INFORMATION SCIENCE AND TECHNOLOGY, BS

Information science, on which the Information Science and Technology program is based, is the study of the organization, storage, retrieval, dissemination, and use of information. Information technology (IT) is the collection of tools that make it possible to access and use information. Some graduates will go directly into jobs in business and industry sectors that rely heavily on information as a raw material or as a product. Other graduates may go on to graduate study in library and information science, information management, computer science, or telecommunications.

Career Opportunities
The Bachelor of Science in Information Science and Technology will give students a head start on any number of careers in the information industry:

- Information Architect
- Business Information Coordinator
- Network Manager
- IT Consultant
- Web Designer
- Technology Trainer
- Multimedia Specialist
- Human-Computer Interface Designer
- Software/Systems Developer
- Technical Writer
- Database Developer
- Digital Library Specialist
- E-Commerce Web Administrator

Experiential Learning
Becoming a leader in IT means immersing yourself in the tools and technologies of the profession. SOIS provides students with valuable experiential learning opportunities through the Nonprof-IT program. The mission of the Nonprof-IT program is to empower local nonprofit organizations with comprehensive information technology support by creating internship opportunities for UW-Milwaukee students. UWM students gain real world experience working on project teams, providing technology solutions, and receive credits toward graduation while developing a passion for service. Learn more about this opportunity here: https://uwm.edu/informationstudies/nonprofit/.

BSIST Mission
The mission of the Bachelor of Science in Information Science and Technology (BSIST) program is to prepare students — equipped with technical, interpersonal, and ethical proficiencies — for careers in the information professions who will design, build, and support user-focused information technology solutions to meet a diverse set of needs.

BSIST Learning Outcomes
Graduates of the Bachelor of Science in Information Science and Technology (BSIST) program will have the ability to:

1. Analyze complex information and technology needs, and to apply principles of information science and other relevant disciplines to identify and implement solutions.
2. Design, implement, evaluate, and administer information systems to meet a given set of requirements — including user and organizational needs — in diverse environments.
3. Communicate effectively in a variety of professional contexts.
4. Function effectively as a member or leader of a team engaged in the design, implementation, and evaluation information technology solutions.
5. Recognize organizational and social responsibilities as information professionals and make informed judgments based on legal and ethical principles.

[Syllabi for all BSIST courses – both core and electives – should specify which of the learning outcomes will be achieved by the end of the course.]

Approved by BSIST Curriculum Committee: March 2, 2018

Requirements

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Area I: UWM Distribution Requirements</td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>Area II: Major Requirements</td>
<td></td>
<td>27</td>
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<tr>
<td>Area III: Information Studies Electives</td>
<td></td>
<td>15</td>
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<tr>
<td>Area IV: BSIST Cross-functional Electives</td>
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<td>15</td>
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<tr>
<td>Area V: General Electives</td>
<td></td>
<td>42</td>
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<tr>
<td>Total Credits</td>
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<td>120</td>
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Related Area of Study
Each student will work with his/her advisor to select general electives, including related areas of study that are appropriate to his/her career goals and to complete the 120 total credit requirements for the BSIST degree. Because of its interdisciplinary and cross-functional nature, the BSIST program allows students to apply the study of the concepts and tools of information science, information architecture, and information technology to one or more related areas of study. The related area of study is a set of courses outside of the BSIST major, normally a minor or certificate in another field of study, typically including 18-22 credits. In some cases, students may choose to study two related areas as part of their BSIST program.

Related Areas of Study Selected List: Computer Science; Health Care Administration; Art & Design; General Business; Library & Information Science; Philosophy; Global Studies; Intelligent Systems; Communication; Digital Arts & Culture; Mass Communication & Journalism

With the help of their advisor, students create and customize their own related area of study. This may be credit-bearing courses that students will take to prepare for certification examinations such as Microsoft certifications, CISCO, etc., or a customized selection of courses chosen by students that will sharpen their skills in one or more selected areas of study.

Completing the Degree
The BSIST degree includes a total of 120 credits as follows:

<table>
<thead>
<tr>
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<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Area I: UWM Distribution Requirements</td>
<td>General Education Requirements (GER)</td>
<td>21</td>
</tr>
<tr>
<td>Area II: Major Requirements</td>
<td></td>
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</tbody>
</table>
The successful BSIST student will demonstrate understanding of the following:

- theoretical nature of information science and information technologies;
- organization and architecture of information based on understanding of the context, the content, and the user needs;
- user-centered information system and service development;
- information storage and retrieval systems;
- management of information, including the processes to enable the flow of information; and

- use of information and communication technology for managing and organizing information and content.

**Admission to the BSIST Program**

Standard UWM admission policies for freshmen and transfer students apply. Students may begin the program as freshmen or after completing several semesters as undeclared or other majors. Students may begin as transfer students from another accredited college or university or as students returning to get a second degree.

In addition to being available during standard class times, the BSIST degree is available fully online to serve students both on and off campus.

**Entrance Guidelines**

Students who meet the standard University admission requirements are admissible to the School of Information Studies. The same criteria for acceptance are applied to in-state and out-of-state students. For undergraduate admission requirements, see the Admission section of this catalog.

**Advising**

Students accepted by UWM who declare an interest in the IST program will be assigned a SOIS advisor. Students are expected to work closely with their IST advisor to tailor a program of electives to best suit their interests and career goals. IST students may also wish to explore minors or certificates in related areas such as computer science or technical writing. For information on Academic Advising for IST majors, please visit the SOIS Academic Advising page.

**Career Services**

Whether you are a recent graduate just starting your career or an alumni looking for a change, the School of Information Studies (SOIS) is committed to supporting students and alumni throughout their careers. Visit our resources page. For information on Academic Advising for IST majors, please visit the SOIS Academic Advising page.

**Honors in the Major**

GPA of 3.500 or above in all Information Studies (INFOST) courses applied towards the Information Studies Core (Area II) and Upper Division (Area III) requirements. A minimum of 36 INFOST credits completed in residence are needed towards the Core and Upper Division requirements to be considered for Honors in the Major.

**High Honors in the Major**

GPA of 3.750 or above in all Information Studies (INFOST) courses applied towards the Information Studies Core (Area II) and Upper Division (Area III) requirements. A minimum of 36 INFOST credits completed in residence are needed towards the Core and Upper Division requirements to be considered for High Honors in the major.

### General Education Requirements

To continue and graduate in the BSIST program, each student must maintain a grade point average of at least 2.5 in the major and a cumulative grade point average of at least 2.0 on all credits counted toward the degree.

Students who have previously completed a bachelor’s degree may be eligible to earn a second bachelor’s degree in Information Science and Technology by completing 36 Information Studies (INFOST) credits in consultation with a BSIST advisor.

### Four-Year Graduation Guarantee

If a student satisfies all the obligations described in the Four-Year Graduation Guarantee, the student will be able to complete an undergraduate degree within four years. If the undergraduate degree completion in four years is delayed by the unavailability of courses, then UWM will relieve the student of the financial tuition burden for courses still required for graduation.

### IST Core Competencies

The successful BSIST student will demonstrate understanding of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFOST 110</td>
<td>Introduction to Information Science and Technology</td>
<td>3</td>
</tr>
<tr>
<td>INFOST 240</td>
<td>Web Design I</td>
<td>3</td>
</tr>
<tr>
<td>INFOST 310</td>
<td>Human Factors in Information Seeking and Use</td>
<td>3</td>
</tr>
<tr>
<td>INFOST 315</td>
<td>Knowledge Organization for Information Science and Technology</td>
<td>3</td>
</tr>
<tr>
<td>INFOST 340</td>
<td>Introduction to Systems Analysis</td>
<td>3</td>
</tr>
<tr>
<td>INFOST 350</td>
<td>Introduction to Application Development</td>
<td>3</td>
</tr>
<tr>
<td>INFOST 410</td>
<td>Database Information Retrieval Systems</td>
<td>3</td>
</tr>
<tr>
<td>INFOST 440</td>
<td>Web Application Development</td>
<td>3</td>
</tr>
<tr>
<td>INFOST 490</td>
<td>Senior Capstone</td>
<td>3</td>
</tr>
</tbody>
</table>

**Area III: Information Studies Electives**

Select five additional Information Studies courses at the 300, 400, 500, or 600 level or equivalent coursework (Area III) requirements. A minimum of 36 INFOST credits completed in residence are needed towards the Core and Upper Division requirements (Area III) requirements. A minimum of 36 INFOST credits completed in residence are needed towards the Core and Upper Division requirements.

**Area IV: BSIST Cross-functional Electives**

Select five additional Information Studies courses at the 300, 400, 500, or 600 level or equivalent coursework.

**Total Credits**

120

Learn more about the General Education Requirements (http://catalog.uwm.edu/policies/undergraduate-policies/#generaleducationtext).
Honors in the School of Information Studies

Dean's Honor List
GPA of 3.750 or above, earned on a full-time student’s GPA on 12 or more graded credits in a given semester.

Honors Degree and Honors Degree with Thesis
Granted to graduating seniors who complete Honors College requirements, as listed in the Honors College (http://catalog.uwm.edu/opportunities-resources/honors-college/) section of this site.

Commencement Honors
Students with a cumulative GPA of 3.500 or above, based on a minimum of 40 graded UWM credits earned prior to the final semester, will receive all-university commencement honors and be awarded the traditional gold cord at the December or May Honors Convocation. Please note that for honors calculation, the GPA is not rounded and is truncated at the third decimal (e.g., 3.499).

Final Honors
Earned on a minimum of 60 graded UWM credits: Cum Laude - 3.500 or above; Magna Cum Laude - 3.650 or above; Summa Cum Laude - 3.800 or above.