

Request for Authorization to Establish a Master of Science in Health Informatics at UNC Charlotte

The University of North Carolina at Charlotte requests authorization to establish an M.S. in Health Informatics degree program (CIP 51.2706).

Program Description

The proposed Professional Science Masters (PSM) M.S. in Health Informatics program is an interdisciplinary program at the intersection of the disciplines of Informatics and Health Services Administration. The PSM is an innovative concept championed by the Alfred P. Sloan Foundation that has received widespread support from a number of organizations including the Business Roundtable and the Council of Graduate Schools. All PSM degree programs are developed in concert with industry and are designed to dovetail into present and future professional career opportunities. The PSM in Health Informatics is designed to train the innovators who will apply 21st Century informatics to the needs of the US health care system. Health Informatics allows comprehensive management of medical information and its secure exchange between health care consumers and providers. It is expected that students entering the PSM in Health Informatics will have completed an undergraduate major in a life science, health science, or informatics discipline, with at least one programming course and at least one database course. The program is structured to provide students with the skills and knowledge to evaluate, modify, and deploy medical information systems and to educate others in their use. The program requires 39 - 48 graduate semester credit hours to complete.

UNC Tomorrow Relevance

This proposed program would address several Recommendations within the UNC Tomorrow Report including the components to enhance Our Global Readiness (Recommendation 4.1), Our Citizens and Their Future: Access to Higher Education (Recommendation 4.2), Our Communities and Their Economic Transformation (Recommendation 4.4) and Our Health (Recommendation 4.5).

Highlights from UNC-GA Data Template

No other public or private college or university in North Carolina or in the southeast region of the United States offers a similar degree. In the past three years, UNC Charlotte has established one doctorate, six masters, and five baccalaureate programs, and has discontinued six masters and one baccalaureate program.

Outcome of Consultation with Disciplinary Panels

The panel included one faculty member from ECU in addition to the UNCC faculty presenters. (The fact that only one other campus attended the disciplinary panel session is indicative of the specialized nature of this proposed graduate degree program.) In addition to discussing the curriculum and some of the coursework in the proposed program, panel members discussed the advantages of PSM degree programs. It was stated that PSM programs “train people for real jobs” because PSM programs typically combine science and business disciplines, training people to apply

the science concepts in a practical business environment. The employment opportunities for program graduates were also addressed. Overall discussion was quite positive, with consensus on the desirability of offering this degree program.

Student Demand

A 15 credit hour Health Information Technology (HIT) graduate certificate program at UNCC began admitting students in Fall 2009. The level of interest in the program has been quite high, with 24 students enrolling in the program the first year, and over one hundred serious inquiries from prospective students being received. Admitted students include people with Health and Computing backgrounds who are interested in cross-training, as well as people with other backgrounds interested in employment transitioning. For the proposed PSM in Health Informatics program, UNC Charlotte projects full enrollment of the program in its fourth year will be 38 full-time and 12 part-time students.

Opportunities for Graduates of the Program

There is a growing demand for professionals with these skills. The president of the American Medical Informatics Association estimates that at least 200,000 new health informatics professionals will be needed to support the current Presidential Administration's health records computerization initiative, and it is expected that approximately 6,000 are needed in North Carolina. Nationally, there are few programs available to train these personnel.

Resource Implications

Resource needs: No new faculty, facilities, equipment, library resources, or information technology services are needed to implement the proposed degree program. Enrollment growth funding will be used to fund additional faculty positions that may become needed after four years.

Resources allocated: The Graduate School at UNCC will administer the proposed program. Five new required courses will be developed in-load. The two participating colleges offering the program will utilize existing courses, faculty, facilities, equipment, technological infrastructure, and library resources to offer and support this new program.

Estimated cost to the State: Based on the University funding formula, when the program reaches full enrollment, UNCC would receive additional state appropriations of approximately \$618,000 if fully funded by the General Assembly.

Recommendation

It is recommended that the Board of Governors approve UNC Charlotte's request to establish a Professional Science Masters M.S. in Health Informatics degree program (CIP 51.2706) subject to the availability of funding.

General Information Template for Academic Program Review

Degree Area and Level:

M.S. in Health Informatics (CIP 51.2706) at UNC Charlotte

Addressing UNC Tomorrow:

This proposed program would address several Recommendations within the UNC Tomorrow Report including the components to enhance Our Global Readiness (Recommendation 4.1), Our Citizens and Their Future: Access to Higher Education (Recommendation 4.2), Our Communities and Their Economic Transformation (Recommendation 4.4) and Our Health (Recommendation 4.5).

Role of Program in Relation to State and Regional Needs:

According to the proposal, “There is a growing demand for professionals with these skills. The president of the American Medical Informatics Association estimates that at least 200,000 new health informatics professionals will be needed to support the Administration’s health records computerization initiative. Given the population of North Carolina, we can extrapolate that at least 6,000 such professionals will be needed in the State. There are few such programs to train these personnel.”

US Labor Department Analysis:

- *Summary* – No summary is provided for this CIP cluster.

Availability of Program Statewide (Enrollment and Degrees Awarded in Last 3 Years):

- *Public universities* – Not available.
- *Private universities* – Not available.

Available or not from Academic Common Market: Not available.

UNC Charlotte enrollment and degrees awarded by similar programs at the Masters level:

(Based on two CIP digits – 51 CIP is the summary group for Health Professions and Related Programs under which Health Informatics is a program.)

Enrollment			Academic Year						
			Fall 06	Spr 07	Fall 07	Spr 08	Fall 08	Spr 09	Fall 09
UNCC	Health/Health Care Administration/Management	MHA	14	59	64	66	77	68	76
	Public Health Education and Promotion	MSPH	20	21	22	22	33	34	31
	Kinesiotherapy/Kinesiotherapist	MS	19	19	27	26	26	28	26
	Registered Nursing, Nursing Administration, Nursing Research and Clinical Nursing, Other	MSN	166	172	185	187	198	189	207

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Number of Degrees Awarded			Academic Year		
			2006-2007	2007-2008	2008-2009
UNCC	Health/Health Care Administration/Management	MHA	25	23	24
	Public Health Education and Promotion	MSPH	6	4	8
	Kinesiotherapy/Kinesiotherapist	MS	4	9	9
	Registered Nursing, Nursing Administration, Nursing Research and Clinical Nursing, Other	MSN	56	79	40

Campus Average of enrollment and degrees awarded in this degree area at the Bachelors level:
(Based on two CIP digits – 51 CIP is the summary group for Health Professions and Related Programs under which Health Informatics is a program - over the last 3 Academic Years, Fall 2006-Fall 2009)

Campus Average			
	Number of Active Programs	Enrollment per Semester	Degrees Awarded per Year
ASU	4	35	23
ECU	14	71	23
NCCU	1	73	32
NCSU	1	11	6
UNC-CH	16	62	27
UNCC	4	74	24
UNCG	5	84	29
UNCW	1	40	10
WCU	4	61	20
WSSU	5	54	21
Campus Average:		57	19

UNC Charlotte Degree Programs added in the past three years:

- *Bachelor*
 - BA Special Education, General Curriculum (03/20/2009)
 - BS Systems Engineering (09/07/2007)
 - BS Respiratory Therapy (05/11/2007)
 - BS Public Health (03/16/2007)
 - BA Japanese Studies (04/09/2010)
- *Master*
 - MUD Urban Design (06/13/2008)
 - MA Latin American Studies (02/09/2007)
 - MS Bioinformatics (05/11/2007)
 - MS Construction and Facilities Management (06/11/2010)
 - MA Anthropology (08/13/2010)
 - Master's Fire Protection and Administration (06/11/2010)
- *Doctoral*
 - PhD Nanoscale Science (01/12/2007)

APPENDIX H

UNC Charlotte Degree Programs discontinued in past three years:

- *Bachelor*
 - BA Special Education (03/20/2009)
- *Master*
 - MEd Special Education, Cross-Categorical Disabilities (03/20/2009)
 - MEd Special Education, behavioral-Emotional Handicaps (03/20/2009)
 - MEd Special Education, Mental Handicaps (03/20/2009)
 - MEd Special Education, Learning Disabilities (03/20/2009)
 - MEd Special Education, Severe and Profound Handicaps (03/20/2009)
 - MA Art Administration (03/20/2009)
- *Doctoral*
 - N/A