Admission Requirements

Applicants will be considered on an individual basis by the BHIS Committee on Academic Affairs. Individuals determined to be deficient in one or more areas may be recommended to the Graduate College for admission upon the condition that any deficiencies are remedied through appropriate course work.

In addition to the Graduate College minimum requirements, applicants must meet the following program requirements:

- **Baccalaureate Field** From an accredited institution that is equivalent to a U.S. bachelor's degree.
- **Grade Point Average** At least 3.00/4.00 for the final 60 semester (90 quarter) hours of undergraduate study or for all terminal graduate degrees. In addition to the previous requirements, the cumulative GPA for any graduate-level course work must be at least 3.00/4.00.
- **Minimum English Competency Test Score**
  - TOEFL If the applicant has taken the paper-based TOEFL, minimum scores in the range of 585–600 will be considered; in addition, the applicant must take the Test of Written English and submit scores in the range of 5–6. Applicants taking the iBT Internet-based TOEFL must have a minimum score of 95, with subscores of Reading 24, Listening 22, Speaking 24, and Writing 24, OR,
  - IELTS 7.0, with subscores of 6.5 for all four subscores, OR,
  - PTE-Academic 54, with subscores of Reading 51, Listening 51, Speaking 53, and Writing 56.
- **Transcripts** Registrar-issued transcripts required from the following:
  - All colleges or universities attended that conferred a degree and any earned credit hours
  - All institutions where post-bachelor's course work was completed and credited

Transcripts must state degree conferred from awarding institution, including grading scale legends, transcript key, mark up sheets (usually on the back of the transcript).

International students should also refer to these requirements for international applicants (https://admissions.uic.edu/graduate-professional/requirements-deadlines/international-requirements).

- **Letters of Recommendation** Two required using the program’s criteria.
- **Personal Statement** Required. The statement should address the questions on the form provided in the application.
- **Resume** Applicant should submit a resume that highlights education and work experience.
- **Other Requirements** Prior academic work must include a course in basic computing skills (or comparable experience) and one course in graduate-level basic statistics taken within the last five years for students in the project research and thesis tracks. The latter may be taken upon matriculation. The following prerequisites for the health informatics program may be taken upon matriculation, as equivalent course work, or as healthcare experience: HIM 486 and BHIS 406.

### Degree Requirements

In addition to the Graduate College minimum requirements, students must meet the following program requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td><strong>Prerequisites</strong></td>
<td></td>
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<tr>
<td>This degree requires completion of the following prerequisite courses (or equivalent course work, professional experience, or demonstration of proficiency). These courses are most typically taken upon admission to the degree program.</td>
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<tr>
<td>HIM 486</td>
<td>Foundations of Health Information Management</td>
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<tr>
<td>BHIS 406</td>
<td>Medical Terminology for Health Information Management</td>
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<tr>
<td><strong>• Minimum Semester Hours Required</strong> 38.</td>
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<tr>
<td><strong>• Course Work</strong></td>
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<tbody>
<tr>
<td><strong>Required Courses for All Tracks</strong></td>
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<tr>
<td>BHIS 437</td>
<td>Health Care Data</td>
</tr>
<tr>
<td>BHIS 499</td>
<td>Information Sources in Biomedical &amp; Health Information Sciences</td>
</tr>
<tr>
<td>BHIS 503</td>
<td>Communication Skills in Health Informatics</td>
</tr>
<tr>
<td>BHIS 505</td>
<td>Ethics and Legal Issues in Health Informatics</td>
</tr>
<tr>
<td>BHIS 510</td>
<td>Health Care Information Systems</td>
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<tr>
<td>BHIS 515</td>
<td>Management of Health Care Communication Systems</td>
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<tr>
<td>BHIS 520</td>
<td>Health Information Systems Analysis and Design</td>
</tr>
<tr>
<td>BHIS 525</td>
<td>Social and Organizational Issues in Health Informatics</td>
</tr>
<tr>
<td>BHIS 593</td>
<td>Health Informatics Capstone Experience</td>
</tr>
<tr>
<td><strong>Required Courses for Project and Thesis Research Tracks</strong></td>
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</tr>
<tr>
<td>BHIS 500</td>
<td>Strategic Inquiry in Biomedical and Health Information Sciences</td>
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<tr>
<td>BHIS 595</td>
<td>Seminar in Biomedical and Health Information Sciences</td>
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<tr>
<td>BHIS 597</td>
<td>Project Research in Biomedical and Health Information Sciences or BHIS 598</td>
</tr>
<tr>
<td><strong>or BHIS 598</strong></td>
<td>Thesis Research in Biomedical and Health Information Sciences</td>
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</tbody>
</table>

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<tr>
<th>Course</th>
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<tbody>
<tr>
<td><strong>Required Courses for Course-Work-Only Track</strong></td>
<td></td>
</tr>
<tr>
<td>BHIS 530</td>
<td>Topics in Health Informatics</td>
</tr>
</tbody>
</table>

**Electives**

Choice of electives to reach the minimum 38 hours should be guided, in consultation with the advisor, by the area of interest and the student's professional experience.

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>BHIS 508</td>
<td>Q Research Methodology â€“ Qualitative Research</td>
</tr>
<tr>
<td>BHIS 509</td>
<td>Informatics for the Clinical Investigator</td>
</tr>
</tbody>
</table>
BHIS 511 Application of Health Care Information Systems
BHIS 514 Patient Safety Topics in Health Informatics
BHIS 517 Health Care Information Security
BHIS 527 Knowledge Management in Healthcare Organizations
BHIS 528 Consumer Health Informatics
BHIS 529 Transforming Healthcare using Business Intelligence and Predictive Analytics
BHIS 532 Theoretical Concepts of Clinical Decision Support Systems
BHIS 533 Practical Implementation of Clinical Decision Support Systems
BHIS 537 Health Care I.T. Vendor Management
BHIS 538 Health Care I.T. Administration
BHIS 543 Health Care Project Management
BHIS 546 Leadership Development in Health Informatics
BHIS 554 Health Informatics Business Intelligence Tools and Application
BHIS 580 Practicum in Health Informatics

Concentration in Health Data Science

Course | Title
--- | ---
BHIS 540 | Essentials of Health Data Science
BHIS 575 | Applied Statistics for Health Data Science

Select two of the following:

BHIS 527 Knowledge Management in Healthcare Organizations
BHIS 529 Transforming Healthcare using Business Intelligence and Predictive Analytics
BHIS 532 Theoretical Concepts of Clinical Decision Support Systems
BHIS 533 Practical Implementation of Clinical Decision Support Systems
BHIS 541 Health Data Analytics
BHIS 542 Artificial Intelligence
BHIS 554 Health Informatics Business Intelligence Tools and Application
BHIS 561 Programming for Health Analytics
BHIS 567 Healthcare Data Visualization

• Comprehensive Examination None.
• Thesis, Project, or Course-Work-Only Option
  • Thesis: Students must earn at least 8 hours in BHIS 598.
  • Project: Students must earn at least 4 hours in BHIS 597.
  • Course Work Only: Requires course work as indicated above and electives to total a minimum of 38 credit hours.
• Other Requirements

• Continuous Registration: Students who have completed all degree requirements except the thesis/project must register for zero credit hours to maintain continuous registration.

Technical Requirements

• Computer Literacy All students enrolled in this program are expected to have working knowledge of the following: microcomputer operating system, word processing, spreadsheets, electronic mail, Internet browsers.
• Technology Recommendations The student should have access to a computer with the following minimum requirements:

PC Users

• Processor Any current i5 or i7 processor
• Video Card Built-in graphics card acceptable for most cases, but will not be sufficient for high-end graphics work. Any current mid-range ($300-$400) graphics card should be acceptable for most graphics work.
• Memory 4 GB RAM minimum, 8–16 GB recommended
• Hard Drive 250 GB or more with 100 GB free space preferred
• Modem A cable or DSL connection
• Sound Card Any current sound card is acceptable
• Monitor 17-inch minimum, larger recommended
• Operating System Windows 7, Windows 8.1, Windows 10
• Software
  • An active antivirus program and an office suite such as Microsoft Office 2013
  • Adobe Acrobat Reader DC (http://www.adobe.com/products/acrobat/readstep2.html) or later
  • Internet Explorer 11.x or later OR Mozilla Firefox ESR
    • Flash plug-in (latest version)
    • Java plug-in (latest version)
  • High speed broadband access Wireless networks are acceptable for static web pages but are not sufficient for working in a learning management system.

MAC Users

• Processor Intel i5 or i7 processor, running Mac OS 10.9.5 or higher
• Memory Minimum of 8 GB RAM
• Hard Drive 500 GB Serial ATA HD; 128 GB or 256 GB solid state drive recommended
• Software
  • An active antivirus program and an office suite such as Microsoft Office 2013
  • Adobe Acrobat Reader DC (http://www.adobe.com/products/acrobat/readstep2.html)
  • Safari 8 OR Mozilla Firefox ESR
    • Flash plug-in (latest version)
    • Java plug-in (latest version)
• High speed broadband access Depending on the bandwidth requirement for course work applications, wireless networks may or may not be sufficient for working in a learning management system.