

## | CURRICULUM |

<b>Core Courses</b>   11 units		
HI 201	Health Informatics	3
HI 210	System Analysis and Design	3
HI 271	Ethical, Legal & Social Issues in Health Informatics	1
HI 298	Seminar in Health Informatics	2
HI 299	Research Methods in Health Informatics	2

<b>Major Courses</b>   13 units		
MI 207	Organization and Management in Health Informatics	2
MI 216	Data Modeling and Design for Health	3
MI 224	Coding, Classification, and Terminology in Medicine	2
MI 227	Clinical and Laboratory Information Systems	3
MI 238	Applications of Internet Technologies in Health Care	2
MI 239	Primary Health Care Informatics	2

<b>Electives/Cognates Courses</b>   6-9 units		
MI 219	Data Warehousing in Health Care	2
HI 250	Business Aspects of Health Informatics	2
MI 295	Special Topics in Medical Informatics	3
BNF 260	Bioinformatics in Clinical Practice	2
BNF 295	Special Topics in Bioinformatics	3

\* Or any graduate course offered in any UP unit as approved by the adviser

\*\* Students may opt to take 2 unit or 3 units courses provided that the total number of elective/cognate is 3.

Thesis 6 units

**Total 36-39 units**

### COURSES DESCRIPTION

#### HI 201 Health Informatics

Spectrum of health informatics domains in the Philippine healthcare situation

#### HI 210 Systems Analysis and Design

Interactions between the components of a health information system: hardware, software, data, network, and people

#### HI 271 Ethical, Legal and Social Issues in Health Informatics

Ethical, Legal and Social Issues in Health Informatics

#### HI 298 Seminar in Health Informatics

#### HI 299 Research Methods in Health Informatics

Concepts, principles and methods of research in health information management

#### MI 207 Organization and Management in Health Informatics

Management and leadership in health information systems

#### MI 216 Data Modeling and Design for Health

Practical course in transforming clinical concepts into actual data models and into databases

#### MI 224 Coding, Classification and Terminology in Medicine

Systematic organization of health concepts with focus on standards and their actual implementation

#### MI 227 Clinical and Laboratory Information Systems

Design and development of clinical and laboratory

#### MI 238 Application of Internet Technologies in Health Care

Application of existing and emerging web-based technologies in health care

#### MI 239 Primary Health Care Informatics

Appropriate technologies and methods in a community-based health information system

Further inquiries may be sent to:  
**MEDICAL INFORMATICS UNIT**

**College of Medicine**

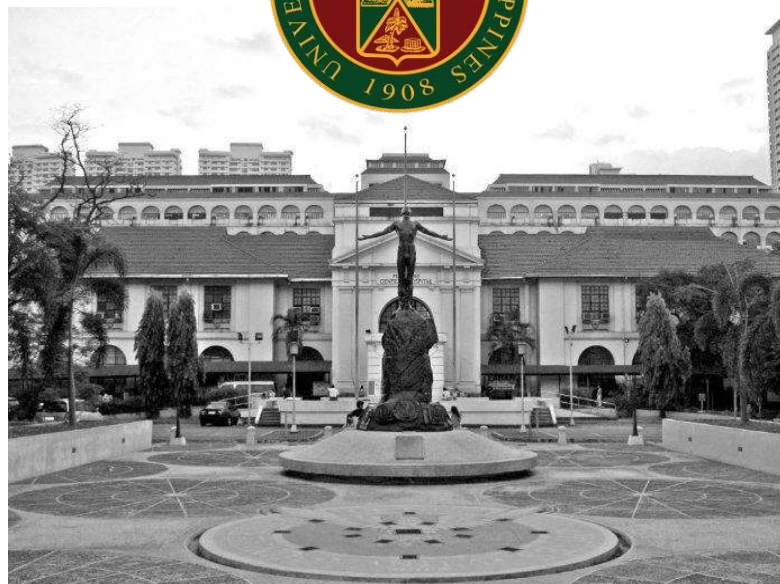
Tel no: 522-9231

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**OFFICE OF THE ASSOCIATE DEAN FOR  
ACADEMIC AFFAIRS**

**College of Arts and Sciences**

Tel no: 525-4980



### CONTACT US

Application forms may be obtained from and returned to:

THE DIRECTOR

NATIONAL GRADUATE OFFICE FOR THE HEALTH SCIENCES

☎ (632) 526-5870, 523-1495

📠 (632) 523-1498

🌐 [ngohs.upm.edu.ph](http://ngohs.upm.edu.ph)

✉ [ngohs@post.upm.edu.ph](mailto:ngohs@post.upm.edu.ph)

🐦 [ngohs@post.upm.edu.ph](mailto:ngohs@post.upm.edu.ph)



**NATIONAL GRADUATE OFFICE  
FOR THE HEALTH SCIENCES**



**MASTER OF SCIENCE IN  
HEALTH INFORMATICS**

**A PROGRAM OFFERING OF THE  
COLLEGE OF MEDICINE  
UNIVERSITY OF THE PHILIPPINES  
MANILA**



## RATIONALE

Health Informatics covers the organization and management of information in the areas of patient care, research and administration. It focuses on the structuring of health data and knowledge to support data analysis and decision-making in medicine and health care with the use of information systems. It covers a wide spectrum of applications, from computer based patient records in general practices and hospitals to electronic communication between health care providers, from signal analysis and image processing to decision support systems. Effective delivery of healthcare requires correct decision-making based on proper management of health information.

Most graduate programs in Health Informatics are offered in western countries and are not easily applicable in the local context. When resources are scarce, incorrect decisions based on improper use of information and inappropriate design can worsen the already deprived situation. Hence, there is a need for trained personnel to focus systems development in healthcare in the proper context.

The Medical Informatics track deals with organization and management of information in support of patient care, education, research and administration. It covers a wide area of the health informatics discipline and involves the study of information systems in clinics, laboratories, health centers, hospitals and other health facilities involved in the management of patient data.

The graduates of Medical Informatics track are expected to be high-level analysts who can perceive various scenarios and analyze them in the context of building systematic information solutions to existing problems. They will have the necessary components of an information system including hardware, software, data, networks, processes and human resource management.

## ACADEMIC INFORMATION

The academic year is divided into 2 semesters of 16 weeks each, excluding registration and final examination periods. The 1st semester starts in August and ends in December, while the 2nd semester covers the period from January to May, with a two-week Christmas vacation in December. The short term session of 6 weeks following the 2nd semester is usually in June and July.

English is generally used as the medium of instruction. A full time student's normal load is 12-15 units per semester and 6 units during summer; a part-time student enrolls in half of these. The tuition fee is P990.00 per unit, library fee is P1,050.00 and other fees is P350 per semester. A student with a load of 15 units in a semester matriculates P16,250.00 on the average while a foreign student pays an additional Educational Development Fund of US \$500.00 (US \$100.00 for residency only) for every semester.

There is a processing fee of P300.00 for Filipino applicants while interested foreigners are charged US \$30.00. Application materials are submitted at the end of March each year.

The following are the grade requirements for each student to be of good standing in the program: 1) general weighted average of 2.00 or better, 2) weighted average of 2.00 or better for the major/required courses, and 3) no grade of 5.00 in any academic course. A maximum of 5 years is given to a student to finish the program.

Living accommodations for students may be provided in privately-owned housing units/dorms/apartment hotels. Dorms offer lodging and/or board. There are privately-owned eateries around the school.

## PROGRAM OBJECTIVES

The training program is designed to provide prospective leaders in Health Informatics with competencies in Health Informatics such that at the end of the program, the students will be able to:

1. apply informatics concepts, skills and principles for the efficient solution of health informatics problems;
2. provide perspectives in health informatics that can be used in the critical study of all levels of health information systems;
3. plan, undertake, evaluate and monitor health informatics research projects; and
4. provide technical services to health professionals and agencies for both public and private sectors concerned with management of information which could be the bases for health policy formulation, thereby providing leadership and excellence in health informatics.



## ADMISSION REQUIREMENTS

The following are the minimum NGOHS requirements:

1. Must be a health practitioner (MD, RN, DDM, RMT etc)
2. Must have good scholastic record from university/ institution of higher learning and possess good scholastic ability
3. Have the capability for self-directed learning as determined by an interview
4. Duly accomplished Application Form (available at the Graduate Office or through [ngohs.upm.edu.ph](http://ngohs.upm.edu.ph)) together with the following documents:
  - \* original copy of the official Transcript of Records
  - \* 2 recommendations from former professors, supervisors or employers (forms included in the application packet)
  - \* receipt of processing fee paid at the UPM Cashier's Office
  - \* certified true copy of college diploma with the seal of the university and the signature of the registrar in ink
  - \* 4 passport-size photos
  - \* photocopy of birth certificate and marriage certificate for married female applicant only (NSO paper)
  - \* essay on an 8-1/2" x 11" sheet of paper describing your motivation for pursuing graduate study and your view of self-directed learning as a method of instruction, and a description of your research interest
5. For foreign applicants, additional requirements include:
  - \* original Transcript of Records in English. If written in another language, must be translated to English and authenticated by the Philippine consulate/embassy from country of origin
  - \* certified true copy of diploma with the seal of the university and the signature of the registrar in ink. If written in another language, must be translated to English and authenticated by the Philippine consulate/embassy from country of origin
  - \* Official TOEFL score of at least 550 (written test) or 173 (computerized test); 61 (internet based) or other Certification of English proficiency equivalent to TOEFL (e.g. IELTS (band 6); a certificate that English is the medium of instruction in the university where the student has graduated from is sufficient to waive this requirement
  - \* affidavit of support or certification of financial capability
  - \* photocopy of passport (present original for verification)

Additional requirements of the College of Medicine:

Applicants must be a health practitioner with:

- a. basic training in biochemistry or molecular biology. Otherwise, prospective students may opt to take the undergraduate equivalent (Chem 32 or Chem 40/ Biochem 14)
- b. a passing mark in a validating examination in Computer Programming and Data Structures. Prospective students however, may opt to take its undergraduate equivalent (CS 11, CS 123) in the BS Computer Science Program of UP Manila
- c. basic training in Epidemiology or Biostatistics or equivalent

## GRADUATION REQUIREMENTS

- \* be in residence for at least one full academic year immediately prior to the awarding of the degree
- \* have completed a minimum of 31 units of formal courses (10 units of core courses, 10 units of major and 3 elective courses (6-9 units))
- \* have a weighted average of 2.00 or better in the core and major/required courses and an overall weighted average of 2.0 or better, provided there is no grade of 5.00 in any of the courses.
- \* have successfully defended a master's thesis and passed the comprehensive examination
- \* submitted the required number of bound copies.