UMBC

Office of the Provost
University of Maryland, Baltimore County
1000 Hilltop Circle
Baltimore, Maryland 21250

PHONE: 410-455-2333
FAX: 410-455-1107
WEB: www.umbc.edu

interoffice

MEMORANDUM

DATE: July 5, 2016

TO: Rosemary Drohan

FROM: Antonio Moreira, Ph.D
                 Vice Provost for Academic Affairs

SUBJECT: Upper Division Undergraduate Certificate in Health Information Technology

Attached please find the original proposal for the Upper Division Undergraduate Certificate in Health Information Technology. For the sake of expediency, I am also sending copies of this information simultaneously to the Faculty Senate, the Undergraduate Council and the Academic Planning and Budget Committee. Please coordinate with Drs. Moffitt, McDonough and Nicholas to obtain the endorsement from the shared governance process.

We look forward to receiving the Faculty Senate's review.

Thank you.

AM:slm
Attachment

Cc: Dr. Kimberly Moffitt, President, Faculty Senate
          Dr. Susan McDonough, Chair, Undergraduate Council
          Dr. Charles Nicholas, Chair, APB
          Dr. Julia Ross, Dean, College of Engineering and Information Technology
          Dr. Carolyn Seaman, Associate Professor, Information Systems
          Ms. Beth Wells (w/o attachment)

Proposed Upper-Division Undergraduate Certificate in

Health IT
UMBC Department of Information Systems

Health information technology (IT) is about making health-related information useful to individuals and organizations for improving the quality of care, obtaining better health outcomes, and reducing health care costs. Health IT has been recognized as an area of national need by the recent US administrations as well as various governmental agencies and large corporations. The health care industry is responding with widespread adoption of health IT solutions such as electronic health records and telemedicine. With the cutting-edge knowledge and active research involvement of its faculty members, the Department of Information Systems provides an excellent environment for our undergraduate students to become better prepared to join the health IT workforce.

Thus, we propose to augment our existing undergraduate curriculum in Information Systems, which already contains rigorous education in programming, databases, systems analysis and design, and computer networking, with additional health IT related courses through an optional upper division certificate program. The IS department has a long history of successfully teaching health IT courses. The certificate will allow interested students to focus on this important application domain and gain a visible credential upon graduation. The core courses in this certificate teach students about the fundamental recurring concepts and essential applications in health IT. The electives provide students with knowledge about the underlying technologies that support health IT solutions. Students in our proposed certificate will also be required to synthesize the concepts and skills acquired in the courses into a final health IT experience.

The certificate is open to all UMBC undergraduate students. We expect that interest will come primarily from IS majors, IS minors, BTA majors, and the Health Administration and Policy and Public Policy (HAPP) program. The existence of this certificate is not expected to attract additional students to UMBC or to the IS department immediately, however, in the long run, the availability of a health IT certificate can attract accomplished students. Based on past enrollment trends in IS 460 and 461, we estimate the enrollment to be around 15 students per year.

Our region is one of the primary hubs in the United States in terms of health IT activity. There is a strong and increasing market demand for health IT professionals in our area, as evidenced in a detailed study conducted in 2013 to support the creation of our current MPS program in Health IT. That study showed that the Baltimore region experienced a 44 percent increase in the total number of health IT positions from 2007 to 2012, while the number of positions declined nationally by ten percent. Employers in the Greater Baltimore region posted 78 percent more health IT positions in the first half of 2012 than they did in the first half of 2010.

Proposed curriculum (15 credits total)

Core courses: IS 460 Health Informatics I (3)
IS 461 Health Informatics II (3)

Experience: IS 397 Health IT internship (3) OR
IS 467 Senior Projects in Health IT (3)

Electives (choose two):
IS 427 Introduction to Artificial Intelligence (3)
IS 428 Data Mining Techniques and Applications (3)
IS 430 Information Systems and Security (3)
IS 464 Telemedicine in Trauma Care (3)

From:	Beth Wells [bwells@umbc.edu]
Sent:	Monday, June 27, 2016 3:00 PM
To:	Carolyn Seaman
Subject:	Re: Health IT UDC

Carolyn,

On the health IT routing sheet, please sign my name on the top line where it says "Informal review by Assistant Vice Provost". Please add a note that I asked you to sign it for me following my review of the proposal on my last day before medical leave. Then sign your name, too.

Thanks so much for your help.

Beth

Beth Wells
Assistant Vice Provost for Academic Affairs
UMBC

Office: 906 Administration
Mail: 1001 Administration
1000 Hilltop Circle
Baltimore, MD 21250

410-455-8907
bwells@umbc.edu

On Mon, Jun 27, 2016 at 2:48 PM, Carolyn Seaman <cseaman@umbc.edu> wrote:

Hi Beth —

No problem, I knew you were away. I'm actually traveling now, too, but I will get the routing started when I'm back in the office on Thursday. While you were away, I corresponded with Pam and Connie and now have approved acronyms for both the cybersecurity and the health IT certificates. I'm pretty sure Susan was cc'ed on those emails, but I'll check to be sure.

Good luck with the back surgery! I hope all goes well. I'll call later in July if I need to, but I'll try to leave you alone.

Cheers,

Carolyn

Proposed New Academic Plan or Name Change to Existing Academic Plan

Required steps in the review and approval process for proposed new academic plans and name changes to existing academic plans vary depending upon a number of factors. The Provost's Office reviews each concept for a new academic plan or name change in light of UMBC campus governance procedures and USM/MHEC approval guidelines. As a result of this examination, **the boxes checked on page 2 of this form reflect the steps that have been identified as required for review of the proposed new academic plan or name change of an existing academic plan** shown below and attached.

Concept approved by the Program Concept Group: Date of PCG review: Date routing sheet sent:

UDC Health IT   4/14/16   5/2/16

This routing form and process is designed to enable more effective and efficient tracking of documents throughout the review and approval steps, ultimately leading to more timely completion of the process. This is especially important because in many cases MHEC has strict "windows" during which proposals must be submitted.

Instructions:
1. Please do **not** detach this routing slip from the proposal.

2. Regarding the proposed program acronym, the department proposing the new academic plan is responsible to consult simultaneously by email with Pam Hawley in the Registrar's Office at mcinnis@umbc.edu and Connie Pierson in IRADS at krach@umbc.edu. Please send the proposed program acronym, type (BA, BS, certificate, etc) and description. If you have no preferred acronym, you can send only the description and degree type; Pam and Michael will respond with an assigned acronym. After this consultation, insert the following below: (1) the proposed name of the new academic plan; (2) a formal description of the proposed new academic plan (up to 30 characters); (3) a short description of the proposed new academic plan (up to 10 characters); and (4) a proposed new 4-letter acronym for the proposed new academic plan.[1]

3. If a new program is proposed, please send an email to Miriam Tillman at mir@umbc.edu to inquire whether the Marketing Department in Institutional Advancement has an interest in exploring marketing opportunities associated with this program.

4. The proposal and these routing sheets should be sent to each office indicated on this form, in the order in which each appears on the list.

5. Attach letters of support from all participating departments, assuring capacity in courses, etc.

As you sign your approval (or return it to the prior step for modification), please email Susan Mocko in the Provost's Office at mocko@umbc.edu, giving the name of the proposal as shown above and the office to which you are sending it next, so that we can keep track of it. If you have questions about the review process, please contact Beth Wells at bwells@umbc.edu, x 58907. Thank you very much for your assistance.

****

Proposed name of proposed new academic plan: Proposed program acronym:

UDC m Health IT   HEIT

Proposed formal description of new proposed academic plan (up to 30 characters):

Health IT

Proposed short description of proposed new academic plan (up to 10 characters):

HEALTH-IT

<p align="center">OR</p>

Proposed change to name of existing academic program: Current program acronym:[2]

Additional instructions for proposal: Beth Wells
Follow the instructions in the new program guidelines on the Provost's Assistant Vice Provost for Academic Affairs
website for program type:

D (p 12)

---

[1] Note that academic plan acronyms are permanent and, once established do not change in the future if the name of the academic plan changes.

2 See footnote 1

Name of proposed new academic plan or proposed change to name of existing academic plan:

UDC Health IT

☑ Department proposing program <u>must submit the proposal for informal review</u> to the Vice-Provost for Academic Affairs, prior to submitting it for formal review.
☑ Department proposing program <u>must develop and get approval</u> for proposed acronym. *Follow instruction # 2 on Page 1.*
☑ USM requires that proposals be submitted electronically. Please send an electronic copy of the FINAL version of your proposal to Susan Mocko at mocko@umbc.edu.
☑ A *Letter of Intent* is required for this program. The format and directions will be sent to you electronically. **Sent to USM 6/27/2016 BW**

Send to this office if checked here.

	Signatures:	Dates:
☑	*Beth Wells*	6/27/2016 – see attached note
	INFORMAL REVIEW	Date reviewed
	Assistant Vice-Provost for Academic Affairs	
☑	*Anya C____*	**6/30/16**
	Department Chair	Date approved
~~NA~~ BW		
NA	Vice-President for Administration & Finance	Date budget reviewed
NA	Vice Provost, Professional Education	Date approved
NA	Dean of Natural & Mathematical Sciences	Date approved
NA	Dean of Arts, Humanities & Social Sciences	Date approved
	Dean of the Erickson School	Date approved
☑	*____ M ____*	6/30/16
	Dean of Engineering & IT	Date approved
☑	*Diane M. Lee*	6/30/16
	Dean of Undergraduate Education	Date approved
N?A	Dean of Graduate Education	Date approved
☑	**Please return proposal & cover sheet at this point to:** Vice Provost for Academic Affairs	Date Letter of Intent sent to USM
☑	Chair, Undergraduate Council	Date approved
NA	Chair, Graduate Council	Date approved
☑	Chair, Academic Planning & Budget	Date approved
☑	President, Faculty Senate	Date approved
☑	**Please return proposal & cover sheet at this point to:** Vice Provost for Academic Affairs	
☑	Provost	Date approved
☑	President	Date approved
☑	University System of Maryland/ Board of Regents and	
☑	Maryland Higher Education Commission for	*administrative review*
NA	*Target* MHEC Window submission date (subject to change) _____	

Office of the Provost
University of Maryland, Baltimore County
1000 Hilltop Circle
Baltimore, Maryland 21250

PHONE: 410-455-2333
FAX: 410-455-1107
WEB: www.umbc.edu

interoffice

MEMORANDUM

DATE: July 5, 2016

TO: Rosemary Drohan

FROM: Antonio Moreira, Ph.D.
            Vice Provost for Academic Affairs

SUBJECT: Upper Division Undergraduate Certificate in Health Information Technology

Attached please find the original proposal for the Upper Division Undergraduate Certificate in Health Information Technology. For the sake of expediency, I am also sending copies of this information simultaneously to the Faculty Senate, the Undergraduate Council and the Academic Planning and Budget Committee. Please coordinate with Drs. Moffitt, McDonough and Nicholas to obtain the endorsement from the shared governance process.

We look forward to receiving the Faculty Senate's review.

Thank you.

AM:slm
Attachment

Cc: Dr. Kimberly Moffitt, President, Faculty Senate
       Dr. Susan McDonough, Chair, Undergraduate Council
       Dr. Charles Nicholas, Chair, APB
       Dr. Julia Ross, Dean, College of Engineering and Information Technology
       Dr. Carolyn Seaman, Associate Professor, Information Systems
       Ms. Beth Wells (w/o attachment)

Proposed Upper-Division Undergraduate Certificate in
Health IT
UMBC Department of Information Systems

Health information technology (IT) is about making health-related information useful to individuals and organizations for improving the quality of care, obtaining better health outcomes, and reducing health care costs. Health IT has been recognized as an area of national need by the recent US administrations as well as various governmental agencies and large corporations. The health care industry is responding with widespread adoption of health IT solutions such as electronic health records and telemedicine. With the cutting-edge knowledge and active research involvement of its faculty members, the Department of Information Systems provides an excellent environment for our undergraduate students to become better prepared to join the health IT workforce.

Thus, we propose to augment our existing undergraduate curriculum in Information Systems, which already contains rigorous education in programming, databases, systems analysis and design, and computer networking, with additional health IT related courses through an optional upper division certificate program. The IS department has a long history of successfully teaching health IT courses. The certificate will allow interested students to focus on this important application domain and gain a visible credential upon graduation. The core courses in this certificate teach students about the fundamental recurring concepts and essential applications in health IT. The electives provide students with knowledge about the underlying technologies that support health IT solutions. Students in our proposed certificate will also be required to synthesize the concepts and skills acquired in the courses into a final health IT experience.

The certificate is open to all UMBC undergraduate students. We expect that interest will come primarily from IS majors, IS minors, BTA majors, and the Health Administration and Policy and Public Policy (HAPP) program. The existence of this certificate is not expected to attract additional students to UMBC or to the IS department immediately, however, in the long run, the availability of a health IT certificate can attract accomplished students. Based on past enrollment trends in IS 460 and 461, we estimate the enrollment to be around 15 students per year.

Our region is one of the primary hubs in the United States in terms of health IT activity. There is a strong and increasing market demand for health IT professionals in our area, as evidenced in a detailed study conducted in 2013 to support the creation of our current MPS program in Health IT. That study showed that the Baltimore region experienced a 44 percent increase in the total number of health IT positions from 2007 to 2012, while the number of positions declined nationally by ten percent. Employers in the Greater Baltimore region posted 78 percent more health IT positions in the first half of 2012 than they did in the first half of 2010.

Proposed curriculum (15 credits total)
Core courses: IS 460 Health Informatics I (3)
                          IS 461 Health Informatics II (3)

Experience: IS 397 Health IT internship (3) OR
                          IS 467 Senior Projects in Health IT (3)

Electives (choose two):
                          IS 427 Introduction to Artificial Intelligence (3)
                          IS 428 Data Mining Techniques and Applications (3)
                          IS 430 Information Systems and Security (3)
                          IS 464 Telemedicine in Trauma Care (3)

From:	Beth Wells [bwells@umbc.edu]
Sent:	Monday, June 27, 2016 3:00 PM
To:	Carolyn Seaman
Subject:	Re: Health IT UDC

Carolyn,

On the health IT routing sheet, please sign my name on the top line where it says "Informal review by Assistant Vice Provost". Please add a note that I asked you to sign it for me following my review of the proposal on my last day before medical leave. Then sign your name, too.

Thanks so much for your help.

Beth

Beth Wells
Assistant Vice Provost for Academic Affairs
UMBC

Office: 906 Administration
Mail: 1001 Administration
1000 Hilltop Circle
Baltimore, MD 21250

410-455-8907
bwells@umbc.edu

On Mon, Jun 27, 2016 at 2:48 PM, Carolyn Seaman <cseaman@umbc.edu> wrote:

Hi Beth —

No problem, I knew you were away. I'm actually traveling now, too, but I will get the routing started when I'm back in the office on Thursday. While you were away, I corresponded with Pam and Connie and now have approved acronyms for both the cybersecurity and the health IT certificates. I'm pretty sure Susan was cc'ed on those emails, but I'll check to be sure.

Good luck with the back surgery! I hope all goes well. I'll call later in July if I need to, but I'll try to leave you alone.

Cheers,

Carolyn