

## **Request for Authorization to Establish a Master of Science in Health Informatics and Information Management at East Carolina University**

East Carolina University (ECU) requests authorization to establish a Master of Science in Health Informatics and Information Management degree program (CIP 51.2706).

### **Program Description**

The health care environment has been moving towards the adoption of information technologies such as Electronic Health Records (EHR) to manage health care data. The proposed Master of Science in Health Informatics and Information Management program is designed to prepare informaticians as well as information management professionals who can work proficiently with clinicians and health services administrators to develop and implement clear and effective health information strategies within organizations. The proposed program is a direct response to the American Health Information Management Association's (AHIMA) white paper, *Vision 2016: A Blueprint for Quality Education in Health Information Management*, which states the "transformation of health information management to a graduate level profession by 2016" as a key priority. Several recent studies have projected the significant and imminent need to develop more professionals with these skills for increasing numbers of health care information management positions.

It is expected that students entering the MS in Health Informatics and Information Management program will have completed an undergraduate major in health sciences, health services management, or computer and information technologies. Students in ECU's existing post-baccalaureate health informatics certificate are also likely candidates for the MS program. Students in the MS program would complete 48 hours of coursework. All MS students will complete twelve core courses (36 hours) in health services and information management, biostatistics, and management information systems. Students will select one of three concentration options for their remaining four courses (12 hours): 1) non-thesis, 2) thesis, or 3) Registered Health Information Administrator (RHIA). Students on the RHIA track will be eligible for the RHIA national certification exam. The entire program will also be made available through distance education.

### **Relevance to Institutional Mission and Strategic Plan**

The proposed degree program addresses a specific aspect of ECU's mission and Strategic Directions: "ECU will save lives, cure diseases, and positively transform the quality of health care for the region and state." Health informatics and information management enhances the ability of health care systems to deliver quality health data and information where and when practitioners need them.

### **Highlights from UNC-GA Data Template**

UNC Charlotte was approved to offer the Master of Science in Health Informatics degree in September 2011. No other public or private institution in North Carolina offers a similar program. In the past three years, ECU has established three masters and two baccalaureate programs and has discontinued three masters and four baccalaureate programs.

### **Outcome of Consultation with Disciplinary Panels**

The panel included three faculty from UNC-CH, two faculty from WCU, three faculty from UNCC, two faculty from ASU, and one faculty member from WSSU, in addition to the UNCW faculty

presenters. ECU presenters emphasized the need for the program and that the MS would replace the existing Bachelor of Science degree in health information management. Panelists agreed on the high need for professionals with the skills that this program would provide; indeed, some expressed that student projections in the proposal may be conservative. Panelists did not express any concerns with the curriculum and discussed opportunities to direct students between relevant community college, bachelors, and master's opportunities in the state. There was consensus favoring the offering of this degree program.

### **Student Demand**

Since Fall 2008, ECU has offered a post-baccalaureate certificate in health informatics, in which 41 students are currently enrolled. Since 2008, ECU has received more than 150 inquiries from prospective students interested in pursuing a graduate program in health informatics. In October 2008, an email survey was sent to the membership of NCHIMA, the state association of health information management professionals. Sixty-eight percent of respondents expressed an interest in pursuing a master's degree program if available at ECU; twenty-five percent of that group conditioned their interest in the program on being able to take courses online. ECU projects full enrollment of the program in its fourth year will be 33 full-time and 32 part-time students.

### **Opportunities for Graduates of the Program**

The national Bureau of Labor Statistics (BLS) projects a growth rate of 16% for "Medical and Health Services Managers" through 2016. A Hersh and Wright study forecasts that approximately 50,000 informatics professionals are needed by 2016 in order to meet projected growth in the adoption of electronic health care information systems. Locally, several health care systems in close proximity to ECU are in the process of adopting electronic health record (HER) systems and have begun to express a preference for health informatics and information management professionals prepared at the graduate level.

### **Resource Implications**

**Resource needs:** No new facilities, equipment, library resources, or information technology services are needed to implement the proposed degree program. As enrollments increase, a new faculty member could be needed as soon as the second year of the program offering, with a second faculty hire projected in the fourth year.

**Resources allocated:** The ECU Department of Health Services and Information Management will administer the proposed program. Should enrollment growth funds not be available, ECU has committed to support and sustain this program by reallocation of existing resources and enrollment management within the program.

**Funding Formula Calculation:** After four years when the program reaches full projected enrollment, based upon the current enrollment change funding formula, ECU would receive additional funding of approximately \$754,000 if fully funded by the General Assembly.

### **Recommendation**

It is recommended that the Board of Governors approve ECU's request to establish a Master of Science in Health Informatics and Information Management degree program (CIP 51.2706).

## General Information Template for Academic Program Review

### ***Degree Area and Level:***

M.S. Health Informatics and Information Management at East Carolina University (CIP 51.2706)

### ***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), and Our Health (Recommendation 4.5).

### ***Role of Program in Relation to State and Regional Needs:***

According to the proposal, “The proposed program is a response to AHIMA’s whitepaper: Vision 2016, *A Blueprint for Quality Education in Health Information Management*, which explicitly stipulates that the “transformation of health information management to a graduate level profession by 2016” is one of its key priorities. Concurrently, the health care environment has been moving toward the adoption of information technologies such as Electronic Health Records (EHR) to manage health care data. As a result, federal, state, and regional projections show a real need for additional HIIM professionals with advanced knowledge and training in the principles of health informatics and information management. The establishment of the proposed MS in HIIM at ECU is designed to help meet the needs of workforce training.”

### ***US Labor Department Analysis:***

- *Summary* – No narrative applicable to this degree program.

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

- *Public universities* – UNC Charlotte was approved to offer the PSM in Health Informatics on 09/09/2011.
- *Private universities* – N/A

### ***ECU Campus enrollment and degrees awarded in 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 and Information Management is listed as a program.)

Enrollment			Academic Year						
			Fall 08	Spr 09	Fall 09	Spr 10	Fall 10	Spr 11	Fall 11
ECU	Audiology/Audiologist and Speech-Language Pathology/Pathologist	MS	110	105	114	112	121	118	123
	Physician Assistant	MS	97	65	97	62	94	62	96
	Athletic Training/Trainer	MS	1	1	4	4	4	4	0
	Substance Abuse/Addiction Counseling	MS	28	26	16	19	19	21	41
	Marriage and Family Therapy/Counseling	MS	23	23	23	22	25	23	26
	Public Health, General	MPH	76	78	80	81	91	103	102
	Environmental Health	MSEH	20	22	28	24	29	31	33
	Occupational Health and Industrial Hygiene	MS	23	24	23	23	24	24	23
	Public Health Education and Promotion	MA	66	75	85	87	85	87	84
	Occupational Therapy/Therapist	MSOT	62	41	60	41	61	45	66
	Therapeutic Recreation/Recreational Therapy	MS	15	16	15	13	17	17	13
	Vocational Rehabilitation Counseling/Counselor	MS	39	45	49	56	47	41	7
	Registered Nursing, Nursing Administration, Nursing Research and Clinical Nursing, Other	MSN	459	443	465	466	491	488	504

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Number of Degrees Awarded			Academic Year		
			2008-2009	2009-2010	2010-2011
ECU	Audiology/Audiologist and Speech-Language Pathology/Pathologist	MS	41	40	47
	Physician Assistant	MS	30	35	29
	Athletic Training/Trainer	MS	1	0	4
	Substance Abuse/Addiction Counseling	MS	31	19	27
	Marriage and Family Therapy/Counseling	MS	12	10	13
	Public Health, General	MPH	32	26	22
	Environmental Health	MSEH	6	7	4
	Occupational Health and Industrial Hygiene	MS	9	6	3
	Public Health Education and Promotion	MA	15	23	23
	Occupational Therapy/Therapist	MSOT	20	20	19
	Therapeutic Recreation/Recreational Therapy	MS	2	4	3
	Vocational Rehabilitation Counseling/Counselor	MS	33	32	35
	Registered Nursing, Nursing Administration, Nursing Research and Clinical Nursing, Other	MSN	111	110	143

***Campus Average of enrollment and degrees awarded per degree program in this area at the Masters level over the last 3 Academic Years, Fall 2008-Fall 2011:***

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

Campus Average			
	Number of Active Programs	Enrollment per Semester	Degrees Awarded per Year
ASU	4	25	13
ECU	13	81	27
NCCU	3	38	23
NCSU	1	8	4
UNC-CH	16	71	28
UNCC	4	85	26
UNCG	5	65	30
UNCW	2	34	15
WCU	4	70	25
WSSU	5	61	23
Campus Average:		54	21

***ECU Degree Programs added in the past three years:***

- *Bachelor*
  - BS Geographic Information Science and Technology (06/11/2010)
  - BS Applied Atmospheric Science (02/12/2010)
- *Master*
  - MS Biomedical Sciences (06/11/2010)
  - MS Security Studies (06/11/2010)
  - MS Sustainable Tourism (01/08/2010)
- *Doctoral*
  - N/A

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### ***ECU Degree Programs discontinued in past three years:***

- *Bachelor*
  - BA Exercise and Sport Science (04/08/2011)
  - BA Art (02/11/2011)
  - BS Accounting (08/14/2009)
  - BS Marketing Education (03/20/2009)
- *Master*
  - MM Music Therapy (03/20/2009)
  - EdS Counselor Education – Intermediate Degree (03/20/2009)
  - CAS Library Science – Intermediate Degree (03/20/2009)
- *Doctoral*
  - N/A