



UNIVERSITY OF MARYLAND
AT BALTIMORE

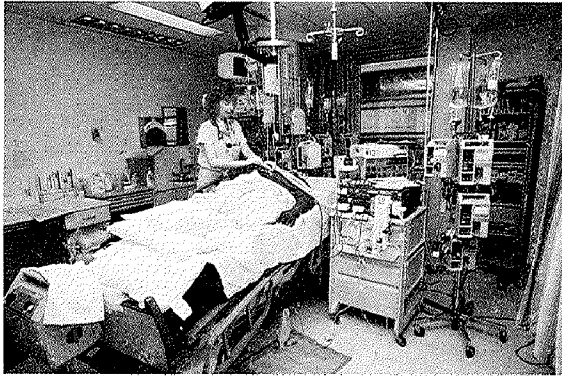
Admissions and Enrollment Management
School of Nursing
University of Maryland at Baltimore
655 West Lombard Street
Baltimore, Maryland 21201-1579



NURSING INFORMATICS
GRADUATE SPECIALIZATION



SCHOOL OF NURSING
UNIVERSITY OF MARYLAND
AT BALTIMORE



SPECIALIZATION IN NURSING INFORMATICS

As the use of computers in health care becomes increasingly important, so does the need for nurses with the skills and knowledge to apply and manage information. These nurses provide leadership in the conceptualization, design and research of computer-based information systems in health care organizations and industry.

The nursing informatics graduate specialty is designed to prepare nursing professionals to enhance quality patient care outcomes. This is accomplished through the design and management of information systems and resources that facilitate clinical and administrative decision making.

THE SCHOOL AND ITS COMMUNITY

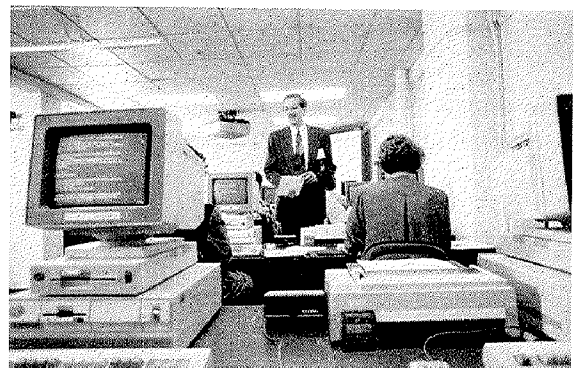
The School of Nursing, University of Maryland at Baltimore, was founded in 1889 by Louisa Parsons, who was a student of Florence Nightingale. Today it ranks among the top 10 nursing schools in the country.

The school shares a 32-acre campus, strategically located in downtown Baltimore, with the Schools of Law, Pharmacy, Social Work, the Dental and Graduate schools, and the University of Maryland Medical System (UMMS). The program

of study offers a broad range of information science and technology courses through articulated programs with the University of Maryland Baltimore County, University of Maryland College Park and University of Baltimore.

The UMMS complex is home to a 747-bed hospital, the Cancer Center, the internationally renowned Shock Trauma Center, the Montebello Rehabilitation Hospital and the James Lawrence Kernan Hospital. Also located on the campus is the new 324-bed Veterans Affairs Medical Center. Students and faculty also have access to one of the largest and most technically sophisticated health sciences libraries in the country. The school's proximity to the state capital in Annapolis, as well as to Washington, D.C., affords students extraordinary opportunities to work in computer systems corporations and over 100 different clinical settings, including the National Institutes of Health, Walter Reed Army Medical Center and the Johns Hopkins Hospital. Students also have access to the Library of Congress, the National Library of Medicine and U.S. Congress, where national health policy is developed.

The University of Maryland at Baltimore is accredited by the Middle States Association of Colleges and Schools. The undergraduate and graduate programs of the School of Nursing are accredited by the National League for Nursing.



MASTER OF SCIENCE IN NURSING INFORMATICS

The Program

The goal of the Master of Science program in nursing informatics is to prepare graduates to analyze nursing information requirements, design system alternatives, manage information technology, identify and implement user training strategies and evaluate the effectiveness of clinical and/or management information systems in patient care.

Curriculum

Courses (12 credits)

All graduate nursing students, regardless of their area of concentration, take courses that focus on clinical and theoretical bases for advanced nursing practice (NURS 602); organizational behavior and societal forces influencing health care delivery and professional practice (NURS 606); and theoretical and applied research skills, including statistical interpretation and use of computer programs (NURS 701, 702).

Major Courses (15 credits)

The student explores theories of organization and management in nursing (NURS 691); applications of computerization and information science in nursing and health care (NURS 736); and principles and practices of nursing informatics (NURS 737). A practicum (NURS 738) in selected agencies allows students to develop skills needed for implementation and evaluation of clinical and management information systems in nursing and health care. A required management course, such as NURS 690, focuses on responsibility in fiscal management of health care agencies.

Support Courses (9 credits)

This component requires at least three areas of study in information science—a foundation course in operations analysis, and two additional focus areas

of choice that may include modeling and simulation, artificial intelligence and expert systems, human/computer interface, project management, software engineering and system design.

Nonthesis Option (6 credits)

Students pursuing the nonthesis option take six credits related to their field of specialization and produce a scholarly paper or project.

Thesis Option (6 credits)

Thesis students design, implement, evaluate and orally defend a research project.

Sample Plan of Study

Courses are offered during daytime and/or evening hours. Part-time study is an option; the plan outlined below is for full-time study.

SEMESTER I		Credits
NURS 691	Organizational Theories: Application to Nursing Management	3
NURS 701	Nursing Research Designs and Analysis I	3
NURS 736	Computer Applications in Nursing and Health Care	3
IFOA 601	Foundation of Operations Analysis	3
TOTAL		12
SEMESTER II		Credits
NURS 606	Influential Forces in Nursing and Health Care	3
NURS 702	Nursing Research Designs and Analysis II	3
NURS 737	Concepts in Nursing Informatics	3
IFOA 607	Applications of Artificial Intelligence	3
TOTAL		12

SUMMER SEMESTER		Credits
NURS 602	Critical Approaches to Nursing Theories	3
ELECTIVE		3
TOTAL		6
SEMESTER III		Credits
NURS 690	Managerial Health Finance	3
NURS 738	Practicum in Nursing Informatics	3
IFOA 602	Data Communication and Networks	3
ELECTIVE		3
TOTAL		12
TOTAL CREDITS		42

Admission Requirements for Master of Science

1. Baccalaureate degree with an upper division nursing major from an NLN-accredited program.
2. Undergraduate grade point average (GPA) of at least 3.0 on a 4.0 scale. When GPA is between 2.75 and 3.0, provisional acceptance may be considered if the candidate demonstrates graduate study potential by other means.
3. Personal interviews on request.
4. Official scores on aptitude portion of Graduate Record Examination.
5. Photocopy of current license as a registered nurse.
6. Satisfactory completion of course in elementary statistics.
7. References from three professional individuals, two of whom are nurses.
8. Evidence of professional experience in nursing is required.

Applications

Applications and supporting documents must be received by July 15 for admission in the fall semester, by December 1 for the spring semester and by May 15 for the summer term.

DOCTORAL SPECIALIZATION IN NURSING INFORMATICS

Program

The goal of the doctoral program in nursing informatics is to prepare graduates to design effective nursing information systems; create innovative information technology; conduct research regarding integration of technology with nursing practice, administration and education; and develop theoretical, practice and evaluation models for nursing informatics.

Curriculum

Nursing Theory (14 credits)

All doctoral nursing students, regardless of their area of study, take courses that address the theoretical basis for nursing practice and the analysis and development of nursing theory. Included are the study and development of key concepts in nursing; the selection and integration of knowledge from philosophy of science, nursing and other disciplines; and the study of techniques for constructing nursing theory using both inductive and deductive approaches. A highly individualized clinical laboratory/field experience provides the opportunity to pursue theoretical aspects of specialized nursing areas selected by the student.

Research and Statistics (17 credits)

All doctoral nursing students take courses that address the techniques of measurement, design, advanced data analysis and evaluation essential to the conduct of nursing research. Students apply these techniques in developing measurement tools and conducting research projects specific to their own interests. Each student has the opportunity to work closely with a faculty member engaged in an ongoing research project.

Informatics Courses (20 credits minimum)

This component allows each student to develop a concentration in the specialized field of nursing informatics. Courses include studies in operations analysis, concepts and theories in nursing informatics, systems design/design technology, human-computer interfaces and advanced experimental design.

Dissertation Research (12 credits)

Each student must complete an independent original research project to be communicated in a written dissertation. The research must address questions of significance to the discipline of nursing informatics.

Sample Plan of Study

Courses are offered during daytime and/or evening hours. Part-time study is an option; the plan outlined below is for full-time study and assumes a master's with a specialty in nursing informatics. Plans are also available for students without a Master of Science in nursing with a specialty in informatics and for students who wish to enroll in the B.S.N. to Ph.D. program.

The post-baccalaureate entry option is for exceptionally well qualified nursing baccalaureate graduates whose career goals are research-oriented and who wish to progress as rapidly as possible toward the Ph.D. Subspecialty education or health policy is provided, as is advanced preparation in scholarship and research.

YEAR ONE		
FALL SEMESTER		Credits
NURS 801	Conceptual Basis for Nursing	2
NURS 803	Conceptualization of Nursing Systems	2
NURS 805	Analysis and Development of Nursing Theory	4

NURS 818	Special Topics in Nursing Research	1
TOTAL		9

SPRING SEMESTER		Credits
NURS 804	Analysis of Indirect Nursing Action	4
NURS 813	Design of Nursing Research I	3
IFOA 604	Database Systems	3
NURS 815	Qualitative Methods in Nursing Research	2
TOTAL		12

SUMMER SEMESTER		
Preliminary Examination		

YEAR TWO		
FALL SEMESTER		Credits
NURS 811	Measurement of Nursing Phenomena	3
NURS 816	Multivariate Statistics	3
NURS 814	Design of Nursing Research II	2
NURS 836	Judgment/Decision Making in Nursing Informatics	3
TOTAL		11

SPRING SEMESTER		Credits
NURS 806	Seminar in Nursing Science	2
IFOA 764	Advanced Systems Design	3
NURS 837	Nursing Informatics in Quality Care	3
NURS 812	Seminar in Nursing Measurement	3
TOTAL		11

SUMMER SEMESTER		Credits
Comprehensive Examination		
Elective		2

YEAR THREE		
FALL SEMESTER		
IFOA 760	Human-Computer Interfaces	Credits 3
NURS 899	Dissertation Research	3
TOTAL		6
<hr/>		
SPRING SEMESTER		
NURS 899	Dissertation Research	Credits 3
TOTAL		3
<hr/>		
YEAR FOUR		
FALL SEMESTER		
NURS 899	Dissertation Research	Credits 3
SPRING SEMESTER		
NURS 899	Dissertation Research	3
TOTAL CREDITS		60

Admission Requirements for Doctorate

1. Master of Science in nursing from an NLN-accredited program.
2. A graduate course (at least three credits) in research and inferential statistics.
3. Grade point average of at least 3.0 on a 4.0 scale for all previous course work.
4. Official scores on aptitude portion of Graduate Record Examination.
5. Photocopy of current license as registered nurse in at least one state or foreign country.
6. Minimum two years of professional nursing experience.
7. Personal interviews.
8. References from three professional individuals, two of whom are nurses.

Requirements for the post-baccalaureate entry option for the doctoral program include: undergraduate grade point average of 3.5 on a 4.0 scale; scores of at least 550 on each of the three components of the Graduate Record Examination; one to two years of work experience as an R.N. Students who do not meet the criteria for this program will automatically be considered for admission to the master's degree program.

Applications

Applications and supporting documents must be received by March 1 for fall admission and by November 1 for spring semester.

POST-MASTER'S STUDY IN NURSING INFORMATICS

A certificate of completion will be awarded in recognition of satisfactory course work in nursing informatics, administration and information systems management for those nurses currently holding a master's degree in nursing. The 18 to 24 credit hour Post-Master's Study in Nursing Informatics focuses on theories and skills for nursing data processing, information systems, management and budgeting.

Sample Plan of Study

SEMESTER I		Credits
NURS 691	Organizational Theories	3
NURS 736	Computer Applications in Nursing and Health Care	3
IFOA 601	Foundations of Operations Analysis	3
TOTAL		9
<hr/>		
SEMESTER II		
NURS 690	Managerial Health Finance	3
NURS 737	Concepts of Nursing Informatics	3
IFOA 607	Artificial Intelligence	3
TOTAL		9
<hr/>		
SEMESTER III		
NURS 738	Practicum in Nursing Informatics	3
IFOA	Elective in Information Systems Management	3
TOTAL		6

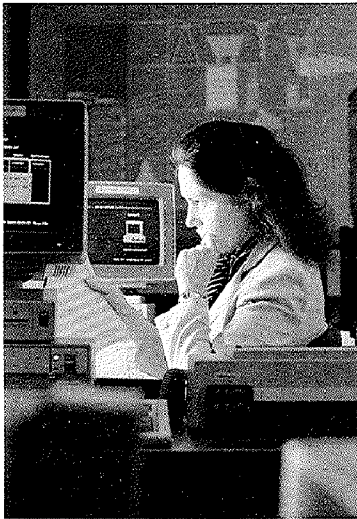
Admission Requirements for Post-Master's Study

Candidates for admission should complete the Application for Graduate Course Work in a Nondegree Status and submit it to the University of Maryland Graduate School, Baltimore, together with the following:

1. A \$40 nonrefundable application fee. Make check payable to the University of Maryland.
2. Copy of a transcript certifying completion of master's degree in nursing and minimal 3.00 GPA in graduate studies. This transcript is in place of an undergraduate transcript.
3. Scores from Graduate Record Examination (Aptitude Test).
4. Statement of goals for career in nursing informatics.
5. Copy of current nursing license.
6. Summary of work experiences in nursing (minimum two years).

POSTDOCTORAL STUDY OPPORTUNITIES

Specialized studies are available in research focused on information systems development in diverse patient care delivery systems and quality improvement.



FINANCIAL ASSISTANCE

In addition to professional nurse traineeships available through the School of Nursing, graduate applicants may also apply for financial assistance through the University of Maryland at Baltimore, Office of Student Financial Aid.

Financial aid, in the form of loans, grants and scholarships, is awarded on the basis of demonstrated need. Maryland residents are eligible for state scholarships awarded to nursing graduate students in exchange for a work commitment upon graduation.

Call the Office of Admissions for further information and for deadline dates.

INFORMATION

Call the Office of Admissions (1-800-328-8346) for the Nursing Informatics Program (410-706-7785) for further information and deadline dates.

Students are considered for admission to the School of Nursing, University of Maryland at Baltimore, without regard to race, color, creed or sex. The school's objective is to enroll students from diversified backgrounds.

TO REACH THE CAMPUS

The University of Maryland at Baltimore is located in downtown Baltimore, six blocks west of the Inner Harbor.

Directions

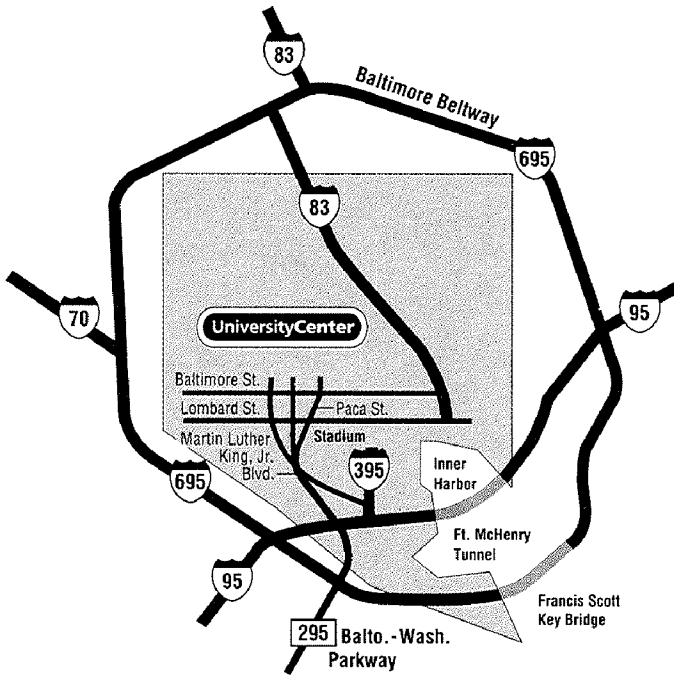
From I-95: Take Rte. 395 (downtown Baltimore) and exit onto Martin Luther King, Jr. Blvd., staying in right lane. At fourth traffic light turn right onto Baltimore St. Turn left at second traffic light onto Paca St. and right into the Baltimore Grand Garage (visitor parking).

Subway Access

The Baltimore Metro runs from Charles Center to Owings Mills. Stops closest to campus are at Lexington Market and Charles Center.

Light Rail

A new rail line connects northern Baltimore County and Oriole Park at Camden Yards. The UniversityCenter stop is at Howard and Baltimore Streets.



Yes, I'd like more information on Nursing Informatics.

Name

Home address

City

State

Zip

Telephone: day

evening

Employer

Previous education

Degree

Year

For more information contact:
Mary Etta Mills, ScD, RN
Associate Professor and Chair
Department of Education, Administration,
Health Policy and Informatics
(410) 706-7785 or
1 (800) 328-8346

Please return this form to:
Admissions and Enrollment Management
School of Nursing
University of Maryland at Baltimore
655 West Lombard Street
Baltimore, Maryland 21201