

HETM Student Handbook

Purpose: The purpose of this handbook is to assist Healthcare Engineering Technology (HETM) students in understanding more fully the policies, practices, and procedures of the IUPUI program. This handbook and the materials in it are intended to be used throughout the entire HETM program. However, this handbook is not all inclusive and does not replace the academic bulletin or Indiana University's Code of Student Rights, Responsibilities, and Conduct. While every effort is made to provide accurate and current information, the HETM program reserves the right to change with notice, curricula, policies, courses, rules or other matters, as necessary to enhance and improve the educational experience.

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University and School of Engineering and Technology Policies:

Students are required to follow all policies associated with Indiana University and the School of Engineering and Technology. Examples of such policies include Academic Probation, Civility, Dismissal, Readmission, Withdrawals, Incompletes, and Grade Appeals, located at www.iupui.edu

These School and University policies SUPERSEDE all other materials in this handbook. For example, if the student meets the qualifications for an internship as outlined in this handbook but the university will not permit enrollment based on an unpaid bursar's bill, the program director cannot over-ride the university registration block to permit internship participation.

Principles and Practices of Professional Conduct

Students are subject to the standards of conduct as defined in the Indiana University's Code of Student Rights, Responsibilities, and Conduct. The Code is available online here <http://www.iu.edu/~code/code/index.shtml>

Ethical HETM practice is framed by the paramount safety, health, and welfare of the public, focused on the improvement, efficacy and safety of healthcare. HETM professionalism is related to 11 essential characteristics: organization, timeliness, communication skills, ability to accept criticism, empathy, demeanor, grooming, collaboration, initiative, self-improvement, and adaptability. Students are required to complete personal assessment and self-reflection of professionalism throughout the curriculum.

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HIPPA

The federal government enacted the Patient Confidentiality and the Health Insurance Portability and Accountability Act (HIPAA) in 1996. Rules regarding the privacy of health information became effective April 14, 2003. In general, privacy is about who has the right to access personally identifiable health information. The rule covers all individually identifiable health information in the hands of covered entities, regardless of whether the information is or has been in electronic form. Students are required to complete education in HIPAA.

The Privacy Standards include:

- limit the non-consensual use and release of private health information;
- give patients new rights to access their medical records and to know who else has accessed them;
- restrict most disclosure of health information to the minimum needed for the intended purpose;
- establish new criminal and civil sanctions for improper use or disclosure;
- establish new requirements for access to records by researchers and others.

Program Educational Objectives:

The program educational objectives of our department are to produce graduates who will hold these attributes, as measured in the early years of their careers following graduation:

1. Be employed and well-compensated in a healthcare technology-related field with a strong demand for skills learned in the HETM program.
2. Work in a stable, supportive environment with the opportunity for career advancement and collaboration with other HETM industry professionals.
3. Continue to work with emerging technology and receive continuing education and/or certification in the HETM profession while providing indirect patient care.

Student Outcomes:

Upon completion of the BS HETM degree, students will have:

1. an ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline;
2. an ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline;
3. an ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature;
4. an ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes; and
5. an ability to function effectively as a member as well as a leader on technical teams.

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Student Uniform/Dress Code

HETM students must have uniforms for participation in HETM 22500 and HETM 32500 and other experiences as identified. The purpose of the uniform policy is to promote professional appearance and readily identify HETM learners. If there are any questions about attire, faculty should be consulted. Students who do not follow the above dress code will be asked to remedy the situation or will be removed from the clinical site.

1. Students must wear a standard black colored scrub top and pants. The uniforms are to be clean and unwrinkled. The uniform top needs to be long enough to cover the waistband of the pants so the midriff is not visible. The pants will be of length that will not touch the floor. Plain black t-shirt (short sleeved or long- sleeved) may be worn under the uniform. Students are required to wear appropriate undergarments.
2. Students must wear enclosed shoes that are black, clean and are in good repair. Socks are mandatory and must be black.
3. Body art must be covered upon request. Piercings must be removed upon request.
4. Students must have long hair pulled back off of the face and shoulders. Beards, sideburns, and mustaches must be neatly trimmed. Students should keep jewelry to a minimum. Nails must be short and clean. Make-up should be kept to a minimum. *Perfume, after-shave or scented lotions must not be worn into clinical settings.* Students who smoke must not have a smoke odor on their person or clothing. Students who smell of smoke or perfume may be prohibited from participating in class or other activity.
5. Students who enter the operating room must comply with hospital expectations for dress regardless of personal or religious requirements. Hospitals commonly and successfully accommodate religious preferences. Students who will not comply will not be permitted to participate in this program.
6. Students must receive an influenza vaccination and be fully vaccinated per university policy for COVID-19 in the fall prior to enrollment in HETM 22500 or HTEM 32500. Students must keep a copy of the immunization record with them to present to the instructor at any time during the semester. Students must receive the flu vaccination at a minimum of two weeks prior to the first day of class of HETM 22500 and HETM 32500.

Immunization Requirements

Each student will be responsible for updating immunizations and tests, annually, as required. Each student is required to have an influenza vaccination annually beginning in the sophomore year of the program. IUPUI offers many free influenza vaccination clinics for students. Documentation of the vaccination must be maintained by the student and available upon request.

HIV/Hepatitis B infection

Qualified learners will not be denied admission to HETM courses solely because they have positive HIV or hepatitis B status. Any student involved in clinical practice who believes he or she may be at risk of HIV or HBV infection is encouraged to seek voluntary testing for confirmation. The student who is seropositive for HIV or hepatitis B infection is encouraged to voluntarily report this status to the program director. Effort will be made to ensure that all infection information is kept confidential.

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Liability Insurance

Indiana University provides liability insurance to each HETM student while in the clinical setting, provided the student is enrolled in HETM course work. Students who are not working towards their HETM degree (or graduates) are not covered by liability insurance.

Attendance/Tardiness

All courses, but especially those taught in the clinical sites, require students to be present and prompt in order for students to earn a passing grade. Students are expected to notify a faculty member or site mentor of anticipated absence or lateness prior to the occurrence. When necessary, faculty members will consult with a student to determine the causes for patterns of absence or tardiness. Faculty members will assess the situation and may require a student to withdraw from a course or receive a failing grade.

Minimum Grade:

Students must earn a grade of C or better in HETM 240 in order to meet the pre-requisite for HETM 32500. No exceptions, bonus points, or appeals are available. However, repeat enrollment is permitted only when the university has determined enrollment is possible. For example, if the student is dismissed from IUPUI, repeat enrollment is not possible.

Student Responsibilities for Clinical Placements:

1. As the root of all activities, students will work to ensure the safety of themselves, coworkers and patients, with careful attention to life saving and hazardous equipment.
2. Students will absolutely maintain patient privacy and the confidentiality of the practicum institution and its staff.
3. Students will comply with institutional policies regarding attire including complete compliance within the operating room. **No** exceptions are permitted.
4. Students who have a university approved waiver for the COVID-19 vaccine may still be required by the internship institutional policy to have a COVID-19 vaccine. The institutions policy will prevail. **No** exceptions are permitted.
5. Students will meet the time requirements as arranged with the practicum supervisor. Time spent will be productive and focused, no “horse play” will be permitted. If an unplanned absence is required, the student will notify their supervisor *prior* to the scheduled start time. “No shows” will not be tolerated and can be a reason for removal from the practicum.
6. A reasonably accurate accounting of time spent in the clinical environment is expected. The deliberate act of erroneously reporting worked hours will result in a failing grade for the course and can result in disciplinary action by the health care institution or the university.
7. As a representative of both Indiana University and Purdue University, students will be expected to be professional, punctual, neat in appearance and maintain the highest level of moral and ethical principles.
8. Students will abstain from the use of alcoholic beverages or any substances in the academic and clinical setting that impair judgment.
9. Students will report to both the faculty and supervisor if problems arise in the clinical experience.

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10. Students will maintain an attitude of service towards the clinical staff, with an emphasis on providing outstanding support services through excellent communication and effort.
11. Students are expected to follow supervisor directions/instructions, complete tasks as assigned and work as part of the clinical engineering team.
12. Students are prohibited from photography in the workplace, with special restrictions on the use of Snapchat or “selfies” using a cell phone. Students may **not** post pictures of themselves in the clinical setting on social media.

Internship requirements:

Clinical placement is subject to the requirements of the internship site or independent service provider and may include any or all of the following:

- A clean criminal background check, which may include state, federal, or motor vehicle
- Meet standards/restrictions on body art, piercings, grooming, or personal hygiene
- Meet cigarette smoking restrictions including clinical sites that prohibit smoke odor on clothing
- Meet immunization requirements – documented inoculations or blood titer, including immunity to Rubeola, Mumps, Rubella, and Varicella, and Hepatitis A and B.
- Meet immunization requirements for COVID-19 within the guidelines of the university.
- Receive an annual Flu vaccination
- Successful TB test or proof of immunity through blood titer
- Successful completion of a drug screening urinalysis
- Successful completion of an alcohol screening urinalysis
- Successful completion of a physical examination by a medical professional
- Successful completion of a behavioral health screening

Expenses incurred during the compliance process are the responsibility of the student. Any attempt to adulterate, manipulate, or circumvent screening procedures will be considered an unsuccessful screening. Placement decisions of the program director are final.

Internship physical requirements include lifting and carrying 25-50 pounds, bending, climbing, kneeling, standing and walking. The work environment may expose a student to biohazardous waste, communicable diseases, dust, hazardous chemicals, latex, heating devices, lasers, magnetic fields, radiation, wet or slippery surfaces, and computer usage (keyboard and monitor).

Internship Pre-placement Process:

Eligible students have completed internship course academic pre-requisites as well as have no negative service indicators including academic warning or probation or a financial hold. Students must complete the hospital research worksheet and participate in a recorded mock-interview through the Office of Student Career Services. The mock-interview is reviewed and scored by three IUPUI staff and/or faculty members. Students must be rated at a 6 (out of 10) or above in each category: grammar /syntax, patterns of speech, and understanding/responding. The rubric (containing additional descriptors) is provided to internship candidate prior to the mock interview.

Internship Transportation and Pay:

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Only a few internship locations are on campus and some are restricted to US citizens. The program cannot assure a student that they will be able to participate in an internship in a hospital on campus. Students who have transportation challenges are strongly encouraged to engage in the internship process at the earliest possible date in order to have the most site opportunities.

Only a very few internship sites pay student interns. Students should expect a volunteer internship as this is a common model utilized in clinical settings.

Internship Alternative:

Students who cannot obtain an external internship will be required to register for OLS 331, *Occupational Safety and Health*. The course will substitute for HETM 295.

Internship availability:

Given the nature of healthcare organizations, internship sites expect students to participate during daytime weekday hours. Few sites, if any, are available in late afternoons, evenings and weekends. Students can only participate in internships during the normal working hours of site mentors (typically 7 am – 3 pm). Applicants are encouraged to assess their day time availability for HETM courses before applying to the program.

Academic Integrity

HETM Honor Code:

As a student enrolled in a course within the curriculum for this degree, students must agree to act with integrity.

- I ensure that all academic ideas and efforts will be my own.
- I will not copy ideas, words, or statements of a website or other resource *unless* permitted by the instructor *with citation*.
- I will follow the instructions provided for all academic exercises and will not use unauthorized assistance from others.
- I will not permit another person to substitute for me in the taking of an examination or quiz.
- I will not permit another person to conduct research or to prepare any assignments for me.
- I will not take any credit for a team project unless I made a fair and substantial contribution to the group effort.
- I will not violate course rules as outlined in the course syllabus or assignment instructions.
- I will not intentionally or knowingly help or attempt to help another student to commit an act of academic misconduct.
- I understand that leaning course material and success in the course is my responsibility and this requires studying outside of class and, if needed, seeking assistance from the instructor during office hours.

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Students can be assigned an academic penalty in the form of a reduced grade or zero grade on an assignment. Students who do not meet course requirements in two separate incidents, may be assigned the grade of F in a course.

Criminal Background

Hospitals and other clinical employers use criminal background checks to screen potential workers. Almost all potential employers will not accept a volunteer intern or hire a HETM graduate who has a felony criminal conviction. Students with misdemeanor or felony convictions will find significant limitations in employment prospects. Students should be aware that, although a criminal background check has not been completed by IUPUI, it may be required by an institution offering an internship. Students with felony convictions are informed that practicum placements may be limited or impossible.

While a student with a criminal background may view their own history as only a minor offence, healthcare institutions may not. The program is not responsible for disruptions in a student's educational plan resulting from a criminal background. Students should report to the best of their ability anything that may come up on a national criminal background check. Self-disclosures should be truthful, accurate, and complete.

Academic Advising:

The process of student advising is assumed to be an ongoing, collaborative effort. Students are encouraged to anticipate or avoid serious difficulties by utilizing the help of the program director and advisor. Students are ultimately responsible for the accuracy of their academic enrollment.

Course Sequencing:

Learners are encouraged to follow the semester-by-semester plan of study and enroll in courses in sequence rather than haphazardly. The listed pre-requisites for courses may not include every prior course in the curriculum. Random selection may lead to disappointment and poor performance. Students must enroll in junior and senior level HETM courses before permission will be granted for enrollment in the senior project courses. This requirement is true even if the student has only a few courses left to earn the HETM degree.

Graduation Requirements

- All required courses for the degree. Students will not receive notification if a course is dropped, skipped or failed. Students alone are responsible to be sure all required courses are completed.
- Satisfactory program GPA above a 2.0 (all courses taken that count toward the degree), overall GPA above a 2.0 (all courses taken at IU ever), residency requirements (courses taken at IUPUI) and any other specific requirements by viewing your advisement report in SIS. Instructions to do this are here: <http://kb.iu.edu/data/amwz.html>

Note: If a name appears in the booklet distributed at graduation, the student may not have earned the degree. This booklet is published prior to grades being posted for the semester. Students should not assume the degree has been awarded even if the learner's name appears in the booklet or the student participated in graduation.

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Repeat Rules

Policy: Effective fall, 2013, students who earn a final grade (complete the course) in HETM 22000, HETM 24000 and/or HETM 32000/32500 cannot repeat the course more than once. Students will be prevented from enrolling in the course for a third attempt. However, repeat enrollment is permitted only when the university has determined enrollment is possible. For example, if the student is dismissed from IUPUI, repeat enrollment may not be possible.

International Student (F1 visa) and Employment in the US:

Graduates of our program readily find employment. However, students who hold F1 visas are not eligible for employment in the US except utilizing the temporary post-completion optional practical training (OPT). The HETM program cannot ensure that F1 graduates can find OPT opportunities or other employment in the US. F1 graduates who do not use OPT would need to find an employer who is willing to support and fund an H1B visa. The high cost of an H1B visa is not feasible for hospitals. While other employers may be willing to fund an H1B, the HETM program director and IUPUI career services center cannot facilitate this placement.

Enrollment in HETM 22500

Students must agree to the course uniform requirements as described in the student handbook. Students must obtain a vaccination for influenza at least 30 days prior to the start of the semester of HETM 22500 enrollment. Students must be fully vaccinated per university policy for COVID-19. Students must meet all course pre-requisites including a passing grade in ECET 10900. Students who do not meet the pre-requisites after enrollment in HETM 22500 will be administratively withdrawn from HETM 22500, even if prior course permission has been provided.

Enrollment in HETM 32500

Students must agree to the course uniform requirements as described in the student handbook. Students must obtain a vaccination for influenza at least 30 days prior to the start of the semester of HETM 325 enrollment. Students must be fully vaccinated per university policy for COVID-19. Students must meet all course pre-requisites including a passing grade in HETM 22500 and ECET 15700 as well as a C or better (no C-) in HETM 24000. Students who do not meet the pre-requisites after enrollment in HETM 32500 will be administratively withdrawn from HETM 32500, even if prior course permission has been provided.

Enrollment in HETM 49000

Students wishing to enroll in HETM 49000, Project Planning and Design must have completed at least a combination of three HETM 3xx or 4xx level courses. However, HETM 32500 does not count as one of the three courses to qualify for enrollment into HETM 49000. No exceptions will be allowed. The course of study for the BS degree allows completion of the combination of the required courses by the 7th semester.

Healthcare Delivery Culture in the United States

Healthcare culture in the United States incorporates some unique features in contrast to other countries/societies/traditions. As examples, patients are fully informed, patients must provide consent for procedures and caregiving is not gender segregated. The IUPUI HETM program follows the standards of practice associated with the US culture of care. Students who arrive at

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IUPUI with various traditions or wishes must comply with local healthcare cultural expectations, regardless of future employment plans, personal beliefs, or previous training.