IUPUI Request for Change of Academic Program Name

School/Department submitting request
School of Engr and Tech, Engr Tech Department

Date
January 29, 2013

Please check name to be changed

Degree

Major

Minor

Certificate

Current Name
Biomedical Engineering Technology

New Name
Healthcare Engineering Technology Management

Current CIP code
15.0401

Recommended CIP code
consult with Registrar

Effective Date
Fall, 2013

Rationale (include any supporting documentation as appropriate (limit 9 lines or 766 characters))

The community of clinical practitioners who support the safe and effective use of medical equipment has been guided by the Association for the Advancement of Medical Instrumentation. In April, 2011, the group created a new discipline name, Healthcare Technology Management (HTM), to describe the field of technology support in the clinical setting. A change to the IUPUI major name is sought to more closely align the major name with the new discipline name. The title has been selected to integrate the discipline with ABET nomenclature. In addition, the change will minimize confusion with the unrelated discipline of biomedical engineering and better characterize the qualities of graduates. The industrial advisory board members support this change.

Submitted by

Department Chair Signature

Name (typed)
Elaine Cooney

Date
January 29, 2013

Date of Approval by School's Faculty
October 9, 2012

Dean Signature

Name (typed)
David Russomanno

Date
January 29, 2013
Proposal to Change the Name of Biomedical Engineering Technology to Healthcare Engineering Technology Management

Proposal: Biomedical Engineering Technology major will now be named Healthcare Engineering Technology Management (HETM)

Impact: Both the associate and bachelor's curricula would be renamed. The name of the degree, AS in Engineering Technology or BS in Engineering Technology would not change as the actual degree is not labeled with the discipline name.

Rationale: The community of clinical practitioners who support the safe and effective use of medical equipment has been guided by the umbrella organization the Association for the Advancement of Medical Instrumentation (AAMI*) sought to identify and implement a unifying name through the Future Forum efforts. In April, 2011, the group created a new discipline name, Healthcare Technology Management (HTM), to describe the field of technology support in the clinical setting. [http://www.aami.org/news/2011/092811.press.future.forum.html](http://www.aami.org/news/2011/092811.press.future.forum.html)

Supporting Evidence:

Nomenclature Alignment: The term biomedical was not incorporated into the discipline name by AAMI in 2011 because the broader term healthcare better describes the overarching field of patient care. The term biomedical has evolved into a research direction and away from direct patient care. This is evidenced by IUPUI biomedical engineering graduates who often work in research laboratories, attend medical school, or pursue graduate degrees. The Biomedical Engineering Society (BMES) supports scientists who “design and build innovative devices (artificial limbs and organs, new-generation imaging machines, advanced prosthetics and more) and improve processes for genomic testing, or making and administering drugs.” ([www.bmes.org](http://www.bmes.org)).

The use of the terms engineering technology in the name satisfies the requirements of ABET (II.E.3.d.(1)) and clearly identifies the program as a technical degree with a focus on the equipment and technologies that support the treatment of patients.

Origin of name Biomedical Engineering Technology: The current name of the major was selected without connection to industry or clinical use of the discipline name. Graduates work in departments named clinical engineering and medical technology support. Academics selected the name because it mirrored the pattern of other disciplines such as electrical engineering and electrical engineering technology, mechanical engineering and mechanical engineering technology, etc.

Alignment with the Engineering Counterpart: Traditionally, the fields of electrical engineering and mechanical engineering share content, albeit a different focus, with their technology counterparts. Biomedical engineering (BME) academic programs do not align with biomedical engineering technology (BMET) programs. For example, the BMET curriculum includes courses in clinical safety regulations and physiology. BME students do not explore
these topics in depth. The similar name yet different subject emphasis can confuse educators and students.

Use of the Term Management: Construction engineering technology management (CEMT) within the engineering technology department has utilized the term management in the major name to emphasize to employers the educational emphasis on construction projects rather than hammering and tool use. Graduates of the IUPUI BMET program support the safe use of medical equipment in overarching ways, dealing with integration and utilization rather than wrench and screwdriver use.

IUPUI as a Leader in the Field: Only two schools in the country offer a bachelor’s degree to prepare technicians to support the safe use of medical equipment in the clinical setting. IUPUI holds a leadership position as a model for other institutions. To follow the AAMI recommendations for the discipline name would strengthen our relationship to industry and once again demonstrate the prominence of IUPUI in this area.

Proliferation of For-Profit Institutions: The lack of academic programs in this field has resulted in a proliferation of for-profit institutions offering trade-school level programs. The name of the academic program at many of these schools is biomedical engineering technology or biomedical technology. IUPUI must distance itself from this nomenclature.

Letters of support from the Kelley School of Business, Purdue’s Weldon School of Biomedical Engineering, Purdue’s College of Technology, and the Association for the Advancement of Medical Instrumentation (AAMI) are included below.

*AAMI is a non-profit association representing more than 7,000 medical technology professionals, hospitals, and manufacturers around the world.
February 14, 2013

David J. Russomanno  
ET 219E  
IUPUI

Dear David:

I understand that the School of Engineering and Technology proposes to change the name of the Biomedical Engineering Technology undergraduate major to Healthcare Engineering Technology Management. I also understand that there are no course or curriculum changes that accompany this re-naming request.

Finally, I understand that this name change is in response to needs of the program’s constituents, including the community of clinical practitioners who support the safe and effective use of medical equipment.

The Kelley School of Business Indianapolis has no opposition to this name change.

Sincerely,

Philip L. Cochran  
Associate Dean--Indianapolis Operations  
Director, Randall L. Tobias Center for Leadership Excellence  
Thomas W. Binford Chair in Corporate Citizenship

PLC/sh
March 5, 2013

Professor Elaine Cooney
Department Chair
Engineering Technology
IUPUI
799 W Michigan St
Indianapolis, IN 46202

Dear Elaine:

On behalf of the Weldon School of Biomedical Engineering, I offer our support for the proposed name change of your biomedical engineering technology program. The phrase biomedical engineering has rapidly evolved to reflect a discipline primarily focused on medical device and biotechnology research and discovery. Our School’s core collaborative partnerships with industry are centered on medically-related devices. The majority of graduates from the Weldon School enter directly into positions with medical device related companies and another large portion complete graduate school training for MS and PhD degrees in Biomedical Engineering. We also place a contingent into medical school training each year.

In contrast, the technology degree offered by IUPUI is focused on the management and support of existing clinical equipment. Graduates promote the safe and effective use of technology within the hospital setting. Changing the name of the degree program to reflects this emphasis on delivery and support healthcare technology and aligns with the call for specification and unification of program names by the Association for the Advancement of Medical Instrumentation (AAMI).

We support the changing of the name of the Biomedical Engineering Technology program at IUPUI to Healthcare Engineering Technology Management.

Sincerely,

Andrew O. Brightman
Assistant Head
Phone: (765) 496-3537
E-mail: aob@purdue.edu
March 22, 2013

Elaine M. Coorey
Chair and Professor, Department of Engineering Technology
Purdue School of Engineering and Technology, IUPUI
799 W. Michigan St.
Indianapolis, IN 46202

Dear Elaine:

I am writing to let you know that we in the College of Technology at Purdue University fully support your proposal to change the name of the Biomedical Engineering Technology undergraduate major to Healthcare Engineering Technology Management. We believe this name more accurately reflects the direction of this field of study.

Sincerely,

Gary R. Bertoline
Dean and Distinguished Professor

cc: Jamie Mohler
February 15, 2013

David J. Russomanno, PhD
Dean, Purdue School of Engineering and Technology, IUPUI
Professor, Department of Electrical and Computer Engineering, IUPUI
799 W. Michigan St., ET 219 E
Indianapolis, IN 46202-5160

Dear Dr. Russomanno:

This letter is written in support of Barbara Christe’s proposal to change the name of the Biomedical Engineering Technology major at IUPUI.

I am president of the Association for the Advancement of Medical Instrumentation (AAMI), a non-profit association representing more than 7,000 medical technology professionals, hospitals, and manufacturers around the world.

In September 2011, AAMI convened an important forum of industry leaders who recommended that “healthcare technology management” (HTM) become the official name of the field responsible for servicing and maintaining healthcare technology. That name was later formalized after considerable industry feedback. This work was desperately needed for a host of reasons, most importantly because the absence of a standardized name resulted in a lack of understanding that this was a distinct field, and confusion about what it entailed.

Barbara Christe, associate professor and program director at IUPUI, was among the industry professionals who participated in that 2011 forum, which also outlined a vision of where the field is headed in the coming years.

The leaders who selected “healthcare technology management” maintained that the name was accurate, easily understood by the public and other healthcare workers, and allowed for expansion of the field in the future. It’s critically important that the field has one unified name, so that AAMI and others can aggressively promote the profession to students, other prospective entrants into the field, employers, and the general public.

As healthcare technology evolves, so does the field of healthcare technology management. The newly developed vision for healthcare technology management includes, but is not limited to, a continued focus on safety, risk management, technical support of medical devices and other clinical technologies, and financial stewardship. The vision also includes management of healthcare technologies that are highly integrated and interoperable. Without this vision and cohesive understanding of the field, healthcare technology management professionals will never be fully integrated members of the healthcare delivery team.

Thus, AAMI enthusiastically supports Barbara Christe’s proposal to change the name of IUPUI’s Biomedical Engineering Technology major to Healthcare Engineering Technology Management (HETM).

Including “engineering technology” in the name of the major satisfies ABET requirements, and identifies the program as a technical degree with a focus on the equipment and technologies that support the treatment of patients. Continuing to refer to the program as “biomedical” engineering fosters longstanding confusion about the difference between biomedical engineers and engineers or technicians who manage healthcare technology.
Further, the proposed name closely aligns with the “healthcare technology management” name that has gained acceptance among the field. Such a name change for this major at IUPUI would help ensure that the program remains aligned with the future direction of this important field.

Finally, it is important to note that the word “management” in the name “healthcare technology management” refers to the effective management of healthcare technology, and not necessarily the management of people. This is an important distinction for members of the field, educational institutions, and others to understand.

I hope you find the information presented in this letter helpful. If you have any questions or require additional information, please do not hesitate to contact me. Thank you for your consideration.

Sincerely,

Mary Logan, JD, CAE
President, AAMI