DOCTORATE IN HEALTH INFORMATICS (DHI)

Program Description and Goals

The program is the nation's first advanced practice degree in health informatics. The DHI includes unique curriculum built for professionals seeking a terminal degree in the field of health informatics.

The degree is geared towards professionals with documented executive or management-level healthcare experience. This practice doctorate program provides informatics leaders with the advanced education required to translate evidence from original research, evaluate current practices, and utilize critical thinking to accelerate the adoption of best practices in clinical and healthcare organizations.

Instruction for the program is in a hybrid environment with more than 50% of the coursework taught online. After completing necessary didactic courses, DHI students must complete a large-scale translational project at a healthcare organization. Students work under advisor guidance while completing the project, so students have the opportunity to translate evidence from original research and accelerate the adoption of best health informatics practices.

The program goals are to help students:

- Assume leadership positions throughout the healthcare industry having integrated health informatics with organizational leadership and ethics.
- Design, implement and evaluate health information technology quality improvement projects in health care systems.
- Implement evidence-based practice to improve human health.
- Employ effective communication and collaboration skills to identify and implement best practices in health care delivery.

Doctorate in Health Informatics Admission Process

The applicant should present a completed application and official documentation of the following:

1. A completed online GradCAS application with a $38 application fee
2. Official transcripts from all colleges and universities attended
3. A baccalaureate or higher degree (master's degree preferred)
4. No minimum GPA requirement. Majority of successful applicants have a GPA of 3.0 or greater
5. A resume or curriculum vitae (as appropriate)
6. Goal Statement – follow template instructions on our website (https://sbmi.uth.edu/documents/DHI-GoalStatementInstructions.pdf)
7. Proposed area of interest for translational practice project
8. A Letter of Support from the healthcare organization willing to facilitate the translational practice project. The Letter of Support must be on the healthcare organization's official letterhead. The Letter of Support should not be from the same person as a Letter of Reference. The Letter of The University of Texas Health Science Center at Houston Support should include background on the healthcare organization (including the indication of size and the type of activities), the area the institution expects the student to perform the project in, and whether or not the organization will provide any type of support (monetary or technical) for the applicant's project.
9. Three letters of reference from supervisors or colleagues. At least two letters should be from supervisors.
10. Interview with the McWilliams School of Biomedical Informatics Admissions, Progression and Graduation (APG) Committee by invitation only. Applicants will also complete a writing assessment as part of the interview process.

Requirements for Applicants with International Coursework

- The Test of English as a Foreign Language (TOEFL) (https://www.ets.org/toefl.html) or the International English Testing System (IELTS) (https://ielts.org/ielts-usa). For admissions consideration, a minimum acceptable score of 5 (for exams taken **after** January 21, 2026) or 94 (for exams taken **before** January 21, 2026) is required on the internet-based TOEFL or a minimum acceptable overall score of 7.0 on the IELTS is required. Test scores are valid for two years from the test date. The official scores must be submitted directly to GradCAS from the applicable test center. Submit official TOEFL scores by using the reporting code B886; no department code is required. Submit official IELTS scores by sending them to GradCAS; no code is needed. Testing is at the applicant's expense.
- Applicants that have completed coursework outside of the United States and who have received a diploma from a university at which English is the language of instruction are not required to submit an English Language exam. If this school is outside of an English-speaking country, evidence that indicates the language of instruction will need to be provided with your application such as a letter from the University on official letterhead.
- Applicants that have completed coursework outside of the United States must submit official transcripts and a course-by-course education evaluation of all transcripts from all universities attended outside the United States. The application forms for such an evaluation may be obtained online from the service providers; Educational Credential Evaluators, Inc. (ECE) (https://www.ece.org/) and World Education Services (WES) (https://www.wes.org/). Only evaluations from ECE or WES will be accepted. The results of the evaluation must be submitted directly to GradCAS by the agency. The evaluation report is at the applicant's expense.
- International applicants seeking F-1 student sponsorship are not eligible for the DHI Program.

Doctorate in Health Informatics Application Deadline

- Fall admission: March 1

Transfer Credit

Transfer credit for equivalent graduate courses taken elsewhere may be awarded and used to meet degree requirements if their equivalency to a McWilliams School of Biomedical Informatics degree program course is approved through a Petition for Equivalency Credit (PEC). The maximum number of transferable semester credit hours is 21 for the DHI program. Contact the Office of Academic Affairs for information.

Courses that are accepted at McWilliams School of Biomedical Informatics, through a dual or join degree program, can only be transferred in if the grade earned in the course is a "B" or higher. Courses

for which grades of less than "B" were earned will not be accepted for transfer. Courses must have been completed within the last five years to qualify. See "Five-Year Rule (https://catalog.uth.edu/biomedical-informatics/academic-standards-policies-procedures/)."

Students who are dismissed from or not in good standing in the master's program at McWilliams School of Biomedical Informatics at UTHealth Houston are not eligible to apply to and enroll in the DHI program at the school.

Students who are presenting coursework from universities or colleges outside the United States to meet admission or graduation requirements are referred to the section on Applicants with International Coursework in this catalog for a listing of additional requirements.

Academic Requirements

Students without a master's degree in health informatics, or a related field, must complete 33 semester credit hours of didactic coursework before starting the DHI curriculum. Students who hold a master's degree in informatics can immediately start the 63-semester credit hour program. A part#time student has up to ten years (30 semesters) from the time of entry to complete the required course work. Continuous enrollment is required unless approval is obtained. Each course with a BMI prefix in the Biomedical Informatics degree plan is a graduate level, professional course and must be passed with a grade of "B" or better. Students must earn a grade of "B" or higher in all dual degree program courses, unless the course is graded on a Pass or Fail basis in which a grade of "Pass" must be earned. If a dual degree student earns less than a "B" in any required course, it must be retaken to continue in the program. A grade of "B" or higher must be earned on the second attempt to prevent dismissal from the program. The minimum grade point average (GPA) required for graduation is 3.0 on all BMI courses.

Each student will develop a degree plan with written approval of their academic advisor. A signed degree plan (https://sbmi.uth.edu/current-students/curriculum/) will be filed each academic year that includes the required and/or elective courses as specified for the student's DHI program.

Computer Requirement

Every student is required to have reliable access to a computer that meets the minimum technical requirements. Students are encouraged to purchase a laptop that meets the minimum school requirements.

Computer requirements are listed on the website (https://sbmi.uth.edu/current-students/student-handbook/computer-requirements.htm) and are subject to change.

Curriculum for the Doctorate in Health Informatics

The DHI program requires a minimum of 63 semester credit hours to earn the degree, for applicants with a master's degree. This includes 30 semester credit hours of required courses, and 33 semester credit hours of coursework focused on translational project advisement, implementation, and evaluation.

Code	Title	Hours
Required Courses		
BMI 5300	Introduction to Biomedical Informatics	3
BMI 6311	Leadership and Decision Making	3
BMI 6316	Change Management for Health Informatics	3
BMI 6324	Health Information Technology Policy	3
BMI 6325	Assessment, Implementation, and Evaluation of Artificial Intelligence in Healthcare	3
BMI 6328	Value in the Health Data Eco-system	3
BMI 6340	Health Information Visualization and Visual Analytics	3
BMI 7350W	Scholarly Foundations of Advanced Health Informatics Practice	3
BMI 7351	Evidence-based Health Informatics Practice	3
BMI 7362W	Advanced Project and Vendor Management in Healthcare Informatics [1]	3
Translational Project Courses		
BMI 7170	Project Advisement [2]	3
BMI 7070	Fellowship in Health Informatics [3]	21
BMI 9950	Project Evaluation and Writing [4]	9
Total Hours		**63**

1. New course being added in Summer 2027.
2. BMI 7170 must be repeated for a maximum of 3 semester credit hours to meet the DHI degree requirements.
3. BMI 7070 must be repeated for a maximum of 21 semester credit hours to meet the DHI degree requirements.
4. BMI 9950 must be repeated for a maximum of 9 semester credit hours to meet the DHI degree requirements.

For those entering the program with only a bachelor's degree, the program requires the completion of 93 semester credit hours of McWilliams School of Biomedical Informatics coursework. This includes 60 semester credit hours of required courses and 33 semester credit hours of coursework focused on translational project advisement, implementation, and evaluation.

Code	Title	Hours
Required Courses		
BMI 5300	Introduction to Biomedical Informatics	3
BMI 5301	The US Healthcare System	3
BMI 5305	Legal Ethical Aspects of Health Informatics	3
BMI 5313	Foundations of Electronic Health Records and Clinical Information Systems	3
BMI 5315W	Quality & Outcome Improvement in Healthcare	3
BMI 5317	Applied Data Management	3
BMI 5328W	System Analysis and Project Management	3
BMI 5329	Workflow Process Modeling	3
BMI 5371	Business and Technical Communication	3
BMI 6316	Change Management for Health Informatics	3
BMI 6340	Health Information Visualization and Visual Analytics	3
Additional Elective Course		3
BMI 6311	Leadership and Decision Making	3
BMI 6316W	Change Management for Health Informatics	3
BMI 6324	Health Information Technology Policy	3
BMI 6325	Assessment, Implementation, and Evaluation of Artificial Intelligence in Healthcare	3
BMI 6328	Value in the Health Data Eco-system	3
BMI 7350W	Scholarly Foundations of Advanced Health Informatics Practice	3

BMI 7351	Evidence-based Health Informatics Practice	3
BMI 7362W	Advanced Project and Vendor Management in Healthcare Informatics [1]	3
Translational Project Courses		
BMI 7170	Project Advisement [2]	3
BMI 7070	Fellowship in Health Informatics [3]	21
BMI 9950	Project Evaluation and Writing [4]	9
Total Hours		**93**

[1] New course being added in Summer 2027.
[2] BMI 7170 must be repeated for a maximum of 3 semester credit hours to meet the DHI degree requirements.
[3] BMI 7070 must be repeated for a maximum of 21 semester credit hours to meet the DHI degree requirements.
[4] BMI 9950 must be repeated for a maximum of 9 semester credit hours to meet the DHI degree requirements.

Progression Gates and Milestones

The DHI Progression Gates or Milestones are required tasks and assignments that must be completed in a satisfactory manner during each specified semester. The Progression Gates are outlined in the DHI Progression Gates Canvas course. One of these Milestones includes required attendance at all DHI Residency Seminars that take place in Houston (on-campus) or virtually.

Failure to complete any Progression Gate or Milestone can result in a student being referred to McWilliams School of Biomedical Informatics Admissions, Progression & Graduate Committee for student review and potential disciplinary action. Students must resolve all outstanding milestones by the end of the next semester, or submit a timeline outlined by the DHI Program Director or they will be unable to enroll going forward.

Core Progression Gates and Milestones

DHI students are expected to meet the following requirements each semester.

- Attend all DHI Residency Seminars (held in Houston or virtually)
- Complete all Canvas-based Progression Gate Assessments
- Meet course requirements and maintain satisfactory academic standing
- Complete all prerequisite courses prior to advancement
- Have a clearly defined Translational Project with organizational approval
- Complete all requirements mandated by the UTHealth Houston Committee For the Protection of Human Subjects

Academic Advising

DHI students must work closely with their Academic Advisor regarding any issues related to the completion of Progression Gates and Milestones.

Translational Project Requirement

To remain in good standing, DHI students must maintain a defined Translational Project throughout their time in the program. Should a DHI student be without a project, the following protocols will take place:

- Failure to have a defined project for **two consecutive semesters** may result in **dismissal** from the program.
- Students who do not have an **approved and clearly defined project prior to the qualifying exam** will have their exam **postponed to the following academic year**.

Qualifying Exam

The goals of the DHI qualifying exam are:

1. To motivate students to review and synthesize course work and reported evidence-based practice
2. To determine the student's ability to understand and apply fundamental concepts
3. To develop and test the student's ability to communicate orally and to respond to questions and comments
4. To evaluate the student's potential to pursue doctoral-level work
5. To identify areas needing strengthening for the student to be successful as a DHI student and informatics leader
6. To provide a mechanism for faculty to come to know the student's capabilities

Students should prepare for a comprehensive qualifying exam upon completion of the second summer semester or after completion of their 33rd semester credit hour. The plan for the qualifying exam will be developed in conjunction with the student's academic advisor.

The qualifying exam consists of demonstration of competency with both:

Domain-Specific Knowledge

Demonstration knowledge, understanding, and proficiency in domain specific content and methodology. One of the purposes is to challenge students to discover relevant literature and deepen their knowledge of interests within this track.

Breadth of Knowledge across the discipline

Demonstrate breadth of knowledge across health sciences disciplines through questions that require synthesis of knowledge from core areas.

General Structure of the Exam

1. Topics for the exam will include materials covered in the Required Courses and materials selected within a specific domain. The domain specific reading list will be developed in conjunction with the student's Committee Chair/Advising Committee.
2. Students will complete a written exam including both domain general and domain specific questions.
3. In addition to the written exam, students will prepare their translational project proposal and deliver a public presentation of the translational project proposal.
4. Following the written exam and public presentation, the student, Advising Committee, and DHI Qualifying Exam Committee will take part in a closed question and answer session (1-2 hours) over the written exam and public defense.

Submission deadlines for materials related to the qualifying exam (e.g., list of references, translational project proposal to committee) will follow a set timeline following the student's declaration of intent.
All components of the qualifying exam must be completed within the published dates associated with your declaration of intent to site for the qualifying exam.

The qualifying exam dossier will contain the following items:

1. Current CV or resume
2. Abstract of DHI Oral Translational Project Proposal Presentation
    a. Students must work with their Chair and Committee to complete this item.
3. Written Draft of DHI Translational Project Paper
4. List of references (30-50 articles) supporting three domain areas related to the student's proposed translational project.
    a. Students should discuss these areas with their advisor in the process of planning their graduate program and prior to preparation of their qualifying exam materials.
5. All previously completed Individualized Development Plans

Grading

The Advising Committee and DHI Qualifying Exam Committee will assign one of the following grades to the overall qualifying exam:

1. Pass unconditionally
2. Pass conditionally (Advising Committee together with the DHI Qualifying Exam Committee to specify the conditions needed to pass, such as remedial coursework needed)
3. Fail with option to retake
4. Fail without option to retake

A student must be successful on each element of the qualifying exam to achieve pass unconditionally. The Advising Committee decision, together with the DHI Qualifying Exam Committee decision, will determine the specific requirements for options of a conditional pass or options to retake (e.g., retake the written and the oral, oral only, remediate with additional coursework.)

If given the option to retake, students will be allowed to retake any specified portion of the exam once. Efforts to retake the progression sequence must be completed within 12 weeks. Failure to progress after this point will result in dismissal from the program.

Upon successful completion of all components of the Qualifying Exam, the DHI student will have advanced to Candidacy for the Doctorate in Health Informatics.

Translational Project

The DHI culminates with a translational project and a project evaluation report. Students in the program will work on didactic courses and translational project work simultaneously. Students identify a project and primary advisor during the first semester of study and invite two additional committee members during the second semester.

The Project Advisement course is taken as the student works with an advisor and committee to prepare the project plan. At the end of the student's first year, a tentative timeline for the completion of the DHI program and translational project must be submitted.

The translational project requires:

- Section 1: Introduction
- Section 2: Evidence-Based Practice Review
- Section 3: Methodology (Setting and Project Design)
- Section 4: Results
- Section 5: Discussion
- Section 6: Study Limitations
- Section 7: Conclusions
- References
- About Appendices (as needed)
- Appendix A: Glossary of Terms
- Appendix B: Project Management Plan
- Appendix C: Return on Investment (ROI)/Cost-Benefit Analysis

After completing the translational project, the student must present the findings. The presentation must be presented at an oral session that is open to the public. Translational project documents authored by degree candidates are available to interested members of the general public upon request. After the presentation, the translational project committee votes to pass or fail the student. If the student passes and all other degree requirements are met, the translational project committee makes its recommendation for the degree to be awarded.

Petitioning for Extension

Students who have exceeded their time to degree deadline or a milestone deadline for the qualifying exam or project defense may petition APG for an extension. The Petition to Extend Time Boundary for Qualifying Exam form or Translational Practice Project Defense form can be found here (https://sbmi.uth.edu/current-students/forms.htm).

For further curriculum information, please contact:
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