



Medical Dosimetry Professional Science Master's (PSM) Program Clinical Training Requirements

- **Pre-Clinical Screening:** Students must complete the pre-clinical screenings listed below within 12 months prior to enrolling in the clinical practicum. Upload the results of these screenings to Temple University's [Patient Health Portal](#). These documents will be made available to the clinical settings upon request. For more information on the required immunizations, visit the [Student Health Services](#) website.
 - Criminal background check from any background check vendor.
 - Immunizations:
 - Meningococcal (meningitis) vaccine
 - Varicella (chickenpox) vaccine
 - Two vaccinations for Measles, Mumps, Rubella (MMR)
 - Tetanus/Diphtheria/Pertussis (Tdap) vaccination within 10 years or Tdap older than 10 years and Diphtheria/Tetanus (DT) within 10 years
 - Hepatitis A vaccine series
 - Hepatitis B vaccine series
 - Human Papillomavirus (HPV) vaccine series
 - Inactivated poliovirus vaccine (IPV)
 - COVID-19 vaccine
 - Influenza vaccine
 - TB screening: Students can complete the Tuberculin Skin Test (PPD) in Student Health Services. IGRA blood tests are also acceptable.
- **Student Health Insurance:** Temple University requires all international students with F1 or J1 visa status to maintain health insurance. For information regarding the minimum coverage requirement, visit <https://careers.temple.edu/hr-resources/our-functional-areas/benefits-administration/health-insurance-plans/student-health-0>. All full-time graduate students have the opportunity to purchase one of Temple University's [Student Health Insurance Plans](#) at reduced group rates.
- **Radiation Safety:** Students must complete radiation safety training, including the principles of ALARA (As Low As Reasonably Achievable), before participating in clinical rotations. Upon completion, students are required to sign the Radiation Safety Training Acknowledgment Form (see Appendix D) and upload the signed form to [Canvas](#). Radiation Protection is a topic sufficiently covered in many of the core courses, including PHYS 5103 - Ionizing Radiation on Living Systems and PHYS 5401 - Medical Dosimetry I. Additionally, students must receive a site-specific radiation safety orientation, which may be provided by the clinical preceptor or the clinical site's Radiation Safety Officer (RSO). Students must complete the form required by their assigned clinical site to receive their external radiation



monitoring badge (dosimeter). Students must wear the badge at all times while in the clinical department. Radiation safety expectations include:

- **No presence in treatment rooms during beam-on:** Students assisting in simulation or patient setup for treatment must not remain in the room during exposure.
 - **Time, Distance, and Shielding:** When participating in brachytherapy or near radioactive sources, students are expected to apply proper time management, maintain safe distances, and use appropriate shielding.
 - **Monitoring and Exposure Limits:** Records of badged student radiation exposure levels are maintained by the clinical site. Temple University's [Environmental Health and Radiation Safety \(EHRS\) Department](#) handles radiation exposure records for students enrolled in clinical training at Temple University Main Hospital. Exposure reports are available for review at EHRS and are distributed to badged students on an annual basis. If a student's reading exceeds the ALARA trigger level (see [Policy 4.6](#)) at any point, the student will be removed from the clinical setting, and an investigation will be conducted by the Radiation Safety Department or the RSO at the clinical training site. The student will be counseled by the Program Director and RSO before returning to clinical training.
- **MRI Safety:** Students must complete Magnetic Resonance Imaging (MRI) safety training prior to participation in clinical rotations at sites where MRI equipment is present. MRI safety content is covered in PHYS 5202 - Physics of Medical Imaging II. Upon completion of MRI safety training, students are required to sign the MRI Safety Training Acknowledgment Form (see Appendix E of the Student Handbook) and upload the signed form to [Canvas](#). Students are also required to complete the MRI Safety Screening Protocol (see Appendix E2 of the Student Handbook) and upload the signed form to [Canvas](#). Students must be aware that the MRI environment contains strong static magnetic fields that are continuously active, and these can present serious hazards to individuals with certain implants, devices, or metallic foreign bodies. Prior to entering any MRI environment, students must complete and submit a screening form to identify any potential contraindications. A student with any known or suspected contraindications must not enter the MRI environment until cleared by appropriate clinical personnel. Clinical sites may perform an additional MRI safety screening and/or orientation upon arrival. Students are expected to follow site-specific MRI safety protocols, including:
 - Never entering the MRI suite without explicit authorization.
 - Complying with all posted signs and safety warnings.
 - Reporting immediately any implants, devices, or injuries involving metal.
 - Following the instructions of the MRI technologists and the site safety officers at all times.
 - **Pregnancy:** Students who are or suspect they may be pregnant are encouraged to review the [U.S. Nuclear Regulatory Commission Regulatory Guide 8.13](#) – Instruction Concerning Prenatal Radiation Exposure and Temple University Policy for Pregnant Radiation Workers ([Policy 4.9](#)). A student is considered pregnant if, and only if, the student declares pregnancy in writing. The declaration of pregnancy is voluntary and may be withdrawn in writing at any time. A student who wishes to declare pregnancy must complete the pregnancy declaration form provided by the clinical training site. Students assigned to the Temple University Main



Hospital must complete the Temple University's Declaration of Pregnancy form, available at the Radiation Safety Department (3307 N. Broad Street, # B49). Upon submission of this form, the Radiation Safety Department will:

- Evaluate the exposure history of the individual and her coworkers
- Provide information concerning risk and precautions
- Evaluate the working environment with respect to radiation exposure
- Make recommendations for reducing radiation exposure
- Monitor monthly radiation exposure following guidelines from the Nuclear Regulatory Commission (NRC) and the state of Pennsylvania

Additionally, the student must complete the Dosimetry Program Pregnancy Declaration Form (see Appendix F of the Student Handbook) and submit it to the Program Director, who will then arrange a meeting with the student to discuss options for school and clinical attendance. A declared pregnant student has the options to:

- Take a leave of absence (Appendix F of the Student Handbook, **Option A**). A Leave of Absence (LoA) allows an active student to interrupt enrollment without having to apply for re-enrollment and without changing the requirements of their degree program. Students who select this option will be readmitted to the program at the first available opening after delivery. For more information and for instructions on how to apply for LoA, visit <https://registrar.temple.edu/leave-of-absence>.
 - Continue in the program with modified coursework and/or clinical training schedules (Appendix F of the Student Handbook, **Option B**). Declared pregnant students may consult with the Program Director to discuss the possibility of adjusting their course and/or clinical rotation schedules to reduce exposure risk or facilitate post-delivery recovery. Students who select this option should be aware that it may impact their education and potentially delay graduation, as some courses are only offered at specific times each year. Additionally, clinical hours cannot be made up by attending more than 10 hours a day (40 hours per week) or during holidays that are observed by the university. Time missed due to pregnancy and/or delivery will likely require completing missed coursework and/or clinical training in a different semester, which may extend graduation by up to a year.
 - Continue coursework/clinical training without modification after signing a statement acknowledging risk (Appendix F of the Student Handbook, **Option C**). Students who select this option are strongly advised to consult their personal physician. Declared pregnant students whose delivery date falls within 10 days of the clinical rotation start date will not be eligible for this option, as they are likely to miss clinical training, which requires modification.
- **Direct supervision:** Direct supervision is required for all student participation in procedures involving patient contact or the generation of patient-specific data for treatment or clinical decision-making. A credentialed practitioner (e.g., Certified Medical Dosimetrist [CMD] or a Qualified Medical Physicist) must be present during the procedure to assist if necessary, review, and approve the outcome. This ensures patient safety, educational quality, and compliance with JRCERT standards. Students may observe only (without participating) when direct supervision cannot be provided. Direct supervision is required for any student involvement in procedures that include, but are not limited to:



- CT simulation and patient positioning
 - Fabrication or use of immobilization devices
 - Image registration and contouring for clinical use
 - Treatment planning activities tied to an active patient case
 - Patient-specific quality assurance preparation
 - Any activity where a clinical decision may affect patient care
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- **Attendance:** Students must arrive at their assigned clinical rotation on time and stay at the clinic for the hours specified by the schedule. Unexcused absences and tardiness demonstrate a lack of responsibility and professionalism, which are not tolerated. Three tardies of more than 10 minutes each count as one absence. Missing five clinical training days will lower the course grade by one letter (e.g., from A to B). Six or more unexcused absences will result in removal from the clinical training and the program. Students are responsible for notifying the clinical preceptor at least 30 minutes before the start of clinical training if they will be late or absent. All excused tardiness and absences must be made up. Students are allowed one personal day and one interview day and are not required to make up days missed due to the closure of the clinical site, such as for bad weather.

 - **Clinical Curriculum Hours:** Students must keep track of their clinical training hours using the timesheet provided in [APPENDIX B](#) of the Student Handbook. A minimum of 880 clinical training hours is required to complete the Medical Dosimetry Program. Students are not allowed to attend clinical training for more than 10 hours a day, more than 40 hours per week, or on university-observed holidays.

 - **Dress Code:** Students are required to wear professional/business attire appropriate for a clinical setting. This includes neatly pressed, non-revealing clothes and dress shoes (no open-toe shoes). Students must also wear a white mid-length lab coat and the Temple University Student badge at all times. Students must maintain good hygiene, clean and neatly groomed or pulled back and fastened hair, and clean and trimmed fingernails (no longer than a quarter inch).

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APPENDIX B: TIME SHEET

Student Name: _____

TUID: _____

Clinical Site: _____

Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total # of Hours	
January																																	
February																																	
March																																	
April																																	
May																																	
June																																	
July																																	
August																																	
September																																	
October																																	
November																																	
December																																	
Grand Total # of Hours																																	

- * Enter the number of hours present for each clinical training day and the total number of hours. A minimum of 880 clinical hours is required to complete the program.
- * Enter B for School Break, C for Closing (e.g., due to inclement weather), H for Holiday, I for Interview Day, P for Personal Day. Students are allowed to miss up to 1 Personal Day and 1 Interview Day (these days do not need to be made up).
- * Excused tardiness and absences must be made up.

Student Signature: _____

Date: _____

Clinical Preceptor Signature: _____

Date: _____

APPENDIX D: RADIATION SAFETY TRAINING ACKNOWLEDGMENT FORM

Student Name: _____

TUID: _____

Training Content Summary: The student has received formal training in radiation safety, including but not limited to:

- Basic principles of radiation protection (time, distance, shielding)
- Regulatory dose limits and exposure monitoring
- Institutional safety procedures and emergency protocols
- ALARA (As Low As Reasonably Achievable) principles and their application in clinical settings
- Personal protective equipment (PPE) and usage
- Use and care of dosimeters and radiation monitoring equipment

Acknowledgment:

I acknowledge that I have completed radiation safety training, including instruction on the ALARA principles, and understand the responsibilities and procedures associated with maintaining radiation safety in clinical environments. I agree to comply with all institutional, regulatory, and clinical guidelines.

Signature: _____

Date: _____



APPENDIX E: MRI SAFETY TRAINING ACKNOWLEDGMENT FORM

Student Name: _____

TUID: _____

Training Content Summary: The student has received formal training in MRI safety, including but not limited to:

- Overview of magnetic fields and safety zones
- Risks associated with ferromagnetic objects and implants
- Emergency procedures and incident response in MRI suites
- Use of screening tools for patients and personnel
- Identification and handling of MRI-safe equipment

Acknowledgment:

I acknowledge that I have completed MRI safety training and understand the responsibilities and safety protocols required to work in and around MRI environments. I agree to comply with all institutional and clinical site guidelines.

Signature: _____

Date: _____



APPENDIX E2: MRI SAFETY SCREENING PROTOCOL

Student

Name: _____

Date: _____

Magnetic resonance (MR) is a medical imaging system in the radiology department that uses a magnetic field and radio waves. This magnetic field could potentially be hazardous to students entering the environment if they have specific metallic, electronic, magnetic, and/or mechanical devices. Students must be screened to identify potential hazards of entering the MR environment before beginning clinical rotations or entering MRI Zones III/IV.

Pregnancy Notice: The declared pregnant student who continues to work in and around the MR environment should not remain within the MR scanner room or Zone IV during actual data acquisition/scanning.

Please indicate if you have any of the following:

	YES	NO		YES	NO
Cardiac pacemaker			Any type of intravascular coil, filter or stent		
Aneurysm clip(s)			Any type of foreign body, shrapnel or bullet		
Cardiac Defibrillator			Cochlear, otologic, or other ear implant		
Neurostimulator			Penile prosthesis		
Tissue expander (breast)			Eye prosthesis		
Implanted Insulin Pump			Any history of eye injury/metal in eye		
Heart Valve prosthesis			Any magnetic implant		
Any tattooed areas			Any electronic or mechanical implant		
Any body piercing			Any other implanted item or device		
Hearing Aid			Dentures		
History of Diabetes			Medication Patch		

Attestation: I attest that the above information is correct to the best of my knowledge. I have read and understand the contents of this form and have had the opportunity to ask questions. Should any of this information change, I will inform my Program Director.

Student Signature: _____

Date: _____

-
- No contraindications identified; student may enter Zone III/IV per site policy.
 - Contraindications or uncertainty identified; student is advised not to progress past Zone II unless screened/cleared by MR Level II personnel onsite.

Clinical Staff Name: _____

Signature: _____

Date: _____



APPENDIX F: PREGNANCY DECLARATION FORM

Student Name: _____

TUID: _____

Pregnancy Declaration Date: _____

Expected Delivery Date (if known): _____

I hereby voluntarily declare that I am pregnant. I understand that this declaration is voluntary and may be withdrawn in writing at any time. Upon declaration, I agree to meet with the Program Director and Radiation Safety Officer (RSO) to review options for radiation protection, academic progress, and clinical placement. I understand that a second dosimeter may be issued to monitor fetal dose, and that I may be eligible for disability and course/clinical training accommodations as outlined in the Students Resources section and the program’s Pregnancy Policy section of this handbook.

Please read each option carefully and circle one of the three options below.

Option A: Leave of Absence (LoA)

I elect to take a temporary leave of absence from the program during pregnancy and/or delivery. I understand that I will be readmitted at the first available opening after delivery, following Temple University’s Leave of Absence procedures.

Option B: Modified Coursework/Clinical Schedule

I elect to continue in the program during pregnancy with modifications to my clinical and/or academic schedule. I understand that I must meet with the Program Director to determine an appropriate plan and that this option may delay my graduation.

Option C: No Modification

I elect to continue in the program and clinical training without modification. I understand the risks of embryo/fetal radiation exposure and acknowledge that I have been advised to consult my physician. I will provide written documentation of my intention to continue without modification, which will be kept in my student file. Declared pregnant students whose delivery date falls within 10 days of the clinical rotation start date will not be eligible for this option, as they are likely to miss clinical training, which requires modification.

Signature: _____

Date: _____



APPENDIX G: CLINICAL ORIENTATION ACKNOWLEDGMENT FORM

Student Name: _____

TUID: _____

Clinical Site Name: _____

Date of Clinical Orientation: _____

I acknowledge that I have attended the clinical orientation session at the site listed above. During this orientation, the following topics were reviewed and discussed with me:

- Clinical site policies and procedures
- Infection control and safety practices
- Radiation safety protocols
- HIPAA and patient confidentiality
- Emergency procedures and contact information
- Use of personal protective equipment (PPE)
- Patient care and communication expectations
- Professional conduct and dress code
- Chain of command and supervisory roles

I understand the importance of adhering to all clinical site policies and professional standards during my clinical rotations. I agree to conduct myself in a professional manner and comply with all safety, privacy, and ethical guidelines as presented.

Signature: _____

Date: _____