ILLINOIS

Proposal to the Senate Educational Policy Committee

PROPOSAL TITLE: Establish a Master of Science degree with a major in Health Technology

SPONSOR: Wendy A. Rogers, Khan Professor of Applied Health Science
Director, Health Technology Graduate & Continuing Education Program
wendyr@illinois.edu
217-300-4662

COLLEGE CONTACT:

College of Applied Health Sciences
Associate Dean Reginald Altston
alston@illinios.edu
217-333-2307

BRIEF DESCRIPTION:

Overview of Program

We propose to deliver a professional, non-thesis based Master of Science degree in Health Technology. The vision is to educate the next generation of Applied Health Technology Professionals. The mission is to develop interdisciplinary practitioners, through classroom education and experiential learning, to have the knowledge, skills, and abilities to advance applied health technology design and implementation.

The timing is right to develop a new Master of Science in Health Technology. Campus developments (e.g., the Carle-Illinois College of Medicine, Siebel Center for Design) combined with increased demand for professionals within health fields converge to support the development of this degree program. The proposed MS in Health Technology will educate the next generation of applied health care and engineering professionals in the development, testing, and use of new technologies that promote health, rehabilitation, mitigate disability, and improve independence and quality of life. This includes bringing end-users (e.g., individuals with chronic conditions, older adults, persons with disabilities), industry professionals, and allied health professionals together with Illinois students and faculty in an interdisciplinary environment to identify existing problems and develop technologies to solve them. Graduates will find career

opportunities in industry, community organizations, and government. Individuals with the skills and expertise this program will provide are highly sought by consumer health care product industries, regulatory agencies, and government organizations.

Structure of MS Program

The MS in Health Technology will be an intensive three-semester (Fall, Spring, Summer) 36 credit hour degree program with a summer Capstone Project. The proposed MS in Health Technology will provide students with advanced professional study in the emerging field of applied health technology. The program will be a self-supporting budgetwhose ownership is in the Department of Kinesiology and Community Health in the College of Applied Health Sciences (AHS), in collaboration with units in the College of Engineering (CoE). The program will generate tuition and fee revenue sufficient to cover associated faculty cost and all other direct and indirect costs. The initiative to create this program was first supported by an Investment for Growth Proposal, which was funded by the University in 2017.

The details of the program (courses of study) are outlined in **Appendix A**. The MS in Health Technology will use the new rubric HT (health technology, also proposed at this time) and include:

16 credit hours of core coursework:

HT 501: Understanding Users of Health Technology (4 hrs)

HT 502: Overview of Human Factors Methods for Health (4 hrs)

HT 503: Hardware Engineering for Health Technology (4 hrs)

HT 504: Software Engineering for Health Technology (4 hrs)

12 credit hours of electives (from an approved list of courses already on campus)

8 credit hours of the Capstone Experience

HT 510: Capstone Project Orientation (1 hr)

HT 511: Capstone Project Development (3 hrs)

HT 512: Capstone Project Implementation (4 hrs)

All core courses except HT 512 will be offered face-to-face. HT 512 will be offered online to accommodate students' participation in their capstone projects, many of which will be off-campus. The capstone projects can be carried out in-state, out-of-state, and internationally, depending on the sponsor of the project. Students will complete a Capstone Project that is extended, intensive, targeted, practical, and problem-based. Students will work on problems provided by industry, government, community-based organizations, or academia. Capstone sponsor locations will vary widely and include industry, regulatory agencies, community organizations, and may be part of campus projects as well. Companies and organizations can sponsor a student in their capstone project over the summer, following their two semesters of coursework. Students will

explore possible projects in the Fall in HT 510 (Capstone Project Orientation) and ultimately choose a project. In the Spring semester, students will develop the project idea in HT 511 (Capstone Project Development). In Summer, students will implement their ideas under mentorship of a faculty member in HT 512 (Capstone Project Implementation) as well as under the guidance of a member of the organization with whom they are working. Faculty will have access to incentive funding to support their participation in mentoring Summer capstone projects (See Appendix B). HT 512 will be taught by the Assistant Director. After working on a specific problem for the company or organization, the student will submit a technical report and video presentation to the MS program for evaluation and grade for HT 512 in lieu of a thesis. Students will also have deliverables specififed by their sponsor ans supervised by the instructor of HT 512 and the student's faculty mentor, but those will not be part of the grade. Capstone projects will be diverse and dependent on the specific needs of the partner industry or community agencies. Examples might include (a) Designing an application for a continuing care retirement community that provides residents with information about community events; (b) Working with a start-up company to conduct usability testing of a medical device, social robot, virtual reality exergame, etc.; (c) Supporting an area agency on aging to conduct a needs assessment of health care access needs for older rural residents to guide design of support tools; (d) Partnering with an insurance agency to assess user acceptance of an augmented communication device for children with developmental disabilities; (e) Assessing usefulness of software designed to increase accessibility for individuals with disability; (f) Providing the human factors expertise for a team developing healthcare technology tools (e.g., medication reminder system, decision support tool) in a research lab on campus. Students will have specific knowledge, skills, and abilities obtained during the first two semesters of the program that will be valuable to the sponsor and their efforts will be specifically targeted to the sponsor's project. Options for students who fail to complete the capstone will be reviewed by the Curriculum Committee.

The HT courses listed above are new courses that are being proposed at this time as well. The Investment for Growth award from the University includes monies to pay for two specialized teaching professors (one housed in Industrial and Enterprise Systems Engineering, ISE, and one housed in Kinesiology and Community Health, KCH) who will teach the majority of these newly proposed courses. HT 510 and HT 511 will be jointly taught by the new specialized faculty hires in KCH and ISE. HT 512 will be taught by Assistant Director for the Health Technology Graduate and Continuing Education Program, Dr. Nicole Holtzclaw-Stone.

Implementation of MS Program

The MS in Health Technology will begin in Fall of 2020. The goal is to enroll ~30 students per year by 2022 with growth after that dependent on the success of the program, faculty availability, and space. Enrollment is expected to have an equal distribution of

Illinois, out-of-state, and international students. We project to enroll 10 students in 2020, 20 in 2021, and 30 in 2022. It is projected that the program will be self-sustaining by FY 2022.

The MS in Health Technology will be a self-sustaining professional program with surplus derived from tuition and fees. The program will generate tuitions and fees sufficient to pay for staff and faculty, after the initial roll-out. The MS in Health Technology is a professional degree. Graduates should be able to recuperate costs in their careers in industry.

Admissions and Curriculum Committee. Oversight of the curriculum will be provided by an Admissions and Curriculum Committee with representation of faculty from both AHS and CoE. Each college will appoint two faculty members from relevant departments. The Director and Assistant Director of the Health Technology Graduate and Continuing Education Program will be *ex officio* members. The Admissions and Curriculum Committee will administer admissions decisions and provide oversight of the degree and its curriculum. Successful applicants to this program will have a cumulative undergraduate GPA of 3.0 on a 4.0 scale in a health, science, or engineering field. Applicants will have successfully completed the program's prerequisite courses or their equivalents.

Director. The Director will be responsible for (1) providing general leadership and direction for the program, (2) developing long-range plans and recruitment strategies with the Assitant Director, (3) serving as *ex officio* member of the Admissions and Curriculum Committee, (4) publicizing the HT program and developing relationships with potential capstone partners, and (5) inviting and coordinating meetings of the Advisory Board while serving as a *ex officio* member of the board.

Assistant Director. The Assistant Director (AD) will oversee recruitment and provide all student advising. The AD will be an *ex officio* member of the Admissions and Curriculum Committee. The AD will coordinate course enrollment for non-HT courses (electives). The AD will be the instructor of record for HT 512. The AD will also serve as the liaison to industry, government, community-based organizations, and academia partners who will provide Capstone Projects. Finally, the AD will be an *ex officio* member of the Advisory Board. (The plan is to hire a 50% administrative support staff member to assist with these activities – additional staff members may be hired as needed with the growth of the program).

Advisory Board. The MS in Health Technology will have an Advisory Board comprised of professionals in the field of health technology with rotating terms. The Advisory Board will be managed by the Director and Assistant Director of the Health Technology Graduate and Continuing Education Program and its mission will include: providing curricular and professional advice to students, being a source for potential Capstone Projects, serving as liaisons to industry, government and community partners, offering advice on searches for full-time employment, and assisting with career development activities. Linkages such as these will be critical to helping locate Capstone Project

sitesfor students and giving students additional professional contacts and ultimate career placement.

JUSTIFICATION:

Many societal factors have converged to create a vital need for an academic response to our health care crisis. Health technology for consumers is increasing rapidly, through forcing functions such as: (a) transitions to home healthcare; (b) an increasing aging population; (c) more people living with chronic conditions and/or disabilities; (d) rapidly emerging technologies used in this domain (apps, smart phones, robotics, wearables); and (e) lower cost of technology components leading to broader availability. Consumer health technologies have tremendous potential that is not yet being met. There is often insufficient focus on users and an absence of an interdisciplinary emphasis during the design, development, and diffusion processes. There is a real need for a better trained workforce in this sector.

Addressing this critical need, the College of Applied Health Sciences (AHS), in collaboration with the College of Engineering (CoE), has developed an interdisciplinary Health Technology & Graduate Education Program aimed at training professionals in improving the quality of life, health, and independence of older adults, and individuals living with disabilities or chronic diseases, or recovering from medical treatment or injury. The MS in Health Technology will be housed administratively within the Department of Kinesiology and Community Health but will forge important collaborations with units in the College of Engineering and will prepare students for careers in the emerging industry of applied health technology.

Our target students will be drawn from many backgrounds, with a shared interest in Health Technology. Students from any undergraduate major may apply, but they will be required to meet the prerequisites. Likely target markets will include:

1. Biology students who want a professional healthcare technology career.
2. Engineering students who want human factors knowledge and skills for a career in applied health technology.
3. Health students who want more engineering knowledge and skills for a career in applied health technology.
4. Physical or Occupational Therapy students who want to transition to a technology-intensive field.
5. Speech and Hearing Science students who want advanced training in health technology.

Program prerequisites or equivalents include:

Calculus I (MATH 220 or 221)
Introduction to Computer Science (CS 125 or 105)
Introduction to Health Statistics (CHLH 244)

Introduction to Psychology (PSYC 100)
Intro to Public Health (CHLH 100)
Linear Algebra (MATH 125, or 225, 410, 415)
Public Health Research Methods (CHLH 201)

Inspiration for this program came from recent campus and external investments in the new Carle-Illinois College of Medicine and the Siebel Center for Design, along with the investment already made by the UIUC Provost's Office for cluster hires and physical infrastructure (i.e., the LIFE Home) in the area of health, technology, and aging.

Further, cost efficient technologies need to be developed that can empower greater levels of independence, self-care, social interaction, health promotion and monitoring, and access to information. Intuitive, user-friendly, and customized consumer technologies need to be developed that will: serve diverse populations (e.g., older adults, individuals with disabilities); provide alternative care; support optimal health and wellness; empower individuals, caregivers and providers with timely, personalized, actionable information; and provide reliable decision analysis. Achieving this goal will require professionals trained to design, develop, test, and implement these technologies. Importantly, the MS in Health Technology is unique (yet synergizes with current campus activities), meets an emerging need and demand, is central to the missions of the partnering units (and other campus units), as well as aids in building synergies within and external to campus, and generates revenue, thus reducing our reliance on state support.

According to a market analysis completed by Illinois Business Consulting (IBC) that surveyed 150 students, no other program such as this exists nationwide and there was demand among students for this type of program. (These data are detailed on p. 12 in the discussion of market demand.)

Further, according to an industry survey that we conducted with 65 experts in the field of health technology, there is support for a Health Technology professional program such as this. A sampling of our data include finding that:

- 65% were likely to hire graduates of this Health Technology program.
- 92% thought our MS degree in Health Technology would be valuable for educating applied health technology professionals
    - 58% said it would be extremely valuable.

The MS in Health Technology is poised to be a leader in training new professionals in the field of applied heath technology. MS in Health Technology graduates will be well-trained for a variety of careers in industry and government, such as:

- Applied Cognitive Scientist
- Cognitive Systems Engineer
- Data Decision Analyst
- Human Factors Engineer
- Human Factors Researcher
- Ergonomist

- Usability Engineer
- User Experience Lead, and
- Visual Designer.

Initial support derives from an Investment for Growth Proposal from the university which will be utilized to support this program until it is self-sustaining. The program will be a professional MS in Health Technology, and therefore financially self-sufficient.

BUDGETARY AND STAFF IMPLICATIONS:

1) Resources
    a. How does the unit intend to financially support this proposal?

        i. Initial support comes from the Investment for Growth Award from the University. $2 million has been committed to support this program until it is self-sustaining.

        ii. The MS in Health Technology will generate revenue through a traditional model of graduate tuition payments by students. Tuition waivers will not be accepted in this program.

        iii. We have done a comparative analysis of tuition nationwide for comparable types of programs and have set our tuition rate to be competitive for the value provided for the program. Students will have access to unique learning facilities such as the LIFE home and the Health Maker Lab. Proposed tuition is $28,000 for in-state students and $40,000 for out-of-state/international students.

    b. How will the unit create capacity or surplus to appropriately resource this program? If applicable, what functions or programs will the unit no longer support to create capacity?

        i. The unit will create capacity to resource this program by using masters-level courses currently available within the Department of Kinesiology and Community Health and other AHS departments (see MOUs; existing courses in various Engineering departments (see MOUs); and through the development of new coursework for Health Technology (HT) (course proposals included with this proposal – see CIM).

        ii. Current resources such as the student lounge (for BS-MS Heath Administration-Master's of Public Health students) will be available to MS in Health Technology students. MS in Health Technology students will have access to the Living in Interactive Future Environments (LIFE) Home currently under development/construction at Illinois. The space will include a Maker's Lab to develop

technologies to be tested in the attached home. The LIFE Home will also include meeting spaces (e.g., for class meetings). Additionally, funds from the Investment for Growth Award will be used to develop lab spaces for several of the required Health Technology courses.

iii. The Departments of Kinesiology and Community Health and Industrial Enterprise Systems Engineering are in the process of hiring two teaching faculty (one in each unit) to support instruction in the MS HT degree program.

iv. No functions or programs need to be altered to create capacity for the MS in Health Technology.

c. Will the unit need to seek campus or other external resources? If so, please provide a summary of the sources and an indication of the approved support.

i. As noted, the program has already been approved for support through the Investment for Growth Award.

ii. The program will be developing relationships with industry and community organizations to support the Capstone Projects for MS in Health Technology students.

d. Please provide a letter of acknowledgment from the college that outlines the financial arrangements for the proposed program.

See Appendix B

2) Resource Implications

a. Please address the impact on faculty resources including the changes in numbers of faculty, class size, teaching loads, student-faculty ratios, etc.

i. **Faculty**: Through the Investment for Growth Award, there is funding to support 2 specialized teaching faculty in HT – one each in KCH and CoE. Additionally, as indicated in the MOUs from department heads, existing courses will be available as electives to our students.

ii. **Class size**: As our class sizes will start at 10 and increase to 30 by 2022, we anticipate minimal impact on class sizes as the students' coursework in electives will be spread across a wide variety of possible courses (listed below). The specialty elective courses thus draw from existing courses in the course catalog in AHS and CoE. In general, our MOU's with CoE and AHS for student access to elective courses is such that they allow for a maximum of 5 MS HT students without cost. In the unlikely event that enrollment rises above 5 MS HT students in any one course, the MS HT program may have to remunerate the host department for access.

iii. **Teaching Loads:** Teaching loads will remain the same for tenure track and specialized teaching faculty. The specialized teaching faculty will teach the core courses in HT, plus additional elective courses. The specialized teaching faculty will teach 4-4 (in KCH) and 3-3 (in CoE) loads per college standards. Instructors for the four core courses and professionalization courses (HT 501, 502, 503, 504, 510 & 511) will be the dedicated new hires in KCH and CoE for the Health Technology program as noted above. HT 512 Capstone Project: Implementation will be taught by Assistant Director Nicole Holtzclaw-Stone. When possible, staffing for this program will represent the faculty members' regular teaching loads with no additional remuneration provided. However, if needed, in order to incentivize faculty participation in student summer capstone projects, we will incentivize faculty participation by offering summer salary or discretionary funds, see Appendix B.

iv. **Student-faculty ratios**: The projected enrollment is expected to be 10 students in the first year, with the projection of growing the program to 30 students by year three (2022). Initial faculty-student ratios in HT will be 1:5. By year four, this will increase to 1:15. These numbers are based on our dedicated teaching faculty (2) and projected enrollment growth. With 2 teaching faculty, we will start as 1:5 ratio with 10 students; and increase to 1:15 when we are at 30 students in the program.

b. Please address the impact on course enrollment in other units and provide an explanation of discussions with representatives of those units.

i. We do not anticipate significant impact on course enrollment in units other than those indicated in this proposal. In addition to the four core courses (16 hours) and three capstone courses (8 hours), the remaining 12 credit hours in the MS in Health Technology are allocated among various relevant elective courses that are already offered across campus. The projected class size for this program is relatively small and the set of elective courses to choose from is fairly large, therefore, we anticipate the impact on other units will be minimal.

ii. Please see MOUs from affected programs attached in **Appendix C**.

c. Please address the impact on the University Library

i. We anticipate no impact above and beyond normal library business. The library already subscribes to leading journals in health technology including: *Human Factors, Ergonomics, Applied Ergonomics, Health Informatics, Health & Technology.*

ii. If additional journals are needed, the library will be approached about necessary additions.
iii. Please see library letter in **Appendix D**.

d. Please address the impact on technology and space (e.g. computer use, laboratory use, equipment, etc.)

i. Impact on technology and space should be minimal.
ii. The university has already committed to developing the Living in Interactive Future Environments (LIFE) Home through startup funds for Professor Wendy Rogers and in the Investment for Growth award. The LIFE Home is a research and educational living environment in which technologies and devices will be developed, deployed, and tested with end-users. The LIFE Home will include a research/ teaching laboratory, and clinical and outreach meeting space.
iii. HT501, HT 510, HT511, will be new courses and require classroom space.
iv. HT 502, HT 503, and HT 504 will require labs. There will be a Maker's Lab in the LIFE Home available for these courses.
v. HT 512 will not require classroom space (512 will be in the field and online).
vi. The elective courses are already in the academic catalog and their capacities will increase incrementally as the program grows.

For new degree programs only:

3) Briefly describe how this program will support the University's mission, focus, and/or current priorities. Include specific objectives and measurable outcomes that demonstrate the program's consistency with and centrality to that mission.

The University of Illinois has developed 11 strategic focus areas for the period 2018-2023 Strategic Plan, or The Next 150. The MS in Health Technology program contributes to two of those focus areas: Health Sciences, and Community Engagement. In terms of the focus on Health Sciences, the cross-cutting threads of "Tech4Health" and "Health Disparities" which were identified by the task force are central to the MS in Health Technology program. Further, in the report produced by the Health Sciences task force, "Leveraging Interdisciplinary Strengths" was identified as a particular challenge. The MS in Health Technology brings together the Department of Kinesiology and Community Health with various units within the College of Engineering for collaboration. Additionally, the task force identified the following relevant strategies: "Strategy #1: Campus-wide Commitment of Identified Impact Areas and Cross-Cutting Threads" and "Strategy #3: Infrastructure Providing Critical Support for Broadly Catalyzing and Coordinating Campus-Wide Health Sciences Growth." The MS in Health Technology directly addresses the cross-cutting threads and within the Investment for Growth proposal there are funds to support the building of a smart home. The first recommendation from the task force is

"Investments in Identified Impact Areas and Cross-Cutting Threads." The University has already made such investments in the cross-cutting threads that are reflected in the MS in Health Technology: "Tech4Health" and "Health Disparities" through the Investment for Growth grant for this program. Also, the report identifies creating new professional programs and educational opportunities with clinical and corporate partners for hands-on experience as a way to leverage our current strengths. The MS in Health Technology is a new professional program with a hands-on Capstone experience that is fundamental to the program.

The Community Engagement task force highlighted two areas in which our MS in Health Technology can contribute: "Promoting a faculty culture of engaged scholarship and teaching" as well as "Strengthening our resources for service learning." Engaging with industry and community partners through our Advisory Board and through the Capstone Project are key to the success of the MS in Health Technology.

Further, the MS in Health Technology will complement the University's recent development of the Carle-Illinois College of Medicine. There are potential synergies with the Interdisciplinary Health Sciences Institute (IHSI) on campus. In addition, the Seibel Center for Design will provide opportunities for engagement of our MS students with undergraduates on joint projects. Finally, one of the current priorities of the university is revenue-generation, which this program will provide.

4) Please provide an analysis of the market demand for this degree program. What market indicators are driving this proposal? What type of employment outlook should these graduates expect? What resources will be provided to assist students with job placement?

According to the Bureau of Labor Statistics New Release on Oct. 24, 2017: p4, "Employment in the health care and social assistance sector is projected to add nearly 4.0 million jobs by 2026, about one-third of all new jobs. The share of health care and social assistance employment is projected to increase from 12.2% in 2016 to 13.8% in 2026, becoming the largest major sector in 2026." Therefore, the demand for graduates in the applied health fields is evident.

Further, the College of Applied Health Sciences contracted with the Illinois Business Consulting (IBC) within the Illinois College of Business for an initial analysis of market demand. Based on surveys of 150 students at Illinois and other universities, IBC found that 77% of those surveyed said they were interested in pursuing a health related master's program. Additionally, IBC found no equivalent programs to the MS in Health Technology in existence nationwide. Therefore, we will be filling a crucial need developing a new market.

Based on data from the industry survey we conducted in August 2018, 65% of those surveyed expressed that they were either "extremely likely" or "slightly likely" to be interested in hiring graduates of our program. Additionally, in our survey, 92% said

that our proposed MS in Health Technology would be of value in educating applied health technology professionals. There is a clear demand for students to have the type of professional training that we will provide.

The program aligns with historical campus strengths in disability and aging and complements the medical technology research in acute care settings (e.g., Internet-of-Things, medical simulations, health informatics/analytics) that is taking place in the CoE and the new Carle-Illinois College of Medicine along with Order of Saint Francis (OSF) Healthcare and Carle Medicine.

The MS in Health Technology Advisory Board, which will consist of industry experts, will advise students on job search strategies. Additionally, the College of Applied Health Sciences is planning to hire a career staff person to aid in job searching for this and other degree programs. Finally, the program includes two professionalization courses (HT 510 & HT 512), which include outcomes such as developing networking skills, building resumes and professional social media profiles, and conducting informational interviews in the student's field of choice. The Assistant Director, Dr. Holtzclaw-Stone, will be the advisor for all of the students in the program. Dr. Holtzclaw-Stone has 11 years of experience in student advising and five years experience in directing an undergraduate program. She will advise students on course selection, career readiness, and organize student programming for the MS in Health Technology Program.

5) If this is a proposed graduate program, please discuss the program's intended use of waivers. If the program is dependent on waivers, how will the unit compensate for lost tuition revenue?

   The proram is not dependent on waivers. There will be no tuition waivers provided. This will be a professional program aimed at generating revenue.

DESIRED EFFECTIVE DATE:

Fall 2020 for our inaugural class.

STATEMENT FOR PROGRAMS OF STUDY CATALOG:

Overview
www.healthtech.ahs.illinois.edu
Director: Wendy A. Rogers, Ph.D.
Assistant Director: Nicole Holtzclaw-Stone, Ph.D.
3014 Khan Annex, Huff Hall
MC-588
1206 S. Fourth St
Champaign, IL 61820
healthtech@illinois.edu

Major: Health Technology
Degrees Offered: Master of Science in Health Technology

Graduate Degree Program:
The MS in Health Technology is designed to educate the next generation of Health Technology Professionals in the development, testing, and use of new consumer-facing technologies that promote health, rehabilitation, mitigate disability, and improve independence and quality of life. This includes bringing end-users (e.g., individuals with chronic conditions, older adults, persons with disabilities), industry professionals, and applied health professionals together with Illinois students and faculty in a multi-disciplinary and inter-generational environment to identify existing problems and develop technologies to solve them.

Completion of this degree does not confer automatic admission to any Ph.D. program at the University of Illinois.

Admission:
Students should have an undergraduate degree in a health or science related field or engineering. Applicants should have a minimum grade point average of 3.00 (A = 4.00) or equivalent for the last two years of undergraduate study and show evidence of strong quantitative skills and of serious interest in health technology through their personal statement. Students with less than a 3.0 GPA may be considered for a limited status admission. Students in the program do not have automatic admission to the Ph.D. program in any Illinois department. Program prerequisites or equivalents include:

Calculus I (MATH 220 or 221)
Introduction to Computer Science (CS 125 or 105)
Introduction to Health Statistics (CHLH 244)
Introduction to Psychology (PSYC 100)
Intro to Public Health (CHLH 100)
Linear Algebra (MATH 125, or 225, 410, 415)
Public Health Research Methods (CHLH 201)

(Note. Promising students might be admitted with a contingency that they complete the preerquisites before the start of the first semester.)

All applicants must submit GRE scores.

All applicants whose native language is not English must submit a minimum TOEFL score of 103 (iBT), 254 (CBT), or 611 (PBT); or minimum International English Language Testing System (IELTS) academic exam scores of 7.0 overall and 6.0 in all subsections. Applicants may be exempt from the TOEFL if certain criteria are met. Applicants with lesser scores may still apply. Limited status is granted for lesser scores and requires enrollment in English as a Second Language (ESL) courses based on an ESL Placement Test (EPT) taken upon arrival to campus.

Financial Aid:

Students in the MS in Health Technology program are not eligible for tuition-waiver generating assistantships. Students may apply for scholarships available through the University.

MS in Health Technology Course Requirements

Requirements:	Hours
Major Core Requirement	
HT 501 – Understanding Users of Health Technology	4 Hours
HT 502 – Overview of Human Factors Methods for Health	4 Hours
HT 503 – Hardware Engineering for Health Technology	4 Hours
HT 504 – Software Engineering for Health Technology	4 Hours
HT 510 – Capstone Project Orientation	1 Hour
HT 511 – Capstone Project Development	3 Hours
HT 512 – Capstone Project Implementation	4 Hours
Total Core Required Hours	24 Hours
Elective Requirement (chosen from approved list)	12 Hours
Minimum 500-level hours	12 Hours
TOTAL Required Hours for MS in Health Technology	36 Hours

CLEARANCES: *(Clearances should include signatures and dates of approval.* ***These signatures must appear on a separate sheet.*** *If multiple departments or colleges are sponsoring the proposal, please add the appropriate signature lines below.)*

Signatures:

Unit Representative:	Date:
College Representative:	Date:
Graduate College Representative:	Date:
Council on Teacher Education Representative:	Date:

Appendix A:

Requirements:	Hours
Major Core Requirement	
HT 501 – Understanding Users of Health Technology	4 Hours
HT 502 – Overview of Human Factors Methods for Health	4 Hours
HT 503 – Hardware Engineering for Health Technology	4 Hours
HT 504 – Software Engineering for Health Technology	4 Hours
HT 510 – Capstone Project Orientation	1 Hour
HT 511 – Capstone Project Development	3 Hours
HT 512 – Capstone Project Implementation	4 Hours
Total Core Required Hours	24 Hours
Elective Requirement (8 hours chosen from approved list)	12 Hours
Approved Health Technology Elective List	
BIOE 414: Bioinstrumentation	3 Hours
BIOE 415: Bioinstrumentation Lab	2 Hours
BIOE 416: Biosensors	4 Hours
BIOE 507: Advanced Bioinstrumentation	4 Hours
BIOE 598 JI: Fintie Element Mthds in Biomed	4 Hours
BIOE 598 NIE: Surgical Technologies	4 Hours
CHLH 421: Health Data Analysis	4 Hours
CHLH 470: Technology, Health, and Aging	4 Hours
CHLH 494: Health Technology and Health Behavior	4 Hours
CS 440: Artificial Intelligence	4 Hours
CS 465: User Interface Design	4 Hours
CS 565: Human-Computer Interaction	4 Hours
KIN 474: Tech-Driven Health Interven	4 Hours
ECE 422: Computer Security I	4 Hours
ECE 437: Sensors and Instrumentation	4 Hours
ECE 470: Introduction to Robotics	4 Hours
ECE 498: Smartphone Computing & Applications	4 Hours
IE 445: Human Performance and Cognition in Context	4 Hours
IE 528: Computing for Data Analytics	4 Hours
IE 529: Stats of Big Data & Clustering	4 Hours
IE 531: Algorithms for Data Analytics	4 Hours
IE 532: Analysis of Network Data	4 Hours
IE 533: Big Graphs and Social Networks	4 Hours
IE 534: Deep Learning	4 Hours
IE 546: Human Factors in HCES	4 Hours
IE 547: Healthcare Operations and Systems	4 Hours
ME 481: Whole-Body Musculoskel Biomech	4 Hours
RST 429: Contemporary Issues in Recreation, Sport and Tourism	4 Hours
RST 441: Community Planning and Engagement	3 or 4 Hours

RST 501: Concepts & Applications in Recreation, Sport, and Tourism	4 Hours
RST 502: Critical Issues Recreation Mgt	4 Hours
RST 520: Critical Issues Sport Mgt	4 Hours
RST 530: Critical Issues Tourism Mgt	4 Hours
RST 586: Health and Leisure in RST	4 Hours
SHS 473: Augmentative & Alt Comm	4 Hours
SHS 553: Hearing Aids and Amplification	4 Hours
SHS 555: Comm Lang Probs Hear Impaired	4 Hours
SHS 556: Sens Proth Devices Hear Loss	4 Hours
SHS 580: Cochlear Implants	4 Hours
Minimum 500-level hours	12 Hours
TOTAL Required Hours for MS in Health Technology	36 Hours

Appendix B:
Letter of Financial Arrangement from AHS Dean

Appendix C:
Memoranda of Understanding from Engineering & AHS Departments:
Bioengineering
Computer Science
Electrical and Computer Engineering
Industrial and Enterprise Systems Engineering
Mechanical Sciences and Engineering
Recreation, Sport, and Tourism
Speech and Hearing Science

Appendix D:
Letter from Library
Program Tuition Waiver Request

Appendix B:

Letter of Financial Arrangements from AHS Dean

ILLINOIS

COLLEGE OF APPLIED HEALTH SCIENCES

Office of the Dean
110 Huff Hall, MC-586
1206 S. Fourth St.
Champaign, IL 61820 USA

December 18, 2018

Dear Educational Policy Committee members:

The Master of Science in Health Technology (MS HT) builds on evolving and recent commitments in College of Applied Health Sciences and College of Engineering to research, education, and outreach at the intersections of health, aging, disability, and technology. While both Colleges have already invested in the foundational pieces that allow us to build this degree program, the goal is to make this degree program self-supporting.

Program specific costs relate to instruction and advisement, as well as facilities, marketing, recruitment, and program support. Instructional costs are specific to teaching the new courses; the college will hire two assistant teaching professors to cover these courses. There are no additional costs associated with the elective courses, as these courses already exist in both colleges. However, faculty who engage with this degree program will have access to incentive funding to facilitate the expansion of enrollments in existing courses and encourage faculty participation in the capstone experiences. The Assistant Director of the program will serve as the program's advisor.

Facilities expenses include offices, application spaces, and infrastructure (including IT). The College of Applied Health Sciences is building the LIFE home (smart home). Students will use the maker space in the LIFE home for the engineering-oriented courses (503 and 504) as well as the human factors methods course (502), and students and faculty may use the research and development spaces for assessments, capstone activities, and other related research projects. Consequently, when revenues are sufficient, the Master's program will contribute to covering some of the operating costs of the LIFE Home, including a portion of the Life Home Director's salary. Additionally, the College of Applied Health Sciences provides office space and supporting infrastructure for current program personnel; both colleges will provide office space and supporting infrastructure for new program personnel, as well.

Funding for the initial years of this program comes from a Campus Investment for Growth award. This funding will cover the personnel, marketing, recruitment, and LIFE home costs until all campus funds are spent. At that point, if the program is not self-supporting, the College of Applied Health Sciences and the College of Engineering will provide the funding needed to fill the gap between revenue generated and actual costs. Additionally, the colleges will absorb office space and related infrastructure costs until the program produces sufficient revenue to cover some or all of these costs.

Cheryl Hanley-Maxwell

Cheryl Hanley-Maxwell, Ph.D.
Dean, College of Applied Health Sciences

Rashid Bashir, Ph.D.
Dean, College of Engineering

Appendix C:

Memoranda of Understanding from Engineering & AHS Departments

Bioengineering

Computer Science

Electrical and Computer Engineering

Industrial and Enterprise Systems Engineering

Mechanical Sciences and Engineering

Recreation, Sport, and Tourism

Speech and Hearing Sciences

Memorandum of Understanding Between the **Department of Kinesiology and Community Health** and **Department of Bioengineering**

For the allocation of course seats in BIOE graduate courses for students in the MS in Health Technology program.

Purpose:

The Memorandum of Understanding between the two departments calls for the **Department of Bioengineering (BIOE)** to allow students in the MS in Health Technology program to register for 400- and 500-level classes in BIOE.

Registration will be based on seat availability in these courses. In addition, Health Technology students must meet all BIOE course prerequisites as defined by the Department in the class schedule (or equivalents approved by the BIOE department or with consent of instructor). The MS in Health Technology Advisor will contact the **Director of Undergraduate Programs** about receiving overrides or other assistance in getting Health Technology students enrolled in classes.

If Health Technology students number more than 5 in any given course in one semester, the MSHT Advisor and the **Department of Bioengineering** will review the current agreement to discuss the possibility of a teaching assistant that is funded by the MS in Health Technology program.

Procedures:

1. Health Technology students will meet with the Health Technology Advisor and declare an interest in a particular BIOE course prior to the registration period.
2. The Health Technology Advisor will reach out to the BIOE Director of Undergraduate Programs to check for seat availability in these courses and to arrange for the registration overrides, if seats are available for MSHT students. Seat availability will not be determined until the Department of Bioengineering releases these courses for open registration at the beginning of each semester.
3. Both parties agree that the terms of this agreement can be revisited annually, and revised as appropriate to comply with university policy and the meet the needs of the units and the program.

Signatures:

Amelia M Woods — 11/28/18

By Amelia Woods, Kinesiology and Community Health Head — Date

11/27/2018

By Michael Insana, Bioengineering Head — Date

Cc: Reginald Alston, Associate Dean, Applied Health Sciences

Harry Dankowicz, Associate Dean, College of Engineering

Cheryl Hanley-Maxwell, Dean, College of Applied Health Sciences

Nicole Holtzclaw-Stone, Assistant Director, Health Technology Graduate and Continuing Education Program

Memorandum of Understanding Between the Department of Kinesiology and Community Health and Department of Computer Science

For the allocation of course seats in CS graduate courses for students enrolled in the MS in Health Technology Program.

Purpose:

This Memorandum of Understanding between the two departments calls for the Department of Computer Science (CS) to allow students in the MS in Health Technology Program (in the Department of Kinesiology and Community Health) to register for graduate courses in CS.

Health Technology students must meet all CS course prerequisites as defined by the Department in the course schedule (or equivalents approved by the CS department or with consent of instructor). The MS in Health Technology Advisor will contact CS Associate Head for Graduate Programs about receiving any necessary overrides or other assistance in getting Health Technology students enrolled in courses.

If Health Technology students number more than 5, or 10% of the class, whichever is smaller, in any given course in one semester, the Health Technology Advisor and the CS Associate Head for Graduate Programs will consult and negotiate additional seats.

Procedures:

1. Health Technology students will meet with the Health Technology Advisor and declare an interest in a particular CS course prior to the registration period.

2. The Health Technology Advisor will reach out to the CS Director of Graduate Studies, if necessary, to arrange for admission to the course prior in suitable priority order, once the registration period for a given semester has begun.

3. Parties agree that the terms of this agreement can be revisited annually, and revised as appropriate to comply with university policy and the meet the needs of the units and the program.

Signatures:

Amelia M. Woods — 10/10/18

By Amelia Mays Woods, Head of Kinesiology and Community Health — Date

10/11/2018

By Vikram Adve, Head of Computer Science — Date

Memorandum of Understanding Between the Department of Kinesiology and Community Health and Department of Computer Science

For the allocation of course seats in CS graduate courses for students enrolled in the MS in Health Technology Program.

Cc:

Reginald Alston, Associate Dean, Applied Health Sciences

Harry Dankowicz, Associate Dean, College of Engineering

Cheryl Hanley-Maxwell, Dean, College of Applied Health Sciences

Nicole Holtzclaw-Stone, Assistant Director, Health Technology Graduate and Continuing Education Program

Wendy A. Rogers, Director, Health Technology Graduate and Continuing Education Program

Memorandum of Understanding Between the Department of Kinesiology and Community Health and Department of Electrical and Computer Engineering

For the allocation of course seats in ECE graduate courses for students enrolled in the MS in Health Technology Program.

Purpose:

This Memorandum of Understanding between the two departments calls for the Department of Electrical and Computer Engineering (ECE) to allow students in the MS in Health Technology Program (in the Department of Kinesiology and Community Health) to register for graduate courses in ECE.

Health Technology students must meet all ECE course prerequisites as defined by the Department in the course schedule (or equivalents approved by the ECE department or with consent of instructor). The MS in Health Technology Advisor will contact ECE Associate Head for Graduate Programs about receiving any necessary overrides or other assistance in getting Health Technology students enrolled in courses.

If Health Technology students number more than 5 in any given course in one semester, the Health Technology Advisor and the ECE Associate Head for Graduate Programs will consult and negotiate additional seats.

Procedures:

1. Health Technology students will meet with the Health Technology Advisor and declare an interest in a particular ECE course prior to the registration period.

2. The Health Technology Advisor will contact the ECE Associate Head for Graduate Studies, if necessary, to arrange for admission to the course prior to the beginning of the graduate student registration period for Spring semester; or prior to the start of the Fall semester.

3. Parties agree that the terms of this agreement can be revisited annually, and revised as appropriate to comply with university policy and the meet the needs of the units and the program.

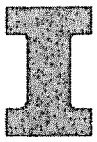
Signatures:

Amelia M. Woods — 10-2-18

By Amelia Mays Woods, Head of Kinesiology and Community Health — Date

10/10/18

By Wen-Mei Hwu, Head of Electrical and Computer Engineering — Date



Memorandum of Understanding Between the Department of Kinesiology and Community Health and Department of Electrical and Computer Engineering

For the allocation of course seats in ECE graduate courses for students enrolled in the MS in Health Technology Program.

Cc:

Reginald Alston, Associate Dean, Applied Health Sciences

Harry Dankowicz, Associate Dean, College of Engineering

Cheryl Hanley-Maxwell, Dean, College of Applied Health Sciences

Nicole Holtzclaw-Stone, Assistant Director, Health Technology Graduate and Continuing Education Program

Wendy A. Rogers, Director, Health Technology Graduate and Continuing Education Program

Memorandum of Understanding Between the Department of Kinesiology and Community Health and Department of Mechanical Engineering

For the allocation of course seats in MechE graduate courses for students enrolled in the MS in Health Technology program.

Purpose:

This Memorandum of Understanding between the two departments calls for the Department of Mechanical Engineering (MechE) to allow students in the MS in Health Technology Program (in the Department of Kinesiology and Community Health) to register for graduate courses in MechE.

Health Technology students must meet all MechE course prerequisites as defined by the Department in the course schedule (or equivalents approved by the MechE department or with consent of instructor). The MS in Health Technology Advisor will contact MechE Associate Head for Graduate Programs about receiving any necessary overrides or other assistance in getting Health Technology students enrolled in courses.

If Health Technology students number more than 5 in any given course in one semester, the Health Technology Advisor and the MechE Associate Head for Graduate Programs will consult and negotiate additional seats.

Procedures:

1. Health Technology students will meet with the Health Technology Advisor and declare an interest in a particular MechE course prior to the registration period.

2. The Health Technology Advisor will contact the MechE Associate Head for Graduate Studies, if necessary, to arrange for admission to the course prior to the beginning of the graduate student registration period for Spring semester; or prior to the start of the Fall semester.

3. Parties agree that the terms of this agreement can be revisited annually, and revised as appropriate to comply with university policy and the meet the needs of the units and the program.

Signatures:

Amelia M. Woods _____ 10-2-18

By Amelia Mays Woods, Head of Kinesiology and Community Health Date

_____ 10-10-18

By Anthony Jacobi, Head of Mechanical Engineering Date

Memorandum of Understanding Between the Department of Kinesiology and Community Health and Department of Mechanical Engineering

For the allocation of course seats in MechE graduate courses for students enrolled in the MS in Health Technology program.

Cc:

Reginald Alston, Associate Dean, Applied Health Sciences

Harry Dankowicz, Associate Dean, College of Engineering

Cheryl Hanley-Maxwell, Dean, College of Applied Health Sciences

Nicole Holtzclaw-Stone, Assistant Director, Health Technology Graduate and Continuing Education Program

Wendy A. Rogers, Director, Health Technology Graduate and Continuing Education Program

Memorandum of Understanding Between the Department of Kinesiology and Community Health and Department of Recreation, Sport, and Tourism

For the allocation of course seats in RST graduate courses for students enrolled in the MS in Health Technology program.

Purpose:

This Memorandum of Understanding between the two departments calls for the Department of Recreation, Sport, and Tourism (RST) to allow students in the MS in Health Technology Program (in the Department of Kinesiology and Community Health) to register for graduate course in RST.

Health Technology students must meet all RST course prerequisites as defined by the Department in the course schedule (or equivalents approved by the RST department or with consent of instructor). The MS in Health Technology Advisor will contact RST Associate Head for Graduate Programs about receiving any necessary overrides or other assistance in getting Health Technology students enrolled in courses.

If Health Technology students number more than 5 in any given course in one semester, the Health Technology Advisor and the RST Associate Head for Graduate Programs will consult and negotiate additional seats.

Procedures:

1. Health Technology students will meet with the Health Technology Advisor and declare an interest in a particular RST course prior to the registration period.

2. The Health Technology Advisor will contact the RST Associate Head for Graduate Studies, if necessary, to arrange for admission to the course prior to the beginning of the graduate student registration period for Spring semester; or prior to the start of the Fall semester.

3. Parties agree that the terms of this agreement can be revisited annually, and revised as appropriate to comply with university policy and the meet the needs of the units and the program.

Signatures:

Amelia M. Woods

By Amelia Mays Woods, Head of Kinesiology and Community Health

10-2-18

Date

Carla Santos

Digitally signed by Carla Santos
DN: cn=Carla Santos, o, ou, email=[illegible], c=US
Date: 2018.11.05 20:06:57 -06'00'

By Carla Santos, Head of Recreation, Sport, and Tourism

Date

Memorandum of Understanding Between the Department of Kinesiology and Community Health and Department of Recreation, Sport, and Tourism

For the allocation of course seats in RST graduate courses for students enrolled in the MS in Health Technology program.

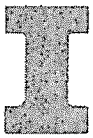
Cc:

Reginald Alston, Associate Dean, Applied Health Sciences

Cheryl Hanley-Maxwell, Dean, College of Applied Health Sciences

Nicole Holtzclaw-Stone, Assistant Director, Health Technology Graduate and Continuing Education Program

Wendy A. Rogers, Director, Health Technology Graduate and Continuing Education Program



Memorandum of Understanding Between the Department of Kinesiology and Community Health and Department of Speech and Hearing Science

For the allocation of course seats in SHS graduate courses for students enrolled in the MS in Health Technology Program.

Purpose:

This Memorandum of Understanding between the two departments calls for the Department of Speech and Hearing Sciences (SHS) to allow students in the MS in Health Technology Program (in the Department of Kinesiology and Community Health) to register for graduate courses in SHS.

Health Technology students must meet all SHS course prerequisites as defined by the Department in the course schedule (or equivalents approved by the SHS department or with consent of instructor). The MS in Health Technology Advisor will contact SHS Associate Head for Graduate Programs about receiving any necessary overrides or other assistance in getting Health Technology students enrolled in courses.

If Health Technology students number more than 5 in any given course in one semester, the Health Technology Advisor and the SHS Associate Head for Graduate Programs will consult and negotiate additional seats.

The MS in Health Technology Advisor has reviewed the course objectives for the following SHS coursework (i.e., 473, 553, 555, 556, 580) and understands that these courses focus on the human user and the use of health technology to improve communication and quality of life, and not on the development of the technology itself. The MS in Health Technology Advisor will make the Health Technology students aware of this focus prior to their enrollment in these courses.

Procedures:

1. Health Technology students will meet with the Health Technology Advisor and declare an interest in a particular SHS course prior to the registration period.

2. The Health Technology Advisor will contact the SHS Associate Head for Graduate Studies, if necessary, to arrange for admission to the course prior to the beginning of the graduate student registration period for Spring semester; or prior to the start of the Fall semester.

3. Parties agree that the terms of this agreement can be revisited annually, and revised as appropriate to comply with university policy and the meet the needs of the units and the program.

Memorandum of Understanding Between the Department of Kinesiology and Community Health and Department of Speech and Hearing Science

For the allocation of course seats in SHS graduate courses for students enrolled in the MS in Health Technology Program.

Signatures:

Amelia Mays Woods — 10/17/18

By Amelia Mays Woods, Head of Kinesiology and Community Health — Date

Karen Iler Kirk — 10/29/2018

By Karen Iler Kirk, Head of Speech and Hearing Sciences — Date

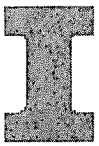
Cc:

Reginald Alston, Associate Dean, Applied Health Sciences

Cheryl Hanley-Maxwell, Dean, College of Applied Health Sciences

Nicole Holtzclaw-Stone, Assistant Director, Health Technology Graduate and Continuing Education Program

Wendy A. Rogers, Director, Health Technology Graduate and Continuing Education Program



Memorandum of Understanding Between the Department of Kinesiology and Community Health and Department of Industrial and Enterprise Systems Engineering

For the allocation of course seats in ISE graduate courses for students enrolled in the MS in Health Technology Program and the hiring of a Health Technology Teaching Assistant Professor in ISE.

Purpose:

This Memorandum of Understanding between the two departments calls for the Department of Industrial and Enterprise Systems Engineering (ISE) to allow students in the MS in Health Technology Program (in the Department of Kinesiology and Community Health) to register for graduate courses in ISE and for ISE to serve as departmental home for a Health Technology Assistant Professor.

Health Technology students must meet all ISE course prerequisites as defined by the Department in the course schedule (or equivalents approved by the ISE department or with consent of instructor). The MS in Health Technology Advisor will contact ISE Associate Head for Graduate Programs about receiving any necessary overrides or other assistance in getting Health Technology students enrolled in courses.

If Health Technology students number more than 5 in any given course in one semester, the Health Technology Advisor and the ISE Associate Head for Graduate Programs will consult and negotiate additional seats.

Procedures:

1. Health Technology students will meet with the Health Technology Advisor and declare an interest in a particular ISE course prior to the registration period.

2. The Health Technology Advisor will contact the ISE Associate Head for Graduate Studies, if necessary, to arrange for admission to the course prior to the beginning of the graduate student registration period for Spring semester; or prior to the start of the Fall semester.

3. Parties agree that the terms of this agreement can be revisited annually, and revised as appropriate to comply with university policy and the meet the needs of the units and the program.

Additionally, ISE will serve as the departmental home for the Teaching Assistant (or open rank) Professor hire for the Health Technology program. The teaching professor will be on a 9 month appointment with a 3-3 load, which will include HT 503 (Hardware Engineering for Health Technology) and HT 504 (Software Engineering for Health Technology) and electives that the individual may develop for the Health Technology program. This individual will also assist with the capstone courses (510, 511, and 512) as needed. The individual will report to the Head of ISE. Investment for Growth

proposal funds will cover the Teaching Assistant Professor's salary until the program is financially independent, ideally in 2021. Once financially independent, funds generated from the MS in Health Technology program will be used to cover the salary of the Teaching Assistant Professor housed in ISE. However, some financial support for this position from ISE may be required beyond 2021 if the program is not yet financially independent by that time.

Signatures:

Amelia M Woods

12/3/18

By Amelia Mays Woods, Head of Kinesiology and Community Health Date

11/29/2018

By Rakesh Nagi, Head of Industrial and Enterprise Systems Engineering Date

Cc: Reginald Alston, Associate Dean, Applied Health Sciences

Harry Dankowicz, Associate Dean, College of Engineering

Cheryl Hanley-Maxwell, Dean, College of Applied Health Sciences

Nicole Holtzclaw-Stone, Assistant Director, Health Technology Graduate and Continuing Education Program

Wendy A. Rogers, Director, Health Technology Graduate and Continuing Education Program

Appendix D:

Letter from Library

Program Tuition Waiver Request

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

University Library
1408 West Gregory Drive
Urbana, IL 61801

October 2, 2018

Prof. Wendy A. Rogers
Khan Professor of Applied Health Science
Director, Health Technology Graduate & Continuing Education Program
Kinesiology & Community Health
1206 South Fourth Street
Room 3011A Khan Annex
1206 S Fourth
M/C 588
Champaign, IL 61820

Dear Prof. Rogers:

The University Library recently received a proposal from the College of Applied Health Sciences to deliver a professional, non-thesis based Master of Science degree in Health Technology.

Based upon the documents received and reviewed by JJ Pionke in the Social Sciences, Health, and Education Library and Tom Teper in my office, it is our belief that there will be no impact on the University Library. We are already supporting this program and see no significant burden on the University Library as a result of the program changes outlined in the proposal.

If additional services or materials are required as the programs further develop, we will be happy to discuss those needs as they emerge.

Sincerely,

John Wilkin
Juanita J. and Robert E. Simpson Dean of Libraries and University Librarian

e-cc: Nicole Holtzclaw-Stone, Ph.D.
JJ Pionke
Thomas Teper

The Graduate College | University of Illinois at Urbana-Champaign

PROGRAM TUITION WAIVER POLICY REQUEST FORM

Definitions of Tuition Waiver Policy Designations:

Traditional Programs. Programs either designated as generating full or base-rate tuition waivers. Please note, new programs seeking Traditional classification with a full waiver do not need to complete this form.

Reimbursable Programs. Programs that have been approved to seek reimbursement from the student's employing unit. The academic program may seek reimbursement for the amount equal to the tuition waiver received by the student, which would have been a result from a waiver-generating appointment.

Cost-recovery and self-supporting programs. Students in approved cost-recovery and self-supporting programs are not eligible to receive tuition and fee waivers except statutory waivers. For example, these students may not hold waiver-generating appointments, receive stand-alone waivers or receive employee waivers. However students are eligible to receive tuition scholarships.

Information related to these tuition waiver classifications can be found here:
http://www.grad.illinois.edu/gradhandbook/2/chapter7/tuition-waivers#otherprovisions.

Please contact the Graduate College if you have questions or seek clarifications, (217) 333-0035.

COLLEGE OR SCHOOL: College of Applied Health Sciences

PROGRAM: MS in Health Technology

REQUESTED CLASSIFICATION: ☐ TRADITIONAL ☐ REIMBURSABLE ☑ SELF-SUPPORTING

JUSTIFICATION: On a separate sheet, please address the following.

1. **Describe the reasons for this request and explain: (a) the pros and cons of the classification requested, and (b) how the requested classification will benefit and not adversely affect the academic quality of the program.**

2. **What type of financial assistance will be offered to students in this program?**

3. **Has this program had a past practice of offering graduate assistantships, if so please describe.**

4. **What provisions will be made to communicate the classification to prospective and newly admitted students?**

Unit Head Signature and Date Amelia M. Woods

College Dean Signature and Date Cheryl Hanley-Maxwell

Program Tuition Waiver Program Proposal – MS in Health Technology

Justification:

1. We are proposing a self-supporting MS in Health Technology. The University made an initial investment in this program through a $2 million Investment for Growth award. The program will be self-supporting by 2021 through the generation of graduate student tuition. As a one-year intensive professional program, a self-supporting model makes sense. The program leverages existing strengths on campus in departments in the Colleges of Applied Health Sciences and Engineering with the more recent developments of the Carle-Illinois College of Medicine and the Siebel Center for Design. (a) The pros of this approach are that we contribute to the solvency of the two colleges involved through the development of a revenue generating degree program and the decreased reliance on state support. The cons of this approach are that students are unable to use tuition waivers, even if external to our program. However, as the program is intensive, and involves a capstone, it is unlikely that students would have time for an assistantship while completing this program. (b) This classification will benefit the program through attracting top students to a professional program.
2. Through our relationship with industry, community organizations, and government, we hope to encourage industry to contribute to a scholarship fund for students in the program.
3. This is a new program – there is no past practice of offering assistantships.
4. We will indicate on our website and application materials that assistantship-based tuition waivers are not accepted to cover tuition costs.

From: Rogers, Wendy
To: McKinney, Allison Ann
Cc: Alston, Reginald J
Subject: RE: Proposal to Establish a MS in Health Technology
Date: Friday, February 22, 2019 2:49:26 PM

Hi Allison,

Thank you for sharing the good news!

I have conferred with the team and this is our plan for managing enrollment of the 5 students per elective course in a given semester:

1. The Assistant Director, Dr. Holtzclaw-Stone (who will be the academic advisor), will coordinate the enrollment on a first-come, first-served basis.
2. As indicated in the MOUs from the participating department heads, if the enrollment interest rises above 5 students per semester for a given course, we will discuss options for providing support (e.g., funding a TA for the course).

Please let me know if additional details are required to address the issue.

Many thanks…wendy

Wendy A. Rogers, Ph.D.
Khan Professor of Applied Health Sciences
Program Director, CHART: Collaborations in Health, Aging, Research, and Technology
Director, Health Technology Education Program
Director, Human Factors & Aging Laboratory
University of Illinois Urbana-Champaign
wendyr@illinois.edu
217-300-1470

From: McKinney, Allison Ann <agrindly@illinois.edu>
Sent: Thursday, February 21, 2019 11:32 AM
To: Rogers, Wendy <wendyr@illinois.edu>
Cc: Alston, Reginald J <alston@illinois.edu>
Subject: Proposal to Establish a MS in Health Technology

Dear Professor Rogers,

The Graduate College Executive Committee reviewed the attached proposal to **"Establish a Master of Science in Health Technology"** at their February meeting this week. The committee approved the

proposal pending the receipt of clarification on the following:

How does the program plan to manage the enrollment cap of 5 students in elective courses outside of the program (page 8 of the document)?

Please let me know if you have any questions.

Sincerely,

Allison McKinney
Senior Director
Academic Affairs
Graduate College

ILLINOIS
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Senate Educational Policy Committee
Proposal Check Sheet

PROPOSAL TITLE (Same as on proposal): Establish a Master of Science degreee with a major in Health Technology in the College of Applied Health Sciences

PROPOSAL TYPE (select all that apply below)**:**

A. ☒ Proposal for a NEW or REVISED degree program. Please consult the Programs of Study Catalog for official titles of existing degree programs.

1. Degree program level:

   ☒ Graduate ☐ Professional ☐ Undergraduate

2. ☒ Proposal for a new **degree** (e.g. B.S., M.A. or Ph.D.):

   Degree name, "*e.g., Bachelor of Arts or Master of Science"*: Master of Science

3. ☐ Proposal for a new or revised **major, concentration, or minor**:

   ☒ New or ☐ Revised **Major** in (name of existing or proposed major): Health Technology

   ☐ New or ☐ Revised **Concentration** in (name of existing or proposed concentration): _____

   ☐ New or ☐ Revised **Minor** in (name of existing or proposed minor): _____

4. ☐ Proposal to rename an existing major, concentration, or minor:

   ☐ Major ☐ Concentration ☐ Minor

   Current name: _____

   Proposed new name: _____

5. ☐ Proposal to terminate an existing degree, major, concentration, or minor:

   ☐ Degree ☐ Major ☐ Concentration ☐ Minor

   Name of existing degree, major, or concentration: _____

6. ☐ Proposal involving a multi-institutional degree:

   ☐ New ☐ Revision ☐ Termination

   Name of existing Illinois (UIUC) degree: _____

Name of non-Illinois partnering institution: _____

Location of non-Illinois partnering institution:

☐ State of Illinois ☐ US State: _____ ☐ Foreign country: _____

B. ☐ Proposal to create a new academic unit (college, school, department, program or other academic unit):

Name of proposed new unit: _____

C. ☐ Proposal to rename an existing academic unit (college, school, department, or other academic unit):

Current name of unit: _____

Proposed new name of unit: _____

D. ☐ Proposal to reorganize existing units (colleges, schools, departments, or program):

1. ☐ Proposal to change the status of an existing and approved unit (e.g. change from a program to department)

   Name of current unit including status: _____

2. ☐ Proposal to transfer an existing unit:

   Current unit's name and home: _____

   Proposed new home for the unit: _____

3. ☐ Proposal to merge two or more existing units (e.g., merge department A with department B):

   Name and college of unit one to be merged: _____

   Name and college of unit two to be merged: _____

   Proposed name and college of new (merged) unit: _____

4. ☐ Proposal to terminate an existing unit:

   Current unit's name and status: _____

E. ☐ **Other educational policy proposals** (e.g., academic calendar, grading policies, etc.)

Nature of the proposal: _____

Revised 10/2012

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

Office of the Provost and Vice Chancellor
for Academic Affairs

Swanlund Administration Building
601 East John Street
Champaign, IL 61820

February 28, 2019

Gay Miller, Chair
Senate Committee on Educational Policy
Office of the Senate
228 English Building, MC-461

Dear Professor Miller:

Enclosed is a proposal from the College of Applied Health Sciences to establish the Master of Science in Health Technology.

Sincerely,

Kathryn A. Martensen
Assistant Provost

Enclosures

c: A. Edwards
E. Stuby
A. McKinney
J. Hart
R. Alston
W. Rogers
N. Holtzclaw-Stone

telephone (217) 333-6677 • *fax* (217) 244-5639

UNIVERSITY OF ILLINOIS
AT URBANA–CHAMPAIGN

Graduate College

110 Coble Hall
801 South Wright Street
Champaign, IL 61820-6210

February 27, 2019

Kathy Martensen
Office of the Provost

Dear Kathy,

Included is a proposal from the College of Applied Health Sciences to **"Establish a MS in Health Technology".**

The proposal was received on February 5, 2019 and reviewed at the Graduate College Executive Committee meeting on February 19, 2019. The committee approved pending receipt of clarification on managing enrollment of students in elective courses outside of the program. The program has provided clarification on this item.

We find that this proposal meets the standards of Graduate Education at Illinois and we now forward for your review.

Sincerely,

John C. Hart
Executive Associate Dean
Graduate College

c: W. Rogers
R. Alston