



Graduate program in
**HEALTHCARE TECHNOLOGIES
MANAGEMENT**



MARQUETTE
UNIVERSITY

Be The Difference.



**MEDICAL
COLLEGE
OF WISCONSIN**

ABOUT MARQUETTE

Our programs. Marquette offers 64 doctoral and master's degree programs and more than 30 graduate certificate programs, including dentistry, law, graduate business and professional studies. And we have a variety of specializations to help you tailor curriculum to your needs — an opportunity not offered by all universities.

Our students. We enroll approximately 3,400 graduate and professional students from diverse cultural and educational backgrounds and countries all over the world.

Our faculty. Marquette's almost 700 full-time faculty represent renowned scholars and industry experts. As a student, you'll also benefit from established collaborations within the local business and nonprofit communities, as well as other nationally recognized institutions in the region, including the Clinical and Translational Science Institute, Medical College of Wisconsin, Milwaukee School of Engineering, University of Wisconsin system, and others.

Our research. Graduate students can participate in important research alongside experts in their fields — making you a contributing member of our research team, not just a face in the crowd like at some other universities. During fiscal year 2013, Marquette's faculty and administrators received awards totaling nearly \$24 million for their research, instruction and other projects.

Our commitment. Class sizes are small and are usually taught by regular faculty members who are conducting cutting-edge research. Your teaching will be informed by current research, and you will often have the opportunity to participate in research.

Our network. As a graduate of Marquette, you'll become part of our alumni family of more than 110,000 around the world — creating a professional network that spans from right next door to across the globe.

Our values-based education. As a Jesuit institution of higher education, Marquette continues a centuries-old tradition of academic excellence, development of the whole person and research that addresses societal needs.

ABOUT THE MEDICAL COLLEGE OF WISCONSIN

The Medical College of Wisconsin offers M.D., Ph.D., M.P.H., M.S. and M.A. degree programs, as well as post-doctoral and physician fellowships and medical residencies. Additionally, MCW has five graduate certificate programs, one in collaboration with the American Medical Association. Approximately 800 medical students and 500 graduate students are enrolled at the Medical College of Wisconsin. Additionally, approximately 650 physicians are in residency training and 250 physicians are in fellowship training with MCW-affiliated hospitals. Approximately 200 post-doctoral fellows are engaged in scientific research.

MCW has approximately 1,600 full- and part-time faculty, and more than 1,500 physicians from the community serve as voluntary faculty. The faculty-student ratio is 1:1.

The Medical College of Wisconsin is a major national research center, the largest research institution in the Milwaukee metro area and second largest in Wisconsin. In fiscal year 2012, MCW received approximately \$95.5 million in NIH funding and ranked 42nd among the nation's 135 medical schools receiving NIH research funding. This places MCW in the top third of medical schools receiving NIH funding.

The Milwaukee Regional Medical Center Campus, composed of MCW, Froedtert Hospital, Children's Hospital of Wisconsin, the Blood Research Institute and the Milwaukee County Behavioral Health Division, had a total economic impact of \$2.9 billion on the four-county metro area. The Clement J. Zablocki VA Medical Center and more than 60 off-campus and community clinics provide significant opportunities to move scientific research from discovery to patient care.

Why a master of science in Healthcare Technologies Management at Marquette and the Medical College of Wisconsin?

Our graduate program is the first in the United States to combine business, medical technology and healthcare and is a joint degree program offered by Marquette and the Medical College of Wisconsin. Unlike an M.B.A., graduate engineering or engineering management program, our targeted curriculum prepares you specifically for management positions in the medical device industry, clinical environments or healthcare consulting firms.

Be more. Give your technical skills some backup. Whether you're an undergraduate seeking an advanced degree or an experienced engineer preparing for career advancement, you'll gain a formal business and management education, updated technical skills, and a greater understanding of the healthcare delivery and regulatory environments.

Be relevant. From day one, you'll apply the management skills you learn — making each class relevant and practical.

Be selective. You'll have a choice of electives and flexibility in your professional project design, allowing you to tailor your graduate studies to your job responsibilities, career goals and interests.

Be supported. Our small class sizes provide greater individualized faculty interaction and peer collaboration.

Be needed. Every day, skilled professionals with technical and managerial skills and an understanding of the healthcare delivery and regulatory environments are in great demand.

YOUR JOURNEY

Healthcare technologies management is a rapidly growing field, and, in today's economic climate, that's saying something. According to the 2014 edition of the Bureau of Labor and Statistics' *Occupational Handbook*, employment of engineering managers is projected to grow 7 percent from 2012–22. However, opportunities for engineering managers should be better in rapidly growing areas of engineering, such as biomedical engineering.

The *Occupational Handbook* states that engineers and scientists with strong communication and business management skills will be in the best position to become managers. Marquette's healthcare technologies management program will prepare you to take advantage of these opportunities.

Master of science in healthcare technologies management

Course work:

Students must take a minimum of 37.5 credit hours (12 classes), including core healthcare technologies management, business/management and elective courses that coincide with their career goals. Students also must complete a professional project.

- Full-time students must enroll in at least 12.5 credit hours (five to six classes) per semester to complete the program in one year.
- Part-time students who enroll in three to six credit hours (one to two classes) per semester typically complete the program in two to three years.
- All classes are offered in the evening, and some business classes are offered Saturdays. Two core healthcare technologies management courses are taught online.
- Some required classes include marketing management, managerial accounting, technology assessment, product development of medical devices, the environment of healthcare delivery and organizational behavior. For a complete list, visit marquette.edu/grad.
- Courses are taught at the Medical College of Wisconsin and Marquette.



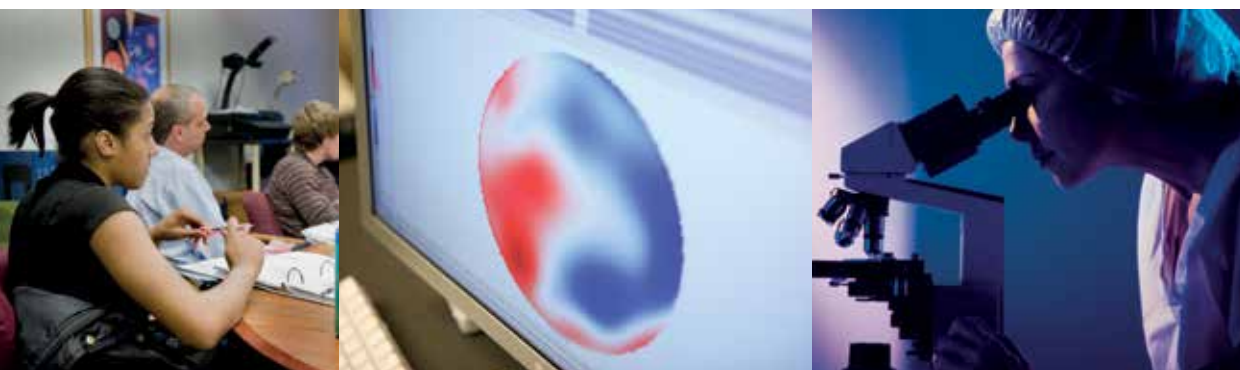
“As a design engineer for GE Healthcare, my career will benefit from the in-depth understanding of the healthcare provider's perspective on technology procurement, utilization and the clinical setting, which the healthcare technologies management program provides to students.”

Andrew Heuttner
Doctoral student in biophysics, Medical College of Wisconsin

Other academic activities:

- Required seminars include:
 - Communication skills for technical managers (fall semester)
 - Making the transition from engineer to manager (spring semester)
- Independent study (professional project) in healthcare technologies management instead of thesis
- Internship placement may be available for qualified full-time students.

For more program details, including requirements and course descriptions, see the *Graduate Bulletin* at marquette.edu/grad.



YOUR FACULTY MENTORS



Marquette

Dr. Jay R. Goldberg, PE., director of healthcare technologies program and associate professor of biomedical engineering

Medical device design and development, biomaterials, degradation and failure of implantable medical devices, forensic engineering, management of the product development process

Dr. Kathryn Schroeter, R.N., C.N.O.R., associate professor of nursing

Ethics in perioperative nursing, impact of professional certification on nursing practice

Dr. Phil Weinfurt, adjunct instructor of biomedical engineering

Assessment of new medical technology, clinical information systems, processes for more rapid implementation of new technologies for healthcare delivery

The Medical College of Wisconsin

Dr. Joseph O. Hill, associate professor of research technology and informatics

Technology transfer, medical microbiology, drug/medical device development, regulatory affairs

Christian J. Krautkramer, J.D., M.P.H., adjunct assistant professor of bioethics and medical humanities

Health law and bioethics, law and bioscience, public health ethics, regulatory and compliance issues in the life sciences industry, health policy

Dr. Charles R. Wilson, associate professor of radiology

X-ray medical imaging, technology in medicine, picture archive and documentation

For more information about the department's faculty members, visit marquette.edu/hctmfaculty.



The program enhanced my project management skills, expanded my business knowledge, and allowed me to work full time and take classes in the evening. I was able to complete my required professional project in an area that benefited my employer and met my career goals. This helped me apply what I learned in the curriculum to my daily work experience."

Kelly Milewski, Grad '06

Project manager
Epic Systems Corp.
Verona, Wis.



YOUR RESOURCES

As a graduate student in healthcare technologies management, you'll have access to:

- all available student services at Marquette and the Medical College of Wisconsin, as well as faculty who can serve as project advisers.
- the Medical College of Wisconsin faculty based at Froedtert Lutheran Memorial Hospital who serve as clinical project advisers.
- courses within Marquette's AACSB-accredited M.B.A. and nursing programs.
- networking opportunities through peer collaboration as part of your course work.



Our graduate programs also provide excellent resources beyond the classrooms. Thanks to our location in downtown Milwaukee and community-connected faculty, you'll enjoy an urban setting with access to a vibrant arts scene, professional sports, restaurants and nightlife.

Marquette University

- Access to networking, career counseling, and job searching counselors and seminars through our free Career Services Center
- More than 20 academic centers and institutes that foster research in end-of-life care, ethics, neuroscience, rehabilitation engineering, transnational justice, water quality, sports law and others
- Access to more than 1.8 million volumes of books and bound journals, 22,000 journals and other serials in digital format, laptops for checkout, and extensive special collections (Raynor Memorial Libraries are open evenings and weekends)
- Access to a secure high-speed wireless network for laptops and other devices
- Remote computer access to campus-only resources through our VPN
- Marquette University Medical Center, Counseling Center and Campus Ministry
- Sports recreation and fitness facilities
- Big East Conference sports, including men's basketball, which has 31 NCAA appearances, 16 Sweet Sixteen appearances, three Final Four appearances and one NCAA championship (1977) and plays in front of 18,000 fans at the BMO Bradley Center

Milwaukee

- The Milwaukee metropolitan area has approximately 1.5 million people, ranking among the top cities in the United States by population.
- The city is home to nine Fortune 500 company headquarters, including Harley-Davidson, Johnson Controls, Northwestern Mutual and Rockwell Automation.
- Milwaukee offers many art and cultural opportunities, including a repertory theatre, a symphony orchestra, two opera companies, a ballet company, diverse art galleries, a public museum, the Milwaukee County Zoo and the Milwaukee Art Museum.
- Professional sports include baseball (Brewers), basketball (Bucks), hockey (Admirals), soccer (Wave) and skating exhibitions at the Pettit National Ice Center (an Olympic training facility).
- Known as the city of festivals, Milwaukee has abundant celebrations throughout the year honoring the city's diverse heritage, including Summerfest — the world's largest outdoor music festival.
- Access more than 10 miles of lakefront, 1,500 restaurants and 15,000 acres of parks.

YOUR INVESTMENT

Furthering your education is an investment you can count on. Financial aid — in several forms — can help meet the costs of your graduate education.

Tuition for the 2014–15 academic year*

For full-time students:

Seven to nine credits per semester at \$1,025 per credit = \$7,175 to \$9,225 per semester

For part-time students:

Three to six credits per semester at \$1,025 per credit = \$3,075 to \$6,150 per semester

* Figures provided are based on average credit hours taken per semester and exclude service fees and/or continuous enrollment/continuation course fees. Per-credit cost valid until May 2015.

Need-based aid

Enroll as a half- or full-time student in a degree program (at least four credit hours, usually two or more classes a semester), and you may be eligible for loans distributed through the Office of Student Financial Aid. Most student loans have competitive interest rates and do not require repayment until after you complete your course of study.

To apply, file the Free Application for Federal Student Aid each year between January 1 and mid-February. It's available from the Office of Student Financial Aid or at fafsa.ed.gov. Once you have been admitted to your program and completed your financial aid paperwork, we will determine your eligibility and send you a notice explaining what financial aid you are eligible to receive from the university.

Additional resources

- Marquette offers a convenient payment plan that divides tuition costs into monthly installments. For more information, visit marquette.edu/mucentral or contact Marquette Central at 414.288.4000.
- Employment assistance is available.
- Private lenders feature special educational loans.
- Your employer may offer a tuition-remission plan.
- Some private foundations offer financial aid for graduate study.
- Tax deductions and/or credits can be claimed for work-related educational expenses.

YOUR OPPORTUNITIES

Where could a master's degree in healthcare technologies management lead you? You'll find our graduates ...

at regionally and nationally known companies, including:

- Abbott Laboratories
- Aramark
- Baxter Healthcare
- Cerner Corp.
- Covidien
- Edwards Life Sciences
- Epic Systems
- Evanston Northwestern Hospital
- GE Healthcare
- Hospira
- Johnson & Johnson
- Kaiser Permanente
- Medtronic
- Philips Medical Systems
- Siemens Medical Solutions
- U.S. FDA
- VA medical centers

in a variety of departments, including:

- research and development
- clinical engineering
- quality assurance
- operations
- regulatory affairs
- marketing
- sales

excelling in their fields as:

- Vice presidents
- Directors
- Managers
- Program managers
- Project managers
- Biomedical engineers
- System engineers

“ This program finally fills a real industry need by preparing individuals for the jobs that exist today. When hiring, graduates of this program should be given serious consideration.”

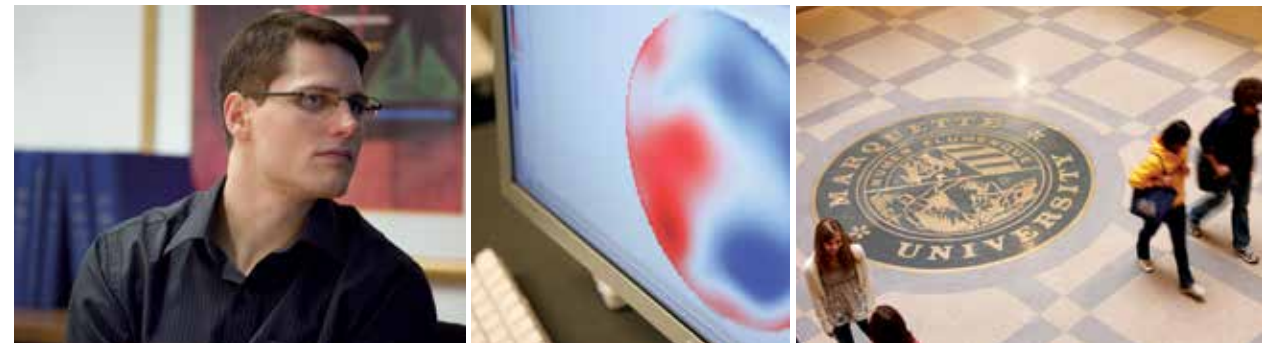
Raymond T. Riddle, Eng '82
Chief regulatory officer
Standard Imaging Inc.
Middleton, Wis.

YOUR FIRST STEP

We invite you to apply.

Application requirement checklist:

- Undergraduate baccalaureate degree in engineering, science (physics, biology chemistry), computer science, information technology or clinical areas such as nursing or physical therapy from an accredited institution with a minimum GPA of 3.0 (on a 4.0 scale)
- Application fee
- Official transcripts from all current and previous colleges/universities except Marquette
- Three letters of recommendation
- A statement of purpose describing your career goals and how you think the program will help you reach them
- GRE (general test only) with an average score of 60 percent minimum; GMAT or MCAT with an average of nine on the individual scores (waived for individuals with a doctoral degree)
- (International applicants only) TOEFL score or other acceptable proof of English proficiency with a minimum score of 79-80 on the Internet-based (computer) version, not including speaking
- If necessary, submit any additional hard-copy materials to:
Marquette University Graduate School
P.O. Box 1881
Milwaukee, WI 53201-1881



We invite you to speak with a faculty member.

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marquette.edu/grad