umich.edu/article/getting-started-linkedin>

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On-campus jobs (work-study and non work-study jobs) are listed at:

[https://studentemployment.umich.edu/JobX\\_Home.aspx](https://studentemployment.umich.edu/JobX_Home.aspx)

For UMSI student groups visit:

<https://si.umich.edu/programs/msi/student-groups>

Maize Pages list hundreds of organizations for students to get involved in: <https://maizepages.umich.edu>

### The Career Center

3200 Student Activities Building  
734-764-7460  
<https://careercenter.umich.edu>

<https://fb.com/careercenter.umich> | <https://twitter.com/careercenter>  
[linkedin.com/company/the-career-center-at-the-university-of-michigan](https://linkedin.com/company/the-career-center-at-the-university-of-michigan)