Master’s Degree Requirements

1) Admissions requirements:
   a) Application Components
      Consideration for program admission requires a bachelor’s degree, three letters of
      recommendation, official transcripts, TOEFL or IELTS scores (if applicable) and an
      Office of Graduate Studies online application with fee by the stated admission
      deadline. Stated admission deadlines can be found on the program website
      (https://health.ucdavis.edu/informatics/admission/index.html/) as well as the Graduate
      Additionally, an interview may be required in certain circumstances. Additional
      requirements include an undergraduate degree with a cumulative GPA of 3.0 or
      higher, submission of transcripts from all Colleges and/or Universities attended, and a
      substantial interest in the field of Health Informatics.

   b) Language Requirement
      For applicants who a) did not receive their bachelor’s degree from an institution
      where English is the sole language of instruction, and/or b) are not from a country or
      region where English is the language of instruction, the program requires a minimum
      TOEFL score of 100 on the internet-based test. Alternatively, applicants may submit
      IELTS scores with a minimum overall BAND of 7.0 on a 9-point scale. Admissions
      decisions are made on a case-by-case basis. Meeting some or all of these criteria does
      not guarantee admission, but merely eligibility. The decision to recommend
      admission to the Dean of Graduate Studies will be made by the Program Admissions
      Committee on the basis of available space and the competitiveness of applicants
      compared to the eligible pool.

   c) Prerequisites:
      For individuals without a health care background, a basic knowledge of human
      diseases and conditions is required. The following UC Davis courses meet this
      requirement:
      - BIS 10 General Biology [4 units]
      - CHA 101, 200 Anatomy [5 units]
      - HPH 200 Human Physiology [6 units]

      For individuals without an information technology background, a basic knowledge of
      object-oriented programming and relational databases is required. The following UC
      Davis courses meet this requirement:
      - ECS 32A, or B Intro to Programming/Data Structures [4 units]
      - ECS 140A, or B Programming Languages [4 units]
ECS 165A, or B  Database Systems  [4 units]

Recommendations about courses or experiences required by applicants to meet these prerequisites will be made on an individual basis by the Admissions Committee.

d) Deficiencies:
Any course work deficiencies in the prerequisites should be made up by the end of the first academic quarter following initial enrollment by earning a letter grade of “B” or better. Pass or Satisfactory grades are also accepted.

2) Master of Science in Health Informatics Plan
The Health Informatics program will follow Plan I, which requires a research-based thesis.

Plan I. This plan requires a minimum of 55 units of graduate courses (200 series only), of which at least 28 must be graduate work in the major field. In addition, a thesis is required. The research thesis serves as the capstone requirement.

This Plan requires more units than the UC Davis minimum, which are:
30 units of graduate and upper division courses (the 100 and 200 series only), at least 12 of which must be graduate work in the major field.

3) Course Requirements - Core and Electives (Total 55 Units)

a) Core Courses (total 28 units)
MHI 202  Computer-Based Patient Records  4 units
MHI 207  Medical Decision Support  4 units
MHI 210  Introduction to Health Informatics  4 units
MHI 289F  Database and Knowledge Management  4 units
MHI 290  Seminar in Health Informatics  3 units
MHI 299  Research in Health Informatics  9 units

b) Elective Courses (total 27 units)
Minimum 27 units required. Elective courses will be selected by the student with guidance from their Graduate Advisor so as to form an individualized plan of study that supports the student’s development and specific topic area. Electives may include, but are not limited to, selections from the following courses:

MHI 207P  Medical Decision Support practicum  2 units
MHI 208  Health Informatics in Web-based Enterprise  4 units
MHI 209  Clinical Data Acquisition and Analysis  4 units
MHI 289E  Clinical Knowledge for the Health Informaticist  4 units
MHI 289I  Programming for Health Informatics  3 units
EPI 205AY  Clinical Epidemiology and Study Design  3 units
EPI 223  Spatial Epidemiology  4 units
NRS 212 Technology & Innovations in Health Care    2 units
SPH 210 Public Health Informatics     2 units
SPH 262 Principles of Environmental Health   3 units
SPH 273 Health Systems and Administration    3 units
c) **Summary:**
28 units of core coursework (including 9 units of research, and 3 units of participatory seminars) and 27 units of electives are required for a total of 55 units. Full-time students must enroll for 12 units per quarter including research, academic and seminar units. Courses that fulfill any of the program course requirements may not be taken S/U unless the course is normally graded S/U. Once course requirements are completed, students can take additional classes as needed. Per UC regulations students should not ordinarily enroll in more than 12 units of graduate level courses (200) or more than 16 units of combined undergraduate and graduate level (100, 200, 300) courses per quarter.

4) **Special Requirements:**
a) **Language Requirement:**
Students who have not obtained a previous degree at an approved English-medium institution or demonstrated English-language proficiency through an appropriate exam (e.g. TOEFL) are required to complete appropriate English-language courses, as described in the policy Graduate Student Course Requirements – English as Second Language (GC2018-02). Courses taken in satisfaction of this requirement do not count towards the units required for graduation.

5) **Committees:**
a) **Committee on Admission and Awards:**
Once the completed application, all supporting material, and the application fee have been received, the application will be submitted to the Committee on Admissions and Awards for review. The Committee on Admission and Awards consists of 3 graduate group faculty and 1 student or alumni representative. The committee will ensure that each application is reviewed by at least three graduate group faculty members. Any applicants to the program who meets the admission criteria may be asked to interview-electronically before a decision is made on their application. Based on a review of the entire application and interview (as applicable), a recommendation is made to accept or decline an applicant’s request for admission. That recommendation is forwarded to the Dean of Graduate Studies for final approval of admission. Notification of admissions decisions will be sent by Graduate Studies. Applications for the Health Informatics program are accepted through June 1 for the Fall Quarter entering class. Specific application deadlines for the program can be located on the Health Informatics website ([https://health.ucdavis.edu/informatics/admission/index.html](https://health.ucdavis.edu/informatics/admission/index.html)).

b) **Committee on Educational Policy:**
The Committee on Educational Policy consists of the Graduate Group Chair, Vice-Chair, Chair of the Committee on Admissions and Awards, a student representative, each of the Graduate Advisors for the program, and five additional faculty members
elected by the Graduate Group for 2 year terms. The Committee on Educational Policy meets at least annually for the following functions:

- Review the requirements for the Health Informatics master’s program
- Recommend course offerings
- Supervise teaching assignments
- Oversee other educational matters requiring collective action/consideration
- Monitor the normal progress of graduate students in the program, including approval of student petitions for normal progress extensions and recommendations for disqualification, when appropriate

c) **Thesis Committee or Comprehensive Examination Committee**

The graduate student, in consultation with their Major Professor, will nominate two (2) additional faculty members to serve on the Thesis Committee. These nominations are submitted to the Office of Graduate Studies for formal appointment in accordance with Graduate Council policy (GC 1998-01). The Major Professor serves as Chair of the committee.

6) **Advising Structure and Mentoring:**

The student’s **Major Professor** is the faculty member who supervises the student’s research and thesis; this person serves as the Chair of the Thesis Committee.

The student’s **Graduate Advisor**, who is assigned by the Chair of the program and appointed by the Office of Graduate Studies, is a resource for information on academic requirements, policies and procedures, and registration information.

The **Graduate Program Coordinator (staff)** assists students with course scheduling, registration and general university policies.

The **Mentoring Guidelines**, which detail expectations of both mentor and mentee, can be found in the Health Informatics Student Handbook which is distributed in person during program orientation. The Health Informatics Student Handbook is additionally available on Canvas for all students to access and by request from the Graduate Program Coordinator.

The **Committee on Educational Policy** which includes all Graduate Advisors for the program, meets at least annually to review the progress of students of all students enrolled in the program.

7) **Advancement to Candidacy:**

Graduate Studies policy states that: “Every student must file an official application for Candidacy for the Degree of Master of Science in Health Informatics and pay the Candidacy Fee after completing one-half of their course requirements and at least one quarter before completing all degree requirements; this is typically during Fall Quarter of their second year (4th quarter of study). The Candidacy for the Degree of Master form can be found online at: [http://www.gradstudies.ucdavis.edu/forms/](http://www.gradstudies.ucdavis.edu/forms/). A completed form includes a list of courses the student will take to complete degree requirements.”
If changes must be made to the student’s course plan after they have advanced to candidacy, the student’s Graduate Advisor must recommend these changes to Graduate Studies. Students must have their Graduate Advisor and committee Chair sign the candidacy form before it can be submitted to Graduate Studies. If the candidacy is approved, the Office of Graduate Studies will send a copy to the appropriate Graduate Program Coordinator and the student. The Thesis Committee Chair will also receive a copy, if applicable. If the Office of Graduate Studies determines that a student is not eligible for advancement, the program and the student will be told the reasons for the application’s deferral. Some reasons for deferring an application include: grade point average below 3.0, outstanding “I” grades in required courses, or insufficient units.

8) **Thesis Requirements (Plan I):**

    **Thesis Committee Selection**
    After the Major Professor approves the thesis topic, the Major Professor will work with the student to nominate the remaining two members of the thesis reading committee. The Dean of Graduate Students will appoint the committee during the Advancement to Candidacy process. The student will then conduct research and write their thesis under the mentorship of their Major Professor and submit it to the committee for review and approval.

    **Thesis Committee Meetings**
    The candidate and Major Professor should meet at least once a quarter with the other members of the thesis committee to discuss progress and any changes in research objectives.

    **Thesis**
    Research for the master's thesis is to be carried out under the supervision of a faculty member of the program and must represent an original contribution to knowledge in the field. The thesis research must be conducted while the student is enrolled in the program. The thesis is submitted to the thesis committee at least one month before the student plans to make requested revisions. All committee members are expected to read and comment on a thesis or dissertation within four weeks. Upon failure of a committee member to comply with the 4-week deadline, the Graduate Advisor may reconstitute the committee which will then be conveyed to the Dean of Graduate Studies for approval. However, this policy does not apply to summer periods for faculty holding 9-month appointments. All committee members must approve the thesis and sign the title page to certify their satisfaction with the thesis before the thesis is submitted to Graduate Studies for final approval.

    If at any point in the process, the student’s thesis research work and progress is deemed unacceptable, the committee should give the student a clearly specified period of time to improve the work, usually one quarter or more, and the Major Professor should complete an interim SPA with these details. If, after that period of time, the student’s thesis research work and progress is still...
unacceptable to a majority of the committee, the program may recommend to
the Dean of Graduate Studies that the student be disqualified from further
graduate study in the program.

**Filing the Thesis**
The thesis must be filed in a quarter in which the student is registered or on
filing fee. Instructions on preparation of the thesis and a schedule of dates for
filing the thesis in final form are available from Graduate Studies; the dates are
also printed in the UC Davis General Catalog and in the Class Schedule and
Registration Guide issued each quarter. The student is responsible for
observing the filing dates and preparing the thesis according to the proper
format. A student must have a GPA of 3.0 for the M.S. degree to be awarded.

9) **Normative Time to Degree:**
Normative time to degree within the Health Informatics program is 18 months to two
years on a full-time basis. As part-time enrollments are allowed, this sequence may be
extended beyond two (2) calendar years and the typical part-time student is expected
to take about three (3) years to complete the program.

10) **Typical Time Line and Sequence of Events:**

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>MHI 210</td>
<td>MHI 202</td>
<td>MHI 207</td>
</tr>
<tr>
<td></td>
<td>MHI 289E</td>
<td>MHI 289F</td>
<td>MHI 208</td>
</tr>
<tr>
<td></td>
<td>MHI 290</td>
<td>MHI 289I</td>
<td>MHI 209</td>
</tr>
<tr>
<td></td>
<td>SPH 205YA</td>
<td>MHI 290</td>
<td>MHI 290</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MHI 299</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two</td>
<td></td>
<td>Advancement to Candidacy</td>
<td>Thesis Due</td>
</tr>
<tr>
<td></td>
<td>SPH 210</td>
<td>MHI 289H</td>
<td>MHI 299</td>
</tr>
<tr>
<td></td>
<td>MHI 299</td>
<td>MHI 299</td>
<td></td>
</tr>
</tbody>
</table>

11) **Sources of Funding**
The majority of the program’s students are typically self-funded. Graduate Student
Researcher (GSR) positions are limited but available for one or more students annually.
Students with clinical positions at UC Davis Health may receive clinical fellowships to
support their training.
12) **PELP, In Absentia and Filing Fee status.**

Information about PELP (Planned Educational Leave), In Absentia (reduced fees when researching out of state), and Filing Fee status can be found in the Graduate Student Guide: [http://www.gradstudies.ucdavis.edu/publications/](http://www.gradstudies.ucdavis.edu/publications/)