Contact us at:

Montana Technological University Graduate School
1300 West Park Street Butte, MT 59701
http://www.mtech.edu/academics/gradschool
406-496-4102
gradschool@mtech.edu
graduatedean@mtech.edu
# Table of Contents

Welcome to Montana Technological University’s Graduate School ........................................... 1

## ENROLLED STUDENT POLICIES ................................................................. 2
- Minimum Enrollment Requirements................................................................................. 2
  - U.S. Students .................................................................................................................. 2
  - International Students.................................................................................................... 2
- Continuing Enrollment .................................................................................................. 2
- Summer Enrollment ....................................................................................................... 3
- Acceptable Academic Progress ....................................................................................... 3
- Academic Probation ....................................................................................................... 4
- Financial Aid and Consequences of Academic Probation ........................................... 4
- Suspension Policy .......................................................................................................... 4

## FINANCIAL INFORMATION ............................................................................... 5
- Graduate Assistantships ............................................................................................... 5
- Graduate Tuition Waivers ............................................................................................ 5
  - Maximum Weekly Work Limit ..................................................................................... 6
- Tax Withholding ........................................................................................................... 6
- Deferment of Tuition and Fees ..................................................................................... 6

## GRADUATE STUDENT PROCEDURES ......................................................... 9
- Petition to the Graduate Dean ....................................................................................... 9
- Responsible Conduct of Research ............................................................................... 9
- Graduate Program Form .............................................................................................. 9
- Graduate Committee and Form .................................................................................... 10
- Thesis Abroad ............................................................................................................. 11

## MASTER’S DEGREE PROGRAMS ................................................................. 12
- Master’s Degree Programs ............................................................................................ 12
  - Master’s Committee Composition ............................................................................. 12
  - Appointment of Master’s Committee Members ......................................................... 12
  - Master’s Thesis or Project Defense ........................................................................... 12
- Interdisciplinary Master of Science (IMS) ................................................................ 13

## DOCTORAL DEGREE PROGRAMS ................................................................. 15
- Dissertation Committee Composition .......................................................................... 15
- Appointment of Dissertation Committee Members ................................................... 16
- Candidacy Examinations .............................................................................................. 16
- Dissertation Defense .................................................................................................... 17

## FORMATTING AND SUBMISSION REQUIREMENTS .................................... 19
- Thesis and Dissertation Formatting and Submission ................................................... 19
  - Before you begin the research for your Thesis or Dissertation ................................ 19
  - Before you begin writing your Thesis or Dissertation ............................................. 19
- Table 1. DEADLINES ................................................................................................. 20
- Exceptions .................................................................................................................. 21
Required Thesis Format ................................................................. 21
Non-Thesis Project, Report, and Publishable Paper Submission ................................................................. 23
Non-Thesis Project, Report, and Publishable Paper Deadlines ................................................................. 23
GRADUATION PROCEDURES .................................................... 24
Degree Requirements ................................................................. 24
Application for Degree ............................................................. 24
Graduate Certificate Completion .............................................. 25
Check-Out Form ........................................................................ 25
Commencement ........................................................................ 25
Delayed Completion ................................................................ 26
Table 2. GRADUATE SCHOOL TIMELINE .................................... 27
5-YEAR B.S. –M.S. OPTION ......................................................... 28
Courses taken at Montana Technological University as an undergraduate student .................................... 28
GRADUATE SCHOOL FORMS .................................................... 29
LIBRARY INFORMATION ............................................................ 30
Research Help ............................................................................ 30
Library Services ........................................................................ 30
Interlibrary Loan ....................................................................... 30
Databases and Indexes ............................................................ 30
Style Guides .............................................................................. 31
Special Collections .................................................................. 31
Federal Government Documents ............................................. 31
State & International Government Documents .................. 31
Patents & Trademarks .............................................................. 32
Montana Superfund Documents .............................................. 32
Master’s Thesis Format and Submission Requirements .......... 32
Digital Commons .................................................................... 32
STUDENT SUPPORT SERVICES ................................................. 33
Counseling ............................................................................... 33
Disability Services .................................................................. 33
Health Services ........................................................................ 34
PERSONAL SAFETY .................................................................... 34
Campus Safety ......................................................................... 34
Campus Security Report ......................................................... 35
Crime Statistics ....................................................................... 36
Fire Data .................................................................................. 39
Sexual Assault & Harassment .................................................. 40
Safe Space ............................................................................... 40
Other Resources ..................................................................... 40
Equal Opportunity Employment, Affirmative Action, & Title IX ................................................................. 41
HAZARDOUS MATERIALS INFORMATION .................................. 43
Purpose .................................................................................. 43
Introduction ............................................................................ 43
Definitions .............................................................................. 43
Regulatory Jurisdiction ........................................................... 44
Welcome to Montana Technological University’s Graduate School

Welcome to the Graduate School at Montana Technological University. Whether you are pursuing a doctorate, a master’s degree, a graduate certificate or are taking a course or two for your personal interest or advancement, we are pleased to have you among us.

In this Graduate School Handbook, you will find information about the policy and procedures for enrolled students, along with links to related forms. The faculty, staff and graduate school is focused on helping you make your time at Montana Technological University educational, enjoyable and valuable for your academic and professional growth. Thank you for trusting us with your education. We welcome your feedback.

Given the global COVID-19 pandemic that affected university operation during the Spring of 2020 and is guiding planning and protocols for Academic year 2020-2021, schedules and procedures described in this Handbook are subject to change on a short notice. The Graduate School will make every effort to minimize and/or accommodate any disruptions, so that students are able to complete their programs on schedule.

On behalf of the faculty and staff of Montana Technological University, we welcome you to our community.
GRADUATE STUDENT POLICIES AND PROCEDURES

ENROLLED STUDENT POLICIES

If you have questions, please inquire of the Graduate School Office for clarification

Minimum Enrollment Requirements

U.S. Students

A student who has been admitted to the Graduate School must be registered on a continuing basis for a minimum of 3 credit hours of graduate courses (4000 and above) during the Fall and Spring semesters of the academic year, whether the student is in residence, off-campus, or pursuing a degree on a part-time basis. Registration will not be allowed after the official “close of registration” (10 days after the first day of class). Graduate Students are required to enroll for a minimum of 3 credit hours per term until all required coursework, seminars, and thesis credits are satisfactorily completed. In the final semester, a student may enroll for 1 credit hour for the purpose of thesis defense, publishable paper presentation, dissertation or final examination if all other conditions for graduation have been met (coursework, seminar, and thesis/research/dissertation credits completed)

International Students

International students on an I-20 visa must be enrolled for a minimum of 9 credit hours of graduate courses (400 level and above) during the Fall and Spring semesters of an academic year to remain in valid Visa status. Exceptions may be made only during the final semester if fewer than 9 credit hours are needed to complete degree requirements. This enrollment requirement supersedes all other requirements, such as those listed for financial assistance. Please direct questions to the Graduate Program Manager.

Continuing Enrollment

Continuing enrollment during each semester of the regular academic year (Fall and Spring) is required to remain in the Graduate School. If
Registration is allowed to lapse, the Graduate School reserves the right to terminate the student's Graduate School admission. Students desiring to take a break in their studies should submit a “Request for Leave of Absence” and pay the fee to keep library and email access during the term(s) of absence. The maximum duration of a Leave of Absence is one calendar year. Should a break of attendance occur, other than for an approved leave of absence, please contact the Graduate School to obtain a Returning Student Application.

Summer Enrollment

A minimum registration for 3 credit hours is required during the summer, if you are using departmental or institutional resources in the pursuit of your studies, such as research, thesis finalization, and/or thesis defense or publishable paper presentation, and have not previously completed all degree requirements. If all other requirements have been met, 1 credit enrollment is required to defend your thesis or dissertation, present your project, or complete the final examination in a non-thesis option.

Acceptable Academic Progress

All graduate students are required to maintain at least a 3.00 cumulative grade point average (CGPA) for graduate level courses (400 and 500 level). A 3.00 CGPA minimum for coursework and thesis is required for graduation. Any course listed in the major or minor (or supporting program) in which a grade lower than a “C” has been received must be repeated.

The Montana Technological University Graduate School does not allow any credits taken at the 300 level or below to count in the Graduate level GPA or to be used as credits toward graduation requirements.

Graduate students taking undergraduate-level courses during their graduate career, either for deficiencies, prerequisites, or personal interest, will register in the courses. During the term, all courses will be classified as graduate (GR) courses, based on the student’s classification as a graduate student. After the end of the term when grades are posted for that semester, all courses taken by graduate students that are below the 400 level will be updated to the Post-Baccalaureate (UP) level, and this updating will remove them from inclusion in the calculation of the graduate school GPA. Graduate GPA and post-baccalaureate GPA are separately calculated, and they show on different pages of the official transcript.
All courses at the 400 level or above taken during a student’s graduate career will be calculated in the Graduate level GPA. Grades earned in these courses are included in the Graduate level GPA, whether or not they apply to the student’s graduate program degree requirements. No courses at the 400 or higher level can be removed from the graduate transcript and GPA calculation without the advance written approval of both the Registrar and the Dean of the Graduate School. Audited and Withdrawn courses show on the transcript, but they do not receive a grade and are not included in the GPA calculation.

Academic Probation

Continued enrollment in good academic standing in the Montana Technological University Graduate School requires the maintenance of a 3.00 CGPA for graduate level courses and evidence of academic progress toward the student's degree objectives as defined by the student's Program Form. Failure of the student to achieve either of these requirements will result in academic probation and can result in ineligibility for financial assistance and eventual dismissal from the Graduate School. A student on academic probation must achieve a term GPA of at least 3.00. The student will remain on probation until the CGPA equals or exceeds 3.00.

Financial Aid and Consequences of Academic Probation

Graduate Teaching Assistantships, Graduate Research Assistantships, Tuition Waivers, and eligibility for federal and state loans, scholarships, or traineeships may be affected by probationary status.

Suspension Policy

Any student whose term GPA is less than 3.0 ("B") for the semester of probation may be suspended from the Graduate School. A student who is suspended may not take courses as a degree-seeking student. Under special circumstances, the student may continue to take graduate courses as a non-degree student. Reconsideration for graduate admission may be requested after one or more semesters by reapplying for admission. See “Former Student Application Procedures” for details.
Graduate Assistantships

Montana Technological University has available a limited number of competitively awarded Graduate Teaching Assistantships (GTA) and Graduate Research Assistantships (GRA). The GTA stipends for master’s students and for Ph.D. students are set by the University. The stipend level applies to GTA/GRA appointments of 20 hours per week. Lesser appointments receive a proportional stipend. The minimum GRA stipend level is equal to the GTA stipend. GRA stipends may be higher, depending on the responsibilities of the appointment, the level of the student, and the budget available in the funding source (typically a research grant). Students must be enrolled in at least 6 credit hours during spring and fall terms, to be eligible for an assistantship that term. During the final term of the program, a lesser enrollment can be allowed, provided the student is taking enough credits to complete the degree requirements that term. No student may have an assistantship during more than one “final term” with fewer than 6 credit hours.

In no case may a student accept a combination of GTA/GRA appointments and hourly work that exceeds 20 hours per week (when classes are in session) or 40 hours per week (between terms or in the summer). Students who have not completed their degrees and who are enrolled for the following fall may receive GTA/GRA appointment(s) during the summer period (May 16 to August 15) for up to 40 hours per week (if they are registered for at least 6 credits in the subsequent Fall and no more than 3 credits during the summer). Students registered for 4 or more credits during the summer are limited to a GTA/GRA appointment of 20 hours per week, during the weeks their classes are meeting. For a GTA or GRA, no graduate student may be paid less than the current GTA rate of $5,000 per semester for a 20 hour-per-week assignment. The amount would be pro-rated for an assignment of fewer hours per week. The minimum pay for other work is the prevailing minimum wage. Graduate assistantships are not subject to overtime pay. The GRA/GTA stipend level for Ph.D. students is typically higher than the stipend level for master’s students.

Graduate Tuition Waivers
Resident and non-resident tuition may be waived for qualified graduate students. Fees are the responsibility of the student. Graduate students applying for tuition waivers may do so by checking the appropriate box on the financial award form which accompanies the financial award application form. Eligibility to continue these awards is determined by the Department and is based upon the following criteria: satisfactory progress towards the degree, maintaining at least a 3.0 Grade Point Average, and continued registration for at least 6 credits at the 400-500 level for the duration of these awards. Contact the Graduate School Office for further information.

Maximum Weekly Work Limit

The maximum work week is 20 hours when classes are in session during Spring and Fall terms. Graduate students are encouraged to balance their workloads with the demands of their classroom and research schedules. Most students find that 20 hours/week represents a realistic balance between these demands. International students are limited to 20 hours of work per week during the academic year, with absolutely no exceptions.

Tax Withholding

All awards with work requirements may be taxable, including GTAs and GRAs. Tuition waivers are not taxed. Detailed tax questions must be directed to a personal accountant or other tax professional.

Deferment of Tuition and Fees

A summary of the deferment policy is below. Please see the Montana Technological University catalog for complete policy details. Health Insurance is not deferrable.
A deferred fee payment plan is authorized, provided that: (a) at least 1/3 of the total is paid two weeks before the first day of class; (b) 2/3 is paid within 30 days of the first day of class and (c) the full amount is paid within 60 days of the first day of class.

International Graduate students are eligible for the deferred payment plan provided that:
(a): the student is enrolled as a full-time student taking a minimum of 9 credits;
(b) the student does not owe a debt to the University;
(c) the student does not have a previous record of nonpayment; and (d) at least 1/3 of the total is paid two weeks before the first day of class; 2/3 is paid within 30 days of the first day of class and the full amount is paid within 60 days of the first day of class.

An administrative charge of $30.00 is levied each semester when a student elects to defer payments and an additional $40.00 is assessed for late payments. Direct questions to the Business Office.
<table>
<thead>
<tr>
<th>TYPE</th>
<th>VALUE</th>
<th>WEEKLY WORK REQUIREMENTS</th>
<th>REGISTRATION REQUIREMENTS</th>
<th>PAYMENT METHOD</th>
<th>PROCESS/PROCEDURE</th>
<th>AWARDED BY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate Tuition Waiver (In-State or Resident)</td>
<td>Resident Tuition May be awarded to Non-Resident students, but will pay only Resident Tuition Does not pay Non-Resident tuition Fees or Health Insurance</td>
<td>None</td>
<td>FALL/SPRING: 6 credits at 400 or 500 level SUMMER: Not Awarded</td>
<td>Credited to student’s account</td>
<td>Sign Award Letter &amp; return letter to Graduate School See Business Office to pay remainder of fees.</td>
<td>Department Chair</td>
</tr>
<tr>
<td>Fees</td>
<td>Varies by Award Minimum Value:  • Registration and Resident Incidental Fees and/or  • Non-Resident Incidental Fees Maximum Value:</td>
<td>None</td>
<td>FALL/SPRING: 6 credits at 400 or 500 level SUMMER: Dept Discretion</td>
<td>Credited to student’s account</td>
<td>See awarding Faculty member to have payment account set up. See Business Office to pay remainder of tuition and fees.</td>
<td>Faculty</td>
</tr>
<tr>
<td>Graduate Teaching Assistantship (GTA)</td>
<td>$10,000 per Academic Year for 20-hours per week assignment for MS students $14,400 per Academic Year for 20-hours per week assignment for PhD students</td>
<td>Depends on Award A full award requires 20 hours/work per week for Fall and Spring terms</td>
<td>FALL/SPRING: 6 credits at 400 or 500 level SUMMER: Not Awarded</td>
<td>See Pay Schedule Payment Begins: FALL: September SPRING: January Payments are bi-weekly</td>
<td>Sign Award Letter &amp; return letter to Graduate School Submit completed paperwork to Student Employment in Enrollment Services Office before you begin working</td>
<td>Department Chair</td>
</tr>
<tr>
<td>Graduate Research Assistantship (GRA)</td>
<td>$10,000 Minimum per Academic Year for 20-hours per week assignment</td>
<td>Varies</td>
<td>FALL/SPRING: 6 credits at 400 or 500 level SUMMER: 0 credits (must be registered in at least 6 credits in the following fall semester)</td>
<td>See Pay Schedule Payment Begins: FALL: September SPRING: January Payments are bi-weekly</td>
<td>See Awarding Faculty Submit completed paperwork to Student Employment in Enrollment Services Office before you begin working</td>
<td>Faculty PI</td>
</tr>
<tr>
<td>Hourly Position</td>
<td>Varies</td>
<td>Varies</td>
<td>FALL/SPRING: 9 credits MMER: 0 credits (must be registered in at least 6 credits in the following fall semester)</td>
<td>Once per month See Pay Schedule</td>
<td>Submit completed paperwork to Student Employment in Enrollment Services Office before you begin working. See Employer</td>
<td>Varies</td>
</tr>
<tr>
<td>Federal Financial Aid</td>
<td>Varies. For graduate students, federal financial aid consists of unsubsidized loans</td>
<td>None</td>
<td>FALL/SPRING: Full Time: 9 credits 1/2 Time: 6 credits minimum SUMMER: 6 credits minimum</td>
<td>See Financial Aid</td>
<td>See Enrollment Processing Office Must maintain 3.0 GPA</td>
<td>Enrollment Services Office</td>
</tr>
<tr>
<td>TARA Waiver</td>
<td>Non-Resident Tuition Does pay Non-Resident fees Will not pay for Health Insurance Does not pay Resident Tuition Students must be non-resident with GRA/GTA stipend of ≥ $4000 per</td>
<td>None</td>
<td>FALL/SPRING: 6 credits at 400 or 500 level SUMMER: 3 credits</td>
<td>Credited to student’s account</td>
<td>Automatically awarded if qualified</td>
<td>Board of Regents Policy 940.31</td>
</tr>
</tbody>
</table>
GRADUATE Student PROCEDURES

Petition to the Graduate Dean

Montana Technological University has a mechanism whereby graduate students can appeal to the Graduate Dean for an exemption, exception, or waiver to many of the general policies or procedures involved in graduate study. A student seeking an exemption, exception or waiver to any academic policy should complete and submit the Petition to Graduate Dean form, with all signatures, at least two weeks prior to the date that the exception is needed. This process does not apply to either financial matters or curriculum matters for which the Business Office, the Program faculty, and/or the Graduate Committee are responsible.

Responsible Conduct of Research

For most graduate students, research is an important part of the master’s or doctoral program. Montana Technological University requires and expects research performed under its auspices to be conducted honestly, ethically and in accordance with the highest professional standards. Therefore, Montana Technological University requires students who will be doing research to attend a workshop on the Responsible Conduct of Research. The workshop is offered every semester as part of the New Graduate Student Orientation and at least one other time. Graduate students should sign up for and attend this training workshop as early as possible in the degree program. Students in programs that do not involve research are not required to take this training. Responsible Conduct of Research must be refreshed every four (4) years.

Graduate Program Form

By the end of your second semester or during the semester in which you would complete your 15th credit, you should complete and submit the Graduate Program form to the Graduate School. This form includes the courses you and your advisor have determined will comprise
your graduate program of study. It also indicates your choice of Option A: thesis or publishable paper (requires approval of Department) or Option B: non-thesis; a 50-word abstract of your thesis, project, or direction of program; and approval signatures by you, your advisor and/or chair, the Environmental Health and Safety Director, the Graduate Dean, and others, as applicable.

Graduate Committee and Form

The Graduate Committee should be appointed by the end of the second semester of graduate study or during the semester in which you will complete your 15th credit. The committee must be proposed and approved using the Graduate Committee Appointment form. For master’s students, the committee consists of at least three members: two members from your major program and one member outside your program and department. Some programs require additional members. You may recruit these members and ask them to serve (one could be from a minor program (if applicable). A member outside your department will be appointed by the Graduate Dean as the Graduate School Representative, and you and your chair are encouraged to nominate or recommend individuals to serve in this role. The chair of your committee is typically your advisor, who must be designated on the form.

In those cases where the student elects to pursue a research project outside the home department, the Chair of the Graduate Committee may be chosen from the department hosting the research project, and a graduate advisor must be chosen from the student’s home department/program. This advisor may serve as Co-Chair of the Graduate Committee. Graduate Committee members typically have terminal degrees; for master’s students, a minority of the committee could have non-terminal master’s degrees. The appointment of members with lesser credentials is subject to review and approval by the department chair and the Graduate Dean.

Doctoral students must have a graduate committee of at least five members: three would be in the student’s program or department, one would be from outside the program/department, and one would be from outside Montana Technological University. The process of finding or nominating members and establishing the committee is identical to that for master’s students. The Graduate Dean approves the Committee membership. Doctoral students should establish their Graduate Committees prior to the end of their second semester (or prior to completing 20 credits, for part-time students).
In situations where the Graduate Committee membership must change, due to changes in the thesis/dissertation, interests/goals of the student, or the non-availability of members, the appointment and approval of the new committee requires the same form and the same approvals as the appointment of the original committee. Direct any questions about the Graduate Committee to your Advisor or to the Graduate School. You are encouraged to request and establish your Graduate Committee as early as possible, as this committee provides important advice and guidance and can help you complete your degree program efficiently.

**Thesis Abroad**

International experiences can be an extraordinarily enriching part of graduate study. To encourage and assist graduate students with opportunities to conduct their theses or parts thereof abroad, Montana Technological University has a Thesis Abroad program. Through this program, funding up to $5,000 per student can be provided to assist with the additional expenses of travel and graduate study in a foreign country.

To apply, an interested student should coordinate with his/her committee and complete and submit the **Thesis-Abroad Application form**. The typical duration would be one semester, late in the student’s degree program and after all or most coursework is complete. Subject to approval of the student’s committee, a longer visit can be accommodated, but the maximum award, regardless of duration, is $5,000. The cost would typically be shared 50/50 between the Graduate School and the student’s department.

The student must be registered at Montana Technological University for the study abroad term and must be in academic good standing to be eligible.
MASTER’S DEGREE PROGRAMS

Master’s Degree Programs

Montana Technological University offers several master’s degree programs. These programs require at between 30 and 37 credits. In most disciplines a “thesis option” and “non-thesis option” are available. For the thesis option, the student must complete coursework plus do a research project culminating in a written thesis or publishable paper, plus present this research in an oral defense. Depending on the program, the non-thesis option requires either a project with written paper and oral defense or passage of a comprehensive examination. Regardless of the option and discipline, each student has a faculty advisor and a master’s committee.

Master’s Committee Composition

The Master’s committee shall be comprised of a minimum of three (3) voting members as follows:
1. A qualified Montana Technological University faculty member from a discipline applicable to the degree, who shall serve as chair and typically as the student’s primary advisor;
2. A second qualified Montana Technological University faculty member from a discipline applicable to the degree;
3. A third qualified Montana Technological University faculty member, not from the relevant discipline program or department, who represents the Graduate School.

Appointment of Master’s Committee Members

Committee members shall be chosen by the student in consultation with his or her academic advisor, and the student shall forward the nominations to the dean of the Graduate School for approval. The Graduate Committee Appointment Form is to be used to designate the committee, and to document approval by the student, advisor, program/department chairperson, and Graduate Dean.

Master’s Thesis or Project Defense

The Master’s Defense is an oral examination before the master’s committee, in which the student presents and defends the thesis,
publishable paper, or master’s project. The presentation portion of the Defense is open to the public. During the committee portion, the student may be asked questions dealing primarily with the thesis, project, or publishable paper and its relationship to the student’s field of study. Below are the policies and procedures related to the master’s defense:

- **Deadlines:** The last day to defend a master’s thesis, project, or publishable paper is one week before the last day of regular scheduled classes of the academic term the student intends to graduate.
- **Notification of Defense Date:** The candidate must coordinate and schedule the defense date with the committee. Once scheduled, the candidate must notify the Graduate School Program Manager of the date, time, location, and title of the project no less than two (2) weeks prior to the defense. The graduate school will advertise the defense.
- **Minimum Registration:** The candidate must be registered for a minimum of one (1) credit hour of thesis research or master’s project in the academic term the student intends to defend and graduate.

**Defense Presentation:** The presentation is open to the public; anyone may ask questions on recognition by the chair. After the presentation and questions by members of the public, the chair will ask everyone except the student and the Committee members

---

**Interdisciplinary Master of Science (IMS)**

Because of the unusual nature of this degree program, the IMS has several additional admission and program conditions. Each student needs to establish a program committee prior to admission to Montana Technological University and the program. The student must seek out and identify a Program Committee of at least 3 university faculty members from at least two different academic departments, who are willing to serve. At least one committee member must be from a Master’s-Degree-granting department of Montana Technological University. The Chair of the Program Committee does not have to be from the Master’s Degree granting department. Each discipline in the proposed interdisciplinary program must be represented on the Program Committee. The student’s Graduate Committee would consist of these members augmented by the outside member appointed by the Graduate Dean. The student and proposed advisor are encouraged to suggest or nominate individuals for the outside-member role to the Graduate Dean. The same form is used to appoint the Graduate Committee for an IMS student as is used for an established program.

The Program Committee is the student’s surrogate department and will meet frequently with the student to assist in keeping the educational goals in order. The student must take responsibility for convening the committee and
for informing the Graduate School of any changes in the academic program using the Amended Program Form. Direct questions to your Advisor, your Program Committee, or the Graduate School.
DOCTORAL DEGREE PROGRAMS

Montana Technological University’s doctoral degree programs are limited to Ph.D. offerings: the Earth Science and Engineering Ph.D., a collaborative Ph.D. in materials science, and an individualized interdisciplinary Ph.D. officially granted through the University of Montana. These programs require passage of a discipline-specific qualifying examination, a discipline- and topic-specific candidacy examination, some coursework, and completion and oral defense of a dissertation describing the original and significant research contributions of the Ph.D. candidate.

Dissertation Committee Composition

The dissertation committee shall be comprised of a minimum of five (5) voting members as follows:
4. A qualified Montana Technological University faculty member from a discipline applicable to the degree, who shall serve as chair;
5. A second qualified Montana Technological University faculty member or adjunct from a discipline applicable to the degree;
6. A third qualified Montana Technological University faculty member or adjunct from the discipline applicable to the degree, or from a cooperating program or unit;
7. A fourth qualified Montana Technological University faculty member, not from the relevant discipline program or department, who represents the Graduate School.
8. A fifth voting member with any suitable affiliation and expertise. For the collaborative Materials Science Ph.D. program, the fifth member must be a qualified faculty member associated with the Materials Science Ph.D. program and affiliated with Montana State University. For the Earth Science and Engineering Ph.D. the fifth member can be from any regionally accredited university or an international equivalent. The Graduate School does not have funding for travel by committee member.

Typically qualified members of dissertation committees are individuals with an earned doctorate. Emeritus faculty and affiliated faculty are eligible to serve on dissertation committees.
Appointment of Dissertation Committee Members

Committee members shall be chosen by the student in consultation with his or her academic advisor, and the student shall forward the nominations to the dean of the Graduate School for approval. The Graduate Committee Appointment Form is to be used to designate the committee, and to document approval by the student, advisor, program/department chairperson, and Graduate Dean.

Candidacy Examinations

Ideally during the second year of the doctoral program, prior to the start of the dissertation research, and at least one (1) semester before the dissertation defense, the student will complete the Candidacy Examination. The Candidacy Examination will consist of at least (1) a written research proposal, describing the proposed dissertation research, and (2) an oral examination that can cover any relevant topics and the dissertation research plans. Doctoral programs are free to include additional components of the Candidacy Examination, provided those components are described in their program materials and that all candidates are required to experience all components.

- The examining committee, is typically the same as the student’s dissertation committee. Any exceptions must be justified, proposed to, and approved by the Graduate Dean (for example, to substitute for a dissertation committee member on sabbatical during the term of the Candidacy Examination).
- The Candidacy Examination must be announced to Program Faculty, who may attend the examination and ask questions on recognition by the chair.
- The committee, voting privately, may pass the student with one (1) negative vote for a committee consisting of five (5) members or not more than 25% negative votes for a committee consisting of more than five (5) members.
- In case of failure, one (1) repeat examination before the same committee is allowed. In case of two failures, the student will not be allowed to continue to the dissertation phase of the doctoral program, but will be allowed to complete a master’s degree.
Dissertation Defense

The Dissertation Defense is an oral examination before the dissertation committee, in which the student presents and defends the dissertation and may be asked questions dealing primarily with the dissertation and its relationship to the student’s field of study. The presentation portion of the Defense is open to the public. Below are the policies and procedures related to the dissertation defense:

- **Deadlines:** The last day to defend a dissertation is one week before the last day of regular scheduled classes of the academic term the student intends to graduate.
- **Notification of Defense Date:** The candidate must coordinate and schedule the dissertation defense presentation/exam. Once scheduled, the candidate must notify the graduate school program manager of the date, time, location, and title of the defense no less than two (2) weeks prior to the dissertation defense. The graduate school will advertise the defense presentation/exam.
- **Minimum Registration:** The candidate must be registered for a minimum of one (1) credit hour of dissertation research in the academic term the student intends to defend the dissertation and graduate.
- **Pre-Defense Committee Meeting:** Each member of the graduate committee must be given a minimum of fifteen (15) business days prior to scheduling the defense date to read and review the dissertation. At least two (2) weeks prior to the intended examination date, the committee will meet briefly to determine if the dissertation is ready for defense. This meeting can occur face-to-face or through electronic communication.
  - If there is one negative vote, the student’s adviser and the Graduate Dean may elect to proceed with the Defense.
  - If there are two or more negative votes, the defense will be indefinitely postponed and the Graduate Committee will provide feedback to the student regarding the deficiencies needing to be remedied before the defense can be scheduled.
  - The Graduate School must be notified at least two weeks prior to the examination date that the defense is ready to proceed, so that the defense announcement can be publicized.
- **Defense Presentation/Examination:** The examination is open to the public; anyone may ask questions on recognition by the chair. After the presentation and questions by members of the public, the chair will ask everyone except the student and Dissertation Committee members to leave. The Dissertation Committee may ask the student additional questions during the closed session, and then will ask the student to
leave, so that the committee, meeting privately, may discuss and vote on whether the student passes the Defense.

- **Defense Evaluation:**
  - The student will pass if the dissertation is accepted (either as it stands or pending minor revisions) with no more than one negative vote. If the committee contains greater than five (5) members, at least 75% of the committee must vote in favor of passing the student.
  - If there are two or more negative votes on a committee of five (5) members (for committees greater than five (5) members, more than 25% members voting negatively), the committee may schedule and conduct a second and final Dissertation Defense no sooner than two (2) months after the initial defense. During that time, the candidate will be asked to make whatever changes are necessary in the dissertation and to remedy whatever deficiencies were identified during the presentation and questions.

- **Failed Defense:** The candidate is allowed two (2) total attempts to pass the defense. At least two (2) months must elapse before the second attempt takes place. Failure to pass the second attempt will result in the termination of graduate study and dismissal from the academic program. Candidates who are dismissed from the program due to failure to pass the defense are ineligible to reapply to the same degree program.

- **Reporting the Results:** The graduate committee and the department head are responsible for providing written notice of the results of the defense to the candidate and to the Graduate School no later than five (5) business days after the defense is held.

- **Invalid Defense:** A dissertation defense held in the absence of the candidate’s graduate committee chair or graduate school representative or any other required representative will be considered invalid and the defense will have to be rescheduled.

- **Age of Defense:** The dissertation defense must be conducted no later than ten (10) years after matriculation into the doctoral program.
FORMATTING AND SUBMISSION REQUIREMENTS

Thesis and Dissertation Formatting and Submission

The Thesis and Dissertation Templates provide the required formats that must be followed when preparing your thesis or dissertation for publication. **READ THE APPLICABLE ONE CAREFULLY.** If you have any questions regarding these requirements, consult with your Committee Chair, a member of your Committee, and the E-Thesis Manager.

**Before you begin the research for your Thesis or Dissertation**

You are required to meet with your Committee Chair about your Thesis or Dissertation topic. Some programs require you to present the topic and research plan before you start the project, and have them approved by your Committee.

**Before you begin writing your Thesis or Dissertation**

You are required to use the Montana Technological University Thesis template (the link to the download is on this page) or Dissertation template located on Admitted Student Forms webpage. Any questions on the formatting or specific formatting issues should be directed to the Graduate School Program Manager, Victoria Pagan at vpagan@mtech.edu

Thesis and Dissertation Deadlines - To graduate on time, these deadlines must be met.

After receiving the go ahead from the Graduate School Committee and no less than 2 weeks prior to Defense: Schedule and publicize the location, date, and time of your defense and submit draft of product to e-thesis manager. The Graduate School can assist with producing and disseminating the announcement. The Graduate School will allow and can facilitate the defense being presented in an online form so that peers, collaborators, family and friends can watch the public portion of the defense. Please speak
with the Graduate School Program Manager at the time of the defense announcement if you wish to utilize this option.

**To complete your degree in any term, your defense must take place on or before the last day of class, and your thesis/dissertation and all items on the Graduation Check List must be completed by the designated date for that term (last day of exams).**

**After Defense:** Contact the Grad School Program Manager to submit your thesis and coordinate any changes and The Grad School Program Manager will upload your thesis to the ProQuest Electronic Thesis Website.

### Table 1. DEADLINES

<table>
<thead>
<tr>
<th>THESIS DEADLINES</th>
<th>Fall</th>
<th>Spring</th>
<th>Summer**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draft thesis due to committee chair (Suggested)</td>
<td>4-weeks prior to defense</td>
<td>4-weeks prior to defense</td>
<td>4-weeks prior to defense</td>
</tr>
<tr>
<td>Draft thesis due to committee members (Suggested)</td>
<td>3-weeks prior to defense</td>
<td>3-weeks prior to defense</td>
<td>3-weeks prior to defense</td>
</tr>
<tr>
<td>Final thesis due to committee members (Suggested)</td>
<td>2-weeks prior to defense</td>
<td>2-weeks prior to defense</td>
<td>2-weeks prior to defense</td>
</tr>
<tr>
<td>Schedule and publicize defense: at least 2 weeks prior to defense* and submit draft of product to e-thesis manager</td>
<td>3-weeks before last day of class</td>
<td>3-weeks before last day of class</td>
<td>3-weeks before last day of class</td>
</tr>
<tr>
<td>Absolute last day to defend*</td>
<td>1-week before Last day of class</td>
<td>1-week before Last day of class</td>
<td>1-week before Last day of class</td>
</tr>
<tr>
<td>Final thesis draft, approved by committee submitted to Grad Program Manager for final review &amp; upload</td>
<td>1-week before final exams</td>
<td>1-week before final exams</td>
<td>1-week before final exams</td>
</tr>
<tr>
<td>Final check-out list to Grad School*</td>
<td>Last day of classes</td>
<td>Last day of classes</td>
<td>Last day of classes</td>
</tr>
</tbody>
</table>
* Exceptions require a petition to the graduate dean. Missing the defense deadline or the final checkout deadline will require the student to register for at least one thesis credit in the following term. Deadlines without asterisks are subject to the willingness of the committee chair and members. Faculty members have many responsibilities and obligations, especially during the period approaching the end of a term. When students miss the thesis draft deadlines, faculty may be unable to review the thesis in time for the asterisked deadlines to be met. Faculty members have no obligation to accommodate students who fail to meet these deadlines.

** Subject to the willingness and availability of committee chair and members, many of whom are not on campus during the summer.

Exceptions

Exceptions to the deadlines and processes above must be justified and requested in writing, in advance, using the “Petition to Graduate Dean form” form. Suitable accommodations will be provided for a student with a registered disability; a petition to the dean would not be required in this case, but the Advisor and Graduate School must be notified in a timely manner of the disability and need for accommodation.

NOTE:

Plagiarism is illegal. You are responsible for using information in compliance with the highest standards of academic honesty. You must reference the work and ideas of others, and comply with copyrights and regulations.

Required Thesis Format

Use the Thesis Template found on the Graduate School’s website. Oversized Maps will be sent to the publication company, which will make a digital copy and also put a hard copy in a pocket at the back of the bound Thesis/Dissertation (contact Victoria Pagan, Grad School Program Manager, vpagan@mtech.edu).

Images

Images must show a full range of contrast and the resolution must be at least 300 dpi.
**Electronic Media – DVDs, CD-ROMs, Videos**

Electronic media that accompanies your Thesis/Dissertation must be properly labeled with title, author, and date of completion. You must provide a media-appropriate container (case or cover) for the Library Copy. Supplemental materials must be identified at the end of the Table of Contents (see E-Thesis Manager).

**Supplemental Thesis Materials**

Your thesis/dissertation may include supplemental materials. All supplemental materials, including DVDs, CDs, and large maps must be submitted to Victoria Pagan, Grad School Program Manager, for approval. Direct questions to vpagan@mtech.edu.
Non-Thesis Project, Report, and Publishable Paper Submission

The Graduate School requires all graduate student projects including non-thesis projects, reports, and publishable papers be submitted to the graduate school for publication in Montana Technological University’s Digital Commons as a part of graduation requirements.

Non-Thesis Project, Report, and Publishable Paper Deadlines

Non-thesis project deadlines are the same as the thesis and dissertation deadlines. To graduate on time, these deadlines must be met.

**No less than 2 weeks prior to Defense:** Schedule and publicize the location, date, and time of your defense and submit draft of product to Grad School Program Manager. The Graduate School can assist with producing and disseminating the announcement.

**To complete your degree in any term, your defense must take place on or before the last day of class, and your non-thesis project report or publishable paper and all items on the Graduation Check List must be completed by the designated date for that term (last day of exams).**

**After Defense:** Contact the Grad School Program Manager to submit your report and coordinate any changes. The Grad School Program Manager will upload your thesis to the Digital Commons Electronic Website.
GRADUATION PROCEDURES

Degree Requirements

Requirements for a Master’s Degree include course work, seminars and, depending on the chosen option of study: **Option A:** thesis, publishable paper, or **Option B:** non-thesis. These requirements include completed thesis, publishable paper or graduate project as outlined on the Graduate Program Form; comprehensive exams and/or successful thesis defense; acceptance of the thesis by the E-Thesis Manager; completion of non-thesis requirements while maintaining at least a 3.0 cumulative GPA. Master’s degrees require a minimum of 30 credit hours, and this minimum depends on the specific degree program and option.

Requirements for a Doctoral Degree include coursework, seminars, qualifying examination, candidacy examination, a dissertation describing significant and original research, and the dissertation defense. Doctoral degrees require a minimum of 60 credit hours, which could include some course credits (not thesis credits) that were also applied to a master’s degree. Students must maintain a cumulative GPA of at least 3.0 to be in good academic standing.

Requirements for a Graduate Certificate include at least 15 course and seminar credits, with the specific number specified in the curriculum.

To apply to a graduate degree or certificate, all courses and seminars must be at the 400-level or higher. In addition more than half of the course credits required for the degree must be taken at the 500-level or higher.

The completed Check-Out Form as submitted to the Graduate School is the indication that the degree requirements have been met (see deadlines in Table 2). Master’s degrees require a minimum of 30 credit hours.

Application for Degree

Graduate students must complete and file an Application for Master of Science or Application for a Doctor of Philosophy Degree with the Graduate School **BY THE 10TH DAY OF CLASS** of the **term of the expected**
completion of degree requirements. If degree requirements are not met during the semester indicated on the application, an updated degree application is required. Failure to submit the application by the specified date may result in not receiving Commencement information and/or not being included on the Commencement program. Please note: if degree requirements are not met, continuing enrollment is required until requirements are completed.

Graduate Certificate Completion

Graduate Certificate students and students receiving a certificate along with the M.S. or Ph.D. degree will need to apply for the certificate separately (there is only one $79 fee if you are applying for an M.S. or Ph.D. at the same time). A Degree Application form needs to be completed for each certificate completed.

Check-Out Form

Before a diploma and/or final transcript with the degree posted can be released, the Graduate School must certify that the candidate has fulfilled all degree requirements, including submission to the Graduate School of a completed Check-Out Form. This form requires signatures from your Department, the Registrar’s Office, the Physical Plant, Library, Business Office, etc. The Check-Out Form is due in the Graduate School Office by the final day of exams for each semester. If not submitted by the given deadline, a mandatory 1-credit registration will be in effect until the paperwork has been submitted. The delayed paperwork will also affect the term in which your degree is posted.

Students in distance programs use a separate Check-Out Form that is available directly from the program’s department or at The Graduate School Forms page.

Commencement

Commencement (graduation) for the students graduating in the Fall semester will be held at the end of the Fall semester. Commencement for graduates finishing in the Spring or following summer, will be held at the end of the Spring semester.

Your final transcript will be marked with the date of the final day of exams the term you fully complete the requirements for your degree,
including submission of your thesis/dissertation/report and the degree checkout form.

Delayed Completion

If your thesis, dissertation, examination, or publishable paper has not been successfully completed and defended with all paperwork submitted and accepted by the deadline stated in on page 22, the minimum enrollment requirements will continue (1 credit). The minimum enrollment requirement is in effect for the semester in which you plan to defend, present your paper, or complete your non-thesis examination as long as all other requirements have been met (coursework, seminar, thesis credits). If all other requirements have not been met, the minimum registration is 3 credits.
Table 2. GRADUATE SCHOOL TIMELINE

<table>
<thead>
<tr>
<th>WHAT</th>
<th>WHEN</th>
<th>PROCEDURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration for Classes</td>
<td>After meeting with advisor and <strong>BEFORE CLOSE OF REGISTRATION</strong>! Ideally during the early registration period in the previous term and preferably prior to the start of classes.</td>
<td>Register with your advisor. For courses with variable credits or Drop/Add issues, go to Graduate School (MG 207).</td>
</tr>
<tr>
<td>Graduate Program Form and Selection of Graduate Committee Form</td>
<td>By the end of the second semester or prior to the completion of 15 credits.</td>
<td>Consult advisor; submit program on <a href="#">official form</a> with all required signatures to the Graduate School, including approval of thesis title indicated by chair’s initials.</td>
</tr>
<tr>
<td>Thesis/Dissertation Outline or Proposal</td>
<td>Before the end of second semester (MS) or third semester (Ph.D.).</td>
<td>Per program guidelines, submit outline or proposal to Graduate Committee members for approval. Meet with Committee on regular basis to review progress.</td>
</tr>
<tr>
<td>Application for Master’s or Ph.D. Degree</td>
<td>Due by 10th day of class for semester in which completion of degree is expected</td>
<td>Complete and submit <a href="#">Degree Application</a> to Graduate School.</td>
</tr>
<tr>
<td>Final Changes in Program Curriculum</td>
<td>If needed, submit no later than one month prior to end of semester of completion of degree requirements.</td>
<td>Submit <a href="#">Amended Student Program form</a> to Graduate School (changes in courses, committee, graduation date, etc.).</td>
</tr>
<tr>
<td>Thesis/Dissertation Draft for Review, &amp; Defense Scheduled</td>
<td>At least two weeks prior to the defense, submit final draft to Committee and Grad School Program Manager.</td>
<td>Submit final draft to Committee for review and to Grad School Program Manager for format check.</td>
</tr>
<tr>
<td>Comprehensive Examination (if applicable)</td>
<td>No later than last day of regularly scheduled classes of semester in which graduate work is completed (not during finals week).</td>
<td>Schedule comprehensive exam with advisor and graduate advisory committee.</td>
</tr>
<tr>
<td>Defense of Thesis/Dissertation or Presentation of Publishable Paper</td>
<td>No later than 1-week before last day of regularly scheduled classes of semester in which graduate work is completed.</td>
<td>Schedule with committee location and time of defense. Graduate School should be notified at least two weeks in advance and will announce the location, date, time, and thesis title.</td>
</tr>
<tr>
<td>Submission of final graduate product (thesis, publishable paper, non-thesis project.)</td>
<td>After the defense and upon completion of corrections. See Grad School Program Manager for submission: Due by last day of classes.</td>
<td>Submit completed Thesis Authorization Form, Grad Checkout List, Grad Student Publication Agreement and Signature Page to Grad School Program Manager as applicable.</td>
</tr>
<tr>
<td>Submission of Grad Student Check-Out and Hazmat Forms</td>
<td>After successful completion of oral or written exam and/or thesis/dissertation defense or publishable paper presentation.</td>
<td>Secure all signatures on <a href="#">Check-Out form</a> and return to the Graduate School. This document is required to post your degree.</td>
</tr>
<tr>
<td>Commencement</td>
<td>Completion of defense, exam, or publishable paper presentation by last day of scheduled classes is required for participation in Commencement. Diploma parchments will be awarded each semester.</td>
<td>If defense or presentation requirements are not met, complete and submit Application for Degree Update form to Graduate School. If all other degree requirements are met (coursework, seminar, thesis), only 1 credit enrollment is required for defense or presentation in the following term.</td>
</tr>
</tbody>
</table>

*Contact your department for specific department timelines and deadlines.*
(Accelerated) 5-YEAR B.S. – M.S. OPTION

Participating departments allow qualified undergraduate students to begin work on the Master’s degree in their junior year at Montana Technological University. To qualify for admission to the program, a student must have completed 75 semester credit hours, usually corresponding to the second semester of the junior (3rd) year, and have a cumulative GPA of 3.0 or better. Students should file a petition with the Graduate School listing those courses that will apply toward the Master's Degree. Students must meet all other requirements for admission to graduate school. Please contact the Graduate School Program Manager at gradschool@mtech.edu to learn the process for applying to the 5-year Master's Degree Programs.

Courses taken at Montana Technological University as an undergraduate student

1. For students who have applied to the Montana Technological University Graduate School, graduate-level courses (400 and 500 level) taken prior to completion of a bachelor's degree may be applied toward any graduate program requirements with the approval of the department head and concurrence of the Graduate School.

These courses must meet the following criteria:

- Courses must have been taken at Montana Technological University (no transfer credits).
- Up to 9 credits may be double counted towards both the undergraduate and graduate curriculum, credits applied for the graduate degree must meet program/department standards for the graduate degree.
- A grade of "B" or better must have been earned for each course.
- Courses must be electives and not part of the core curriculum for the undergraduate degree.
- Courses must have been taken in the past 4 years.
- Partial course credit could be applied, similar to course substitution.

2. Students interested in taking advantage of this opportunity are encouraged to speak with a faculty member or department head for the graduate program of interest about the 5-Year BS-MS option and to take electives intended to apply to both degree programs at the 500-level, wherever possible.
GRADUATE SCHOOL FORMS

Graduate School Forms are available on the Graduate School’s Website: [https://www.mtech.edu/gradschool/admitted-students/forms.html](https://www.mtech.edu/gradschool/admitted-students/forms.html) The Table below provides links to each form. During Academic Year 2017-18 the Graduate School is converting the forms to fillable ADA accessible formats. They can also be obtained from the Graduate School. Please contact the Graduate School at (406) 496-4304 or Gradschool@mtech.edu or the Graduate Dean at graduatedean@mtech.edu with questions regarding the forms or any other Graduate School matters.

On-Campus Programs
- Program Form
- Program Form Update
- Graduate Committee Appointment Form
- Degree Application
- Degree Application Update
- Checkout Form
- Lab Checkout Form
- Graduate Hazardous Waste Checkout Form
- Lab Check-In Form

Miscellaneous Forms
- Application for Readmission
- Leave of Absence Form
- Petition to Graduate Dean
- Petition to Transfer Credit Form
- Petition to Change Levels Form

PhD forms
- Authorization to Schedule Graduate Product Defense Form
- Results of Candidacy Examination
- Results of Graduate Product Defense
- Results of Qualifying Examination
- Application for PhD Degree
- Application for PhD Update Update

Graduate Product
- Graduate Student Product Publication Agreement
- Graduate Product Submittal Policy & Process

Dissertation
- Dissertation procedure
- Dissertation Authorization form
- Dissertation template

Thesis
- E-Thesis Authorization Form
- E-Thesis Procedure form
- Thesis Deadlines
- Thesis Cover Page Example
- Thesis Signature Page Form
- Thesis Template Form [word]
- Thesis Template LaTeX (multiple files) [zip]
LIBRARY INFORMATION

Research Help

Meet with a research librarian before you begin writing your thesis. Montana Technological University Library has subject-specialist librarians to assist you in finding relevant information for your thesis. They will help you locate journal articles, books, conference proceedings, government publications and more. Call the Information Desk at 496-4282 to set up an appointment with a librarian, or contact librarians directly:

Adrian Kien  406-496-4282  Akien@mtech.edu
Ulana Holtz  406-496-4523  Uholtz@mtech.edu

Library Services

Interlibrary Loan

If the library does not own an item that you need, it can often be obtained through the interlibrary loan system, called ILLiad. You can obtain books, journal articles, and other materials for your research at no charge to you.

To use ILLiad:
You must first set up your account at ILLiad. Click “First Time Users”

To request an item:
Log in to your ILLiad account and select the type of material you want, and then fill out the form as completely as possible. Click here for more info. Many items arrive in 1-2 days, but others may take up to 1-2 weeks. When you order books, you will be notified when your items arrive at the library, and you can pick them up at the Information Desk. To retrieve articles you have ordered, log into your ILLiad account and select “View/Download Electronically Received Articles.”

Databases and Indexes

Electronic access to the library’s 100+ academic databases is available to all students through the Databases A-Z List on the library’s website.
Databases are accessible off-campus via the above link. Most databases are specific to a particular subject which makes them powerful tools for finding relevant information. Do not hesitate to ask for assistance from a librarian if you do not know where to start or cannot find what you need. Click here for info.

**Style Guides**

While writing your thesis, you will need to adhere to one style for your citations, notes, and other elements of your thesis. The library has Print and Electronic Style Guides. The print versions are on the first floor of the library. Examine both the print and electronic guides, and consult your Committee Chair to choose the style for your field and subject. You may also find it useful to use a citation manager like Mendeley or EndNote. Contact a librarian if you have questions about these services.

**Special Collections**

**Federal Government Documents**

The U.S. government is a valuable source of information, particularly in the sciences, health, and social sciences. The library receives materials related to these subjects, including maps, annual reports, periodicals, legal materials, legislative publications, and many other documents. Most government publications are online, but some are still published in print. Many items appear in the Library Catalog with a link to the electronic version of the resource as well as the call number for paper resources. Ask a librarian if you do not find what you are looking for. The University of Montana at Missoula has a large government documents collection as well. This includes thousands of maps and charts, many of which are available to you through interlibrary loan.

**State & International Government Documents**

The library has a substantial collection of current and historical Montana documents related to geology, mineral exploration and extraction, environmental issues, and natural resources. The oldest date back to the mid-19th century, and include all the publications of the Montana Bureau of Mines and Geology beginning at the turn of the 20th century.
The Library also maintains a collection of documents related to geology, minerals, environmental issues, and natural resources from all fifty states as well as Canada and other foreign countries.

Patents & Trademarks

Patents and trademarks are another source of information containing new and developing technologies as well as the history of many ideas and processes. The Montana Technological University Library is the Patent and Trademark Resource Center (PTRC) for the state of Montana. If you have questions about patents and trademarks please contact Scott Juskiewicz at sjuskiewicz@mtech.edu or 496-4284.

Montana Superfund Documents

The library has a specialized collection of print documents related to environmental remediation efforts in Montana, particularly in the Butte-Silver Bow-Anaconda area. If we do not have the document you need, we can also obtain documents for your use from the state of Montana, the federal Environmental Protection Agency, or through interlibrary loan.

Master’s Thesis Format and Submission Requirements

See the “Requirements for Thesis Format and Submission” guidelines on the Graduate School website, or contact the Grad School Program Manager, Victoria Pagan, 496-4102, vpagan@mtech.edu.

Digital Commons

Digital Commons @ Montana Technological University provides a central, on-line location for papers, posters, abstracts, videos and more created by Montana Technological University students and faculty. Works posted in Digital Commons are discoverable in Google and other major search engines; its stable URLs provide permanent access. Master’s project reports are to be posted on Digital Commons. Other works, such as posters, presentations, performances, and papers may also be posted, if compatible with the work’s copyright status. To post your work, or for more information about Digital Commons contact Scott Juskiewicz: Scott sjuskiewicz@mtech.edu, 496-4284; or Kristi Carroll: kcarroll@mtech.edu, 496-4668.
STUDENT SUPPORT SERVICES

Counseling

Montana Technological University is committed to student success. We believe that happy and healthy students will be the most productive. Thus, we offer our students a variety of free counseling services to assure your academic and personal success and we are pleased to offer individual, couples, family, and group counseling to you.

Our professional counselors can assist you in a variety of ways to include greater self-awareness, independence, and self-direction in areas such as self-esteem, personal growth and wellness, sexuality, alcohol and drug abuse, stress and anxiety and depression to name just a few. We welcome sitting down with you to discuss your needs and concerns and determine together how we may be able to assist you.

Your privacy is important to us. Please read through the privacy statement.

If you are in crisis and this is an emergency, please contact:

- **911** for the Butte Police Department
- **406-723-2500** for St. James Health Care
- **406-496-4198** for Dr. Carrie Vath, Dean of Students
- Go to the emergency room if necessary.

Disability Services

Montana Technological University is committed to the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 and to student success. All of our students have the right to enjoy equal opportunities in all aspects of campus life and we will strive to eliminate barriers and make the appropriate accommodations necessary.

The Disability Services Coordinators are here to help current and prospective students self-advocate for their requested accommodations in accordance with Montana Tech’s Disability Services for Students Policy. Please note that accommodations will not be issued retroactively and all accommodations will be considered on an individual basis. Even if you received an accommodation in high school or from another university, you are not guaranteed an accommodation approval at Montana Tech and you must self-identify your needs in order for accommodations to be considered.
Please visit the Office of Civil Rights website to learn more about how students with disabilities can transition from high school to college.

Contact Shauna Goodell  
Student Affairs, SSC 3.137  
406-496-4428  
sgoodell@mtech.edu

Health Services

Montana Technological University’s Student Health Center provides several services to keep our students healthy. Our health care providers can diagnose and treat acute and chronic conditions. Common conditions include strep throat, influenza, common cold, urinary tract infections, basic first aid, sports physicals, depression and other mental health concerns. In addition to these services, our health care providers can administer vaccinations, medications, and allergy injections. Referrals for STD testing, specialty providers, community resources, and on-campus counselors are also available.

Check out the Latest issue of CampusWell, Montana Tech’s Monthly Wellness Magazine: https://mtech.campuswell.com/

*In order to be eligible for the health center, North campus students must be registered for seven or more credits and Highlands College students must opt in to pay the Health Center Fee.

Heidi Chatriand, RN  
Phone Number: 406-496-4243  
Office Location: SUB 111  
Email Address: HealthCenter@mtech.edu  
Hours: Monday – Friday, 10:00 – 2:00  
Physician Available, 11:00 – 1:00

PERSONAL SAFETY

Campus Safety

Montana Technological University takes the personal safety and well-being of our students, faculty and staff very seriously. Campus security officers are available 24/7 to respond to any emergencies on our campus, as
well as to provide safety escorts if you feel it is needed. You may call us at **406-496-4357** (HELP).

If you need to report a crime to Butte-Silver Bow Police or have a non-emergency please call **406-497-1120**

If you are in crisis or this is an emergency, please contact:

- **911** for the Butte-Silver Bow Police Department
- **406-723-2500** for St. James Health Care, 400 South Clark Street
- **Go to the emergency room, if necessary**

**Campus Security Report**

Montana Tech (MT) Clery Compliance Office compiles an annual Campus Security Report to comply with the *Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act* (the Clery Act or the Act), and is a disclosure for the three most recent calendar years concerning the number of specific crimes that occurred on or within MT’s Clery geography. This report is a collaborative and comprehensive effort that includes the cooperation of departments from all divisions within the institution, individuals designated as “Campus Security Authorities” (CSA) under the Clery Act, and local law enforcement agencies with concurrent jurisdiction over the campus’s Clery geography. Each entity is asked to provide crime statistics and/or information on their educational efforts and programs to comply with the Act. The policies and procedures within this report are current as of the publication, as MT recognizes this document is an immediate reference to possible current inquiries; however, the statistical data, as previously mentioned, is for the three previous calendar years.

All students and employees receive annual notice by University-wide email that informs them of the Annual Security Report, a brief description of its contents, information regarding the availability of the report on the campus website, the electronic address to access the report, and a statement on how to obtain a paper copy, if desired. Additionally, similar notices are provided to prospective students and employees on the Admissions and University Personnel web pages, respectively.

For more information, U.S. Department of Education Campus Safety: [https://www2.ed.gov/admins/lead/safety/campus.html](https://www2.ed.gov/admins/lead/safety/campus.html)

- **Annual Campus Fire and Security Report**
Crime Statistics

Montana Tech crime statistics concerning the number of criminal offenses, or referrals for campus disciplinary actions, and fire safety statistics are submitted by the Dean of Students to the Department of Education’s Web-Based Campus Crime and Security Survey. Definitions of crimes comply with the Jeanne Clery Disclosure of Campus Security Policy and Crime Statistics Act.

Crime statistics are provided by the Butte-Silver Bow Sheriff’s Department. Montana Tech’s Campus Crime Log is available at the Security Office located in the Physical Facilities Building.

The following definitions will be used for reporting Clery crimes, which are derived from the Federal Bureau of Investigation’s (FBI) Uniform Crime Reporting (UCR) Program and Department of Education regulations as follows:


ii. The definitions for Fondling, Incest, and Statutory Rape are excerpted from the “National Incident-Based, Reporting System (NIBRS) User Manual” from the FBI’s UCR Program.

iii. The definitions for Larceny-Theft (except Motor Vehicle Theft), Simple Assault, Intimidation, and Destruction/Damage/Vandalism of Property are from the “Hate Crime Data Collection Guidelines and Training Manual” from the FBI’s UCR Program.

iv. The definitions for Dating Violence, Domestic Violence, and Stalking are from the Department of Education’s Clery Act implementing regulations at 34 C.F.R. § 668.46.

In addition to the crimes listed in (iii), hate crimes are also disclosed for those listed in (i). The statistics provide an overall picture of crime at MT from January 1 to December 31 for 2016, 2017, and 2018. Crime statistics are collected annually from law enforcement agencies with concurrent law enforcement jurisdiction(s) surrounding MT and off-site properties or facilities owned or controlled by MT. These law enforcement agencies provide crime statistics they have collected for crimes occurring on on-campus properties or public property immediately adjacent to MT properties or facilities. MT does not have any off-campus properties owned by student organizations.
Statistics regarding specific violations of law resulting in student disciplinary actions are collected from but not limited to the offices of Title IX & Human Resources, Residential Life, and the Dean of Students office. Clery Act statistics are also collected from individuals with significant responsibility for students and/or their student activities.

Crime statistics, for Clery crimes listed in (i) –(Iii), are classified and counted pursuant to the guidelines as specified in The Handbook of Campus Safety and Security Reporting, 2016 edition and separated by the following geographical areas:

- On-campus;
- On-campus residential housing facilities;
- On public property (within and immediately adjacent to MT);
- In or on non-campus property (either owned or controlled by MT in direct support of or in relation to its educational purposes; or a building or property owned or controlled by an officially recognized student organization not reasonably contiguous to the core campus)

*The geographic breakdown definitions are from the Department of Education’s Clery Act implementing regulations at 34 C.F.R. § 668.46.(c)(4)

**See Appendix 1 for the Highlands College and Montana Tech Clery Geography

It is important to consider the following when reviewing the MT crime data:

Counting Hierarchy

When counting multiple offenses in a single incident, MT used the FBI’s UCR Hierarchy Rule. Under this rule, when more than one Criminal Offense was committed during a single incident, MT only counted the most serious offense. A single incident means that the offenses were committed at the same time and place. That is, the time interval between the offenses and the distance between the locations where they occurred were insignificant. Beginning with the most serious offense, the following list shows the hierarchy for Clery Act reporting:

- Murder and Non-negligent Manslaughter
- Manslaughter by Negligence
- Sexual Assault
- Robbery
- Aggravated Assault
- Burglary
- Motor Vehicle Theft
There are exceptions to using the Hierarchy Rule when counting offenses. They apply to Arson, Sexual Assaults, Hate Crimes and Violence Against Women Act (VAWA) Offenses. When applying these exceptions, MT must:

- Always count Arson regardless of the nature of any other offenses that were committed during the same incident. When multiple offenses are committed during the same distinct operation as the Arson offense, report the most serious offense along with the Arson.
- Include incidents in which persons are killed as a direct result of Arson as Murder and Non-negligent Manslaughter and Arson or Manslaughter by Negligence and Arson.
- Include a Sexual Assault as Fondling only if it is the only Sexual Assault.
- Count both the Sexual Assault and the Murder if Rape, Fondling, Incest or Statutory Rape occurs in the same incident as Murder.

The Hierarchy Rule does not apply to Hate Crimes. MT must count all of the offenses committed in a multiple offense incident that are bias-motivated, and include only the crimes that are bias-motivated as Hate Crimes in a multiple-offense incident. For any Criminal Offense that is also a Hate Crime, statistics will indicate the offense and also the offense with the category of bias. For example, if an Aggravated Assault is a Hate Crime, MT will include one Aggravated Assault in the statistics in the Criminal Offenses category and one Aggravated Assault motivated by (category of bias) in the Hate Crime category. The exception is when the Aggravated Assault is not included in the Criminal Offenses category because of Hierarchy Rule. For example, for a single incident involving both a Rape and an Aggravated Assault that were both Hate Crimes, MT’s statistics would include only the Rape in the Criminal Offenses category and both the Rape and the Aggravated Assault in the Hate Crimes category.

Lastly, the Hierarchy Rule does not apply to VAWA Offenses (i.e. Dating Violence, Domestic Violence, and Stalking). Therefore, for any Criminal Offense, Hate Crime, or arrest for Weapons, Drug or Liquor Law Violations that is also a VAWA Offense, statistics reflect the original offense and the VAWA Offense.

**Unfounded Crimes**

In accordance with 34 C.F.R. § 668.46, MT may only exclude a reported crime from an upcoming annual security report, or remove a reported crime from its previously reported statistics, after a full investigation by sworn or commissioned law enforcement personnel have made a formal determination that the report was false or baseless and the
crime report was therefore “unfounded.” This does not include a District Attorney who is sworn or commissioned. A Campus Security Authority who is not a sworn or commissioned law enforcement authority cannot “unfound” a crime report either. The recovery of stolen property, the low value of stolen property, the refusal of the victim to cooperate with law enforcement or the prosecution, or the failure to make an arrest does not “unfound” a crime. The findings of a coroner, court, jury (either grand or petit), or prosecutor do not “unfound” crime reports of offenses or attempts. Crime reports can be properly determined to be false only if the evidence from full investigation establishes the crime reported was not, in fact, completed or attempted in any manner. Crime reports can only be determined to be baseless if the allegations reported did not meet the elements of the offense or were improperly classified as crimes in the first place. A case cannot be designated “unfounded” if no investigation was conducted by sworn law enforcement personnel or the investigation was not completed, nor can it be designated “unfounded” merely because the investigation failed to prove the crime occurred; this would be an inconclusive or unsubstantiated investigation. If a crime is “unfounded”, it will not be included in the Clery Act statistics for the associated crime category, and will be removed from any previously reported statistics for that crime category. The “unfounded” crime will be included in the total count of “unfounded” crimes for the year in which the crime was originally reported.

Crime statistics concerning this campus and others can also be found on the U.S. Department of Education website: https://ope.ed.gov/campussafety/#/.

Montana Tech Crime Statistics
Highlands College Crime Statistics

Fire Data

Montana Technological University fire statistics concerning the number of fires and the cause of fires, number of deaths related to the fire, number of injuries related to the fire that resulted in treatment at a medical facility and value of property damage related to the fire are submitted to the Department of Education’s Web-Based Fire Safety Report.

• Montana Tech Fire Data

Copies of the reports may also be obtained at the Dean of Students’ Office located in Engineering Hall, Room 101 or by calling 406-496-4198.
Sexual Assault & Harassment

Montana Technological University is committed to providing an environment that emphasizes the dignity and worth of every member of our community. Sexual harassment and sexual misconduct (sexual assault, inducing incapacitation for sexual purposes, relationship (dating) violence, domestic violence, sexual exploitation and stalking) will not be tolerated.

University employees, with the exception of Montana Technological University’s counselors, are required to report disclosures of sexual misconduct to the Montana Tech Title IX Coordinator. Retaliation for reports are strictly prohibited.

If you are a victim of sexual assault or harassment, support, counseling and advocacy can be arranged with our counseling staff (Amy Lorang: alorang@mtech.edu or call her at (406) 496-4429).

If you are in crisis or this is an emergency, please contact:
- **911** for the Butte Police Department
- Carrie Vath, Dean of Students at Office: 406-496-4198 or Cell: **352-682-2492**

Safe Space

Safe Space is our community resource and is available to assist and support victims. Safe Space provides shelter and advocacy services: Please contact:
- Office: **406-782-9807**
- Crisis Line: **406-782-8511**
- Toll Free: **877-335-8511**
- Email: safespacebutte@gmail.com

Other Resources

Please use these documents as resources and to report an incident involving sexual assault and/or harassment.
- Sexual Assault Reporting Options
- Montana Tech’s Policy on Discrimination, Harassment, Sexual Misconduct, Stalking, and Retaliation
- Montana Tech Discrimination Grievance Procedures
- Report Discrimination
- Report Harassment, Hazing, or Sexual Assault
Equal Opportunity Employment, Affirmative Action, & Title IX

It is the policy of Montana Technological University to provide equal educational and employment opportunity (EEO) to all persons regardless of race, color, religion, creed, sex, national origin, age, mental or physical disability, marital status, sexual orientation or political belief with the exception of special programs established by law. Montana Technological University is committed to Equal Opportunity Employment, Affirmative Action, and Title IX. Contact Montana Technological University Equal Employment Opportunity and Affirmative Action Officer Vanessa Van Dyk at (406) 496 4322 or E-mail Vanessa. Visit the Montana Tech EEO-AA/Title IX page.
HAZARDOUS MATERIALS INFORMATION

Revised 7/16

<table>
<thead>
<tr>
<th>GHS Pictograms and Hazard Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>pic 1803</td>
</tr>
<tr>
<td>Oxidizers</td>
</tr>
<tr>
<td>Self-Reactives Pyrophorics Self-Heating</td>
</tr>
<tr>
<td>pic 1809</td>
</tr>
<tr>
<td>Acute Toxicity (severe) Corrosives Gases Under Pressure</td>
</tr>
<tr>
<td>pic 1807</td>
</tr>
<tr>
<td>Carcinogen Respiratory Sensitizer Reproductive Toxicity Target Organ Toxicity Mutagenicity Aspiration Toxicity Environmental Toxicity Iridant Dermal Sensitizer Acute Toxicity (harmful) Narcotic Effects Respiratory Tract Irritation</td>
</tr>
</tbody>
</table>
HAZARDOUS MATERIALS INFORMATION

Purpose

The Hazardous Materials section presents a brief overview of hazardous materials issues encountered while working on campus. Contact the Environmental, Health and Safety Office (EH&S), 4463, for information on the use of hazardous materials, the collection of hazardous wastes for disposal, and information about hazardous materials responsibilities and management. A complete Hazardous Materials Management Plan is available online at http://www.mtech.edu/env_health_safety/docs/hazardous-materials-management-plan.pdf.

Introduction

Faculty, researchers and students at Montana Technological University routinely use hazardous substances for research and instruction, and consequently generate hazardous wastes. Disposal of waste and unwanted chemicals has become increasingly complicated. Protection of human health and the environment from potential hazards posed by these materials is essential. This section summarizes some of the basic issues associated with hazardous materials and Montana Technological University’s current management program.

Definitions

An understanding of some basic terms is essential.

**Solid waste**: Includes both hazardous and nonhazardous wastes in solid, semi-solid, liquid, or gaseous states. Garbage, refuse, sludges from waste treatment, water supply treatment or pollution control facilities, discarded material from industrial, commercial, mining, agricultural, and community activities.

**Hazardous waste**: Solid waste that is either listed as a hazardous waste by the Environmental Protection Agency (EPA) (F, K, P or U list) or exhibits the characteristics of hazardous waste (ignitability, corrosivity, reactivity, toxicity), or is a mixture containing a hazardous waste.

**Acute hazardous waste**: (EPA “P” list) Chemicals that are acutely toxic and require special procedures for handling and discarding.
Regulatory Jurisdiction

Chemicals on the Montana Technological University campus are regulated by several laws: The Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (worker right-to-know), OSHA’s Occupational Exposure to Hazardous Chemicals in Laboratories Standard (the Lab Standard), and the U.S. Environmental Protection Agency’s (EPA) Resource Conservation and Recovery Act (RCRA). RCRA is the primary hazardous waste regulation in the United States, passed by Congress in 1976, and revised in 1980 and 1984. Subtitle C of RCRA establishes a “cradle to grave” system for managing hazardous materials. These regulations developed by the U.S. Environmental Protection Agency (EPA) apply to those who generate, transport, treat, store or dispose of hazardous wastes. The Montana Department of Environmental Quality (MDEQ) is authorized to administer its own hazardous waste requirements within the state. These requirements are equivalent to those promulgated by the EPA, and in a few exceptions, are more stringent than the federal requirements. In addition to the EPA, OSHA, and the MDEQ, Montana Technological University’s hazardous materials activities must also conform to the regulations and guidelines of the Butte-Silver Bow Public Works Department for landfill issues and the Butte-Silver Bow Metro Wastewater Treatment Plant.

Responsibilities

Proper handling of chemicals and hazardous materials in laboratory and classroom activities is the responsibility of students, instructors, researchers and department administrators. When a hazardous material becomes a hazardous waste, the responsibility for proper handling is likewise shared by every level of administration.

When an environmental law is violated, Montana Technological University can be fined; however, liability can also extend to the hands-on student, researcher, and technician, up to the highest positions of administration. Penalties for violation range from warnings to imprisonment and fines of up to $25,000 per day for each offense. A warning for an offense can be issued only once, and the next offense requires that a penalty be issued. Each subsequent repeat offense requires a ten-fold increase in the amount of the fine. Intentional violations receive the most severe sanctions.
Ignorance of the law and lack of experience are not defenses. A graduate student with a degree in science or engineering is expected to have the awareness of an experienced professional.

Procedures for Handling Hazardous Substances and Hazardous Waste

Chemical Management System

By statute and policy, Montana Technological University must comply with all federal, state and local regulations regarding hazardous materials. Montana Technological University utilizes a chemical management system, which ensures that hazardous acquisitions are inventoried and recorded, safety data sheets (SDS) and required spill clean-up equipment are on site, and the materials are properly disposed of. These procedures are designed to bring Montana Technological University into compliance with the regulations and minimize the amount of waste that we generate on our campus. The following is an overview of the program.

Each department on campus has a chemical acquisition manager (CAM) who has been trained in the inventory management procedures. All chemical acquisitions (including donations) must go through this person. Check with Office of EH&S to see who the CAM is for your department. When a researcher needs a chemical, he/she must contact the CAM, who first checks to see if the chemical is an acutely hazardous material (or a RCRA “P-listed” chemical). That list is available from EH&S. If it is P-listed, the chemical user will be asked to consider substituting a less hazardous material if at all possible. P-listed materials are extremely hazardous and very expensive to dispose.

The CAM then checks the campus inventory to determine if the chemical is already available on campus. If another department is willing to barter for the chemical, you will have saved yourself some time and money. If the chemical is not available on campus, the CAM will secure a purchase order number or use a Pro-card to order any chemicals that must be purchased. Order only what you need. Even though the cost may be lower by buying large quantities, the expense for disposing of the unused chemicals usually far exceeds the cost savings.

The CAM will receive the chemicals when they arrive, place a bar code on the container, enter all the pertinent information into the database system, and make certain that the SDS came with the chemical. A copy of the SDS goes to the user and one to the SDS file. The chemical user must read the
**SDS before using the chemical.** The user is also responsible for ensuring that he/she has and uses the proper protective equipment (gloves, goggles, aprons, etc.)

When a chemical container is **empty**, the CAM must be notified and given the bar code number to record the consumption of the chemical. If a chemical is no longer wanted or needed within the department, the CAM will notify other departments of its availability. For any hazardous waste disposal, contact the Office of EH&S, 4463.

### Disposal Costs and Waste Minimization

Disposal of hazardous waste and acute hazardous waste can be very expensive, especially if the contents are unknown. In a recent case, a one-liter container of unknown material cost over $800 to analyze and identify before it could be properly disposed of. **EH&S WILL NOT ACCEPT UNKNOWNS FOR FREE DISPOSAL.** Unknown materials will be accepted with the understanding that the department or research program responsible for the waste will be billed for the analysis and possibly for the disposal.

One kilogram (2.2 pounds) of a known acute hazardous waste (P-listed) that was turned over to the EH&S office for disposal cost Montana Technological University $1800 to dispose of. These are prime examples of why waste identification and minimization are so crucial.

The following **waste minimization techniques** should be considered:

- Eliminate the need for chromic acid washing of glassware, either by using disposable plastic glassware or by cleaning glassware with specialty detergents. Chromic acid rinsate must be disposed of as hazardous waste.
- Buy only the amount of chemical, paints, etc. that you need. This will reduce generation of surplus materials requiring disposal.
- Explore opportunities to use or reuse a waste in another process.
- Never combine hazardous wastes with non-hazardous wastes or acute hazardous waste with other waste. The entire quantity then becomes hazardous or acutely hazardous and will be more expensive to dispose of.

Many toxic and corrosive waste chemicals can be converted to non-hazardous chemicals with simple chemical treatment methods.

A copy of the **Chemical Hygiene Plan** (CHP) has been placed in each laboratory on campus; the CHP contains an appendix on chemical disposal procedures. EH&S also has several reference books available and can provide
guidance on waste destruction. If destruction methods are unavailable, then waste disposal will be the final step for each experiment.

**Sewer Discharge and Landfill**

No reagents should be discharged down the drain without the permission of the POTW (Publicly Owned Treatment Works, which is Butte-Silver Bow Sewage Treatment). Some chemicals may be neutralized, such as acids and bases, and discharged down the drain. Refer to the Chemical Hygiene Plan in the laboratory. Hazardous materials cannot be disposed of in dumpsters or waste baskets. Trash that goes to the landfill from commercial users like Montana Technological University is strictly regulated. No hazardous materials are permitted into the landfill, and all chemicals are considered hazardous materials unless otherwise cleared.

**Safety Data Sheets (SDS)**

Every chemical that is brought on campus must have an SDS (formerly called MSDS – Material Safety Data Sheet). The SDS provides information about the identity of the chemical, its hazardous ingredients, the OSHA permissible exposure limits, the physical and chemical properties of the chemical, any physical hazards, health hazards, reactivity information, precautions for safe handling and use, and control measures. **Any employee/student who will be using a chemical must read the SDS before handling the chemical.**

**Labeling of Chemical Containers**

The purpose of labeling is to convey immediate identity and hazard information about the chemical. The identity is any term that appears on the label, the SDS, and the list of chemicals, and thus links these three sources of information. The wording on the label should be in full word English form, not common abbreviations, as SDSs and labels generally use the word form. For example, *methyl alcohol* should be labeled as such or as an appropriate synonym such as *methanol*. MeOH alone is not acceptable because the SDS would not be filed under MeOH.

Every chemical container, whether it is the original or a secondary container, must have a permanent and readable label identifying the contents,\(^1\) including those containing non-hazardous materials such as deionized water. The Office of Environmental, Health & Safety has secondary labels available.

\(^1\) Exception to this rule: Portable containers into which hazardous chemicals are transferred from labeled containers and are intended only for the immediate use of the individual who makes the transfer do not require a label. If another person will use the chemical or if the chemical will not be used up that day, the container must be fully labeled.
The Laboratory Standard also provides an exemption for beakers, flasks, and test tubes; they do not have to be fully labeled. However, they must at least be labeled with the contents, the name of the responsible person, and a date. Containers found with unknown substances in them are very expensive and difficult to dispose of. The department/researcher/student will be held responsible.

Other information that must appear on a chemical container label includes:
1. Product identifier
2. Supplier information
3. Signal words – either Danger or Warning
4. Pictograms for the hazards present
5. Hazard and precautionary statements for each hazard class and category

These labeling requirements do not apply to hazardous waste containers. (See below for hazardous waste labeling requirements.)

Experimental procedures commonly use numerous small-size sample bottles labeled only with a code abbreviation recorded in a logbook. If the small-size sample containers are stored in a rack or larger container, the labeling requirement can be satisfied by labeling only the rack or larger container. For example, “All containers in this rack contain samples of Crystal Mine water filtered through wood chips and sand.”

**Labeling of Hazardous Waste Containers**

Waste containers must be labeled clearly with the words “HAZARDOUS WASTE” or “ACUTE HAZARDOUS WASTE,” or the substance name with the word “WASTE” such as “waste toluene,” whatever is appropriate. As waste is added to a container, the addition must be listed in a log book; the entry must include the date, concentration, total amount of each chemical/contaminant in the waste, and the person adding the waste. (See Log Records section.) This is crucial for a waste containing any of the contaminants listed in Table 1 of 40 CFR 261.24 “Maximum Concentration of Contaminants for the Toxicity Characteristic.” If the concentration in the waste exceeds the regulatory level given in this table, the waste is then a hazardous waste. Table 1 appears at the end of this section.

**Log Records**

Hazardous waste collection containers must have a written record or log nearby that identifies each addition of waste, including the date of the additions, the constituents, and the name of the person adding the waste. This record of accumulation is required by law, and is necessary when the time comes for disposal. Unknown hazardous waste must be identified before disposal, and the costs can be very high for analysis.
Storage of Chemicals and Hazardous Waste

- Chemicals and waste must be stored in **suitable containers** that prevent the accidental release of material, and containers must have adequate labeling. Plastic milk jugs and soda bottles are not acceptable. If the container is not in good condition or is leaking, the hazardous material must be transferred to another container or managed in some way that complies with the requirements.

- Chemical **compatibility** and hazard class must always be considered when storing.

- Use **secondary containment** for all liquid chemicals.

- Ensure that the container will **not react** with the contents (i.e., don’t put acids in metal cans).

- Original chemical shipping containers may be reused as hazardous waste containers if the container is compatible with the waste materials, and the container is re-labeled.

- Waste containers must have **caps or lids** capable of containing materials if the container is tipped over. Aluminum foil and plastic wrap are not adequate.

- Use the **appropriate size container** for the amount of waste (don’t put 20 g or 20 ml of waste in a 2.5 liter bottle).

- Leave two (2) inches of **headspace** in liquid containers. Do not fill bottles to the top.

- **Segregate SOLVENT wastes** into three separate classes/containers:
  - Halogenated (i.e. chloroform)
  - Water miscible, non-halogenated (i.e. acetone, alcohols)
  - Non-water miscible, non-halogenated (i.e. hexane)

- Do not mix inorganic wastes with organic wastes.

- Do not mix heavy-metal wastes with organic wastes.

- Never mix **mercury compounds** with any other wastes.

- **Segregate** acid waste from base waste, unless you are neutralizing the material. Do not mix either acids or bases with solvents.

- Do not accept wastes from outside parties for disposal through Montana Technological University.

- All containers of hazardous waste must be **dated** on the day that EH&S is notified of the request for the pickup. This date will be the accumulation start time.

- A container holding hazardous waste must always be **closed during storage**, except when it is necessary to add or remove waste. The regulations allow for a hazardous waste container to be opened at the beginning of a laboratory class period (provided that materials are not volatile) so students have easy access to the container. The waste container must be closed securely after the class is over. This exemption
does not apply to the performance of research. Hazardous waste containers in research laboratories must be kept closed at all times.

**Satellite Waste Containers**

Hazardous waste containers are permitted in laboratories, provided that the containers are properly labeled as “HAZARDOUS WASTE” or “ACUTELY HAZARDOUS WASTE,” or with other words that identify the contents of the containers. These are considered “satellite waste containers.” The containers must be closed at all times with the exception noted above. When the waste container is full or the process or study that created the waste is terminated, the waste can then be transferred to the Office of Environmental, Health & Safety for disposal. Contact the EH&S office for instructions.

**Fume Hood Use**

Most operations in a laboratory are carried out in fume hoods. Please note the following operating instructions.

**Operating Instructions for Fume Hoods**

Do not operate with sash higher than 18”.
1. Place chemicals at least 6” inside sash.
2. Elevate large apparatus on blocks so airflow is not blocked. Do not block baffles.
3. Remove all materials not needed for immediate work. Hood should not be used for storage.
4. Keep sash closed when hood is not in use.
5. Never place your head inside hood.
6. Wear chemical splash goggles at all times when using chemicals.
7. Clean up spills immediately.
8. If fumes or odors are present, stop, close sash and notify Physical Facilities and EH&S that there is a problem.

**CAUTION**: Do not use any hood for perchloric acid procedures, except for the designated perchloric acid fume hood located in CBB.

Each department is responsible for maintaining a log of what chemicals are used in a given fume hood. Each time a new or different chemical is used in a fume hood, the chemical must be listed on the log. The information should include the person’s name and chemical(s) they are using. If a chemical already appears on the log, it does not have to be entered again unless a different person is using it.
Table 3-Maximum Concentration of Contaminants for the Toxicity Characteristics

<table>
<thead>
<tr>
<th>EPA HW No.</th>
<th>Containment</th>
<th>CAS NO.(2)</th>
<th>Level (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>D004</td>
<td>Arsenic</td>
<td>7440-38-2</td>
<td>5.0</td>
</tr>
<tr>
<td>D005</td>
<td>Barium</td>
<td>7440-39-3</td>
<td>100.00</td>
</tr>
<tr>
<td>D018</td>
<td>Benzene</td>
<td>71-43-2</td>
<td>0.5</td>
</tr>
<tr>
<td>D006</td>
<td>Cadmium</td>
<td>7440-43-9</td>
<td>1.0</td>
</tr>
<tr>
<td>D019</td>
<td>Carbon tetrachloride</td>
<td>56-23-5</td>
<td>0.5</td>
</tr>
<tr>
<td>D020</td>
<td>Chlordane</td>
<td>57-74-9</td>
<td>0.03</td>
</tr>
<tr>
<td>D021</td>
<td>Chlorobenzene</td>
<td>108-90-7</td>
<td>100.0</td>
</tr>
<tr>
<td>D022</td>
<td>Chloroform</td>
<td>67-66-3</td>
<td>6.0</td>
</tr>
<tr>
<td>D007</td>
<td>Chromium</td>
<td>7440-47-3</td>
<td>5.0</td>
</tr>
<tr>
<td>D023</td>
<td>o-Cresol</td>
<td>95-48-7</td>
<td>{4} 200.0</td>
</tr>
<tr>
<td>D024</td>
<td>m-Cresol</td>
<td>108-39-4</td>
<td>{4} 200.0</td>
</tr>
<tr>
<td>D025</td>
<td>p-Cresol</td>
<td>106-44-5</td>
<td>{4} 200.0</td>
</tr>
<tr>
<td>D026</td>
<td>Cresol</td>
<td>94-75-7</td>
<td>{4} 200.0</td>
</tr>
<tr>
<td>D016</td>
<td>2,4-D</td>
<td></td>
<td>10.0</td>
</tr>
<tr>
<td>D027</td>
<td>1,4-Dichlorobenzene</td>
<td>106-46-7</td>
<td>7.5</td>
</tr>
<tr>
<td>D028</td>
<td>1,2-Dichloroethane</td>
<td>107-06-2</td>
<td>0.5</td>
</tr>
<tr>
<td>D029</td>
<td>1,1-Dichloroethylene</td>
<td>75-35-4</td>
<td>0.7</td>
</tr>
<tr>
<td>D030</td>
<td>2,4-Dinitrotoluene</td>
<td>121-14-2</td>
<td>{3} 0.13</td>
</tr>
<tr>
<td>D012</td>
<td>Endrin</td>
<td>72-20-8</td>
<td>0.02</td>
</tr>
<tr>
<td>D031</td>
<td>Heptachlor (&amp; its epoxide)</td>
<td>76-44-8</td>
<td>0.008</td>
</tr>
<tr>
<td>D032</td>
<td>Hexachlorobenzene</td>
<td>118-74-1</td>
<td>{3} 0.13</td>
</tr>
<tr>
<td>D033</td>
<td>Hexachlorobutadiene</td>
<td>87-68-3</td>
<td>0.5</td>
</tr>
<tr>
<td>D034</td>
<td>Hexachloroethane</td>
<td>67-72-1</td>
<td>3.0</td>
</tr>
<tr>
<td>D008</td>
<td>Lead</td>
<td>7439-92-1</td>
<td>5.0</td>
</tr>
<tr>
<td>D013</td>
<td>Lindane</td>
<td>58-89-9</td>
<td>0.4</td>
</tr>
<tr>
<td>D009</td>
<td>Mercury</td>
<td>7439-97-6</td>
<td>0.2</td>
</tr>
<tr>
<td>D014</td>
<td>Methoxychlor</td>
<td>72-43-5</td>
<td>10.0</td>
</tr>
<tr>
<td>D035</td>
<td>Methyl ethyl ketone</td>
<td>78-93-3</td>
<td>200.0</td>
</tr>
<tr>
<td>D036</td>
<td>Nitrobenzene</td>
<td>98-95-3</td>
<td>2.0</td>
</tr>
<tr>
<td>D037</td>
<td>Pentachlorophenol</td>
<td>87-86-5</td>
<td>100.0</td>
</tr>
<tr>
<td>D038</td>
<td>Pyridine</td>
<td>110-86-1</td>
<td>{3} 5.0</td>
</tr>
<tr>
<td>D010</td>
<td>Selenium</td>
<td>7782-49-2</td>
<td>1.0</td>
</tr>
<tr>
<td>D011</td>
<td>Silver</td>
<td>7440-22-4</td>
<td>5.0</td>
</tr>
<tr>
<td>D039</td>
<td>Tetrachloroethylene</td>
<td>127-18-4</td>
<td>0.7</td>
</tr>
<tr>
<td>D015</td>
<td>Toxaphene</td>
<td>8001-35-2</td>
<td>0.5</td>
</tr>
<tr>
<td>D040</td>
<td>Trichloroethylene</td>
<td>79-01-6</td>
<td>0.5</td>
</tr>
<tr>
<td>D041</td>
<td>2,4,5-Trichlorophenol</td>
<td>95-95-4</td>
<td>400.00</td>
</tr>
<tr>
<td>D042</td>
<td>2,4,6-Trichlorophenol</td>
<td>88-06-2</td>
<td>2.0</td>
</tr>
<tr>
<td>D017</td>
<td>2,4,5-TP (Silvex)</td>
<td>93-72-1</td>
<td>1.0</td>
</tr>
<tr>
<td>D043</td>
<td>Vinyl chloride</td>
<td>75-01-4</td>
<td>0.2</td>
</tr>
</tbody>
</table>
EMERGENCY RESPONSE INFORMATION

See Montana Technological University’s *Emergency Action and Crisis Protocol Manual* and Montana Tech’s *Safety Policy* for complete details.

When an emergency situation arises, such as a fire, explosion, etc., the following procedures must be followed:

- **Call 911** and identify who you are, exact location of the emergency, nature of emergency, and any hazardous materials involved.
- If necessary, evacuate building first, **then** call 911 from a safe location.
- **Call Campus Security** (HELP or 4357), **EH&S (4463)** and **Physical Facilities (4268)**.
- **Evacuate** building by pulling fire alarm.

If a release or spill of hazardous materials occurs, follow these procedures:

- Call **EH&S (4463)** who will determine if additional resources should be called, i.e., fire department, Olympus Environmental, Northwestern Energy, etc.
- If the spill or release is large or involves a very toxic or flammable material, evacuate the area immediately.

If an **accident or injury** occurs, follow these procedures:

- **Call 911**:
  - If a victim should not be moved.
  - If someone is unconscious, even for a moment.
- **Call EH&S (4463) and Campus Security** (HELP or 4357)

If 911 is not called, any employee who is in need of **medical treatment** because of a work-related accident or injury should:

- Attempt to see your family physician first if the injury is not life threatening. If that is not possible, go to an Express Care unit or to St. James Healthcare Emergency Room.
- If the injury requires immediate attention, go to St. James Healthcare Emergency Room.

**Accident Reporting/Investigation**

- **All** work-related incidents of property loss or injury must be reported immediately by telephone or in person to Personnel, 4380. A **First Report of Injury** must also be completed online. If the incident involves any property damage or loss, Personnel, 4380, and Physical Facilities Director, 4399, must be notified immediately.
- Any non-work related incidents involving students or visitors must be reported immediately by telephone or in person to Personnel, 496-
A Student/Visitor Incident Report Form must be completed and submitted to Personnel.

- All work-related accidents and incidents are investigated, particularly those involving one or more of the following:
  - Injury or death involving a Montana Technological University employee.
  - Damage to Montana Technological University property and/or vehicle in excess of $250.00.
  - Non-work related incidents involving students or visitors are also investigated if they occur on campus and involve injury or death.
  - The immediate supervisor or department head will participate in the initial investigation and report using the forms provided by the Personnel office. Personnel will coordinate with the EH&S Director to investigate the incident.

An accident report must be initiated:

- Even if the employee does not seek medical attention. This protects both the employee and Montana Technological University. If an employee does not complete a report form and later decides to see a doctor, Montana Technological University has no documentation that the accident occurred at work, and the claim may be questioned or challenged by Montana Technological University and the Worker’s Compensation carrier, and consequently, may be denied.

- Even if no injury or property damage resulted from the incident. This protects both the employee and Montana Technological University. A “near-miss” signals that something is not right and should be investigated to prevent further incidents.

- In the event Montana Technological University of the death of any employee from a work-related incident, Montana Technological University must report the fatality by telephone to the Montana Department of Labor Safety Bureau in Helena, 444-6401, within eight (8) hours and within 24 hours for the in-patient hospitalization of an employee, an amputation or loss of an eye as a result of a work-related incident.

---

1 A near miss is defined as an incident that has the potential to cause serious injury or property damage. The incident reveals a physical condition or employee action that could lead to future serious injury or property damage if not corrected.
Montana Technological University Emergency Plan
Instructions: What You Need to Know Now

Active Shooter
Follow these procedures in this order:
   a. Run – if you are able to get out of the area safely, do so!
   b. Hide – if you cannot escape, find a safe place to hide, barricade, and lockdown
   c. Fight – if you have no other choice, try to take the aggressor down – improvise weapons – use furniture, computers, fire extinguishers, etc.

Bomb Threat
1. Call 911 but do not pull fire alarm
2. Follow evacuation procedures if instructed to do so and sign in at assembly area so you are accounted for. You may be asked to remain in the building.

Earthquake
1. If inside, stay inside
2. If outside, stay outside and move away from buildings and utility wires
3. Drop, Cover and Hold on! Shield your head and face
4. Take cover under a heavy desk or table and stay there until shaking stops
5. If nothing is available to hide under, inner walls or door frames are next choice
6. Stay away from glass, hanging objects and bookcases

Fire
1. Pull fire alarm & follow evacuation procedures; sign in at assembly area
2. Call 911 from safe location
3. Call Environmental Health & Safety 4463 and Security 4357 (HELP)
   **Use fire extinguisher if you are trained and fire is “garbage can size”

Gunman/Terrorist Event/Violence
1. Follow instructions for an Active Shooter

Hazardous Materials Incident
1. If a spill is in a lab and the spill is small & manageable, wear personal protective equipment & clean up appropriately. Always notify EH&S 4463
2. If a spill is in a lab and spill is large, toxic or flammable, evacuate lab. Notify EH&S 4463 & Security 4357 immediately
3. If incident is large from railcars or trucks in the vicinity, follow instructions to shelter-in-place or evacuate

Hostage Situation

1. If you are not the hostage, call 911, EH&S 4463, Paul Beatty 4198, Security 4357
2. Remove uninvolved individuals to a safe location
3. Provide any information you have to authorities

Medical Emergency or Physical Injury

1. Call 911 if you have an unconscious person or if someone requires immediate medical assistance
2. Also call EH&S 4463 and Security 4357
3. Send someone to meet emergency responders
4. Administer first aid, CPR or AED (automated external defibrillator) if necessary and if trained

Evacuation Procedures

**Follow anytime the alarm sounds or you are instructed to evacuate.**
1. Follow evacuation route for that room/building
2. Close but do not lock doors unless necessary
3. Turn off equipment if safe to do so
4. Use stairs, not the elevator
5. Go to assigned assembly area and sign in so you are accounted for
6. Do not go back into a building until given the all clear

Lockdown Procedures

**Follow for any event when you need to be protected from someone or something on the outside**
1. If you are outside, go to closest safe building and closest room
2. If you are already inside, stay in room
3. Close and lock door if possible
4. Close windows, drapes, & turn off lights
5. Lie down on floor away from windows and out of sight if possible
6. Remain silent & calm. Turn cell phones to silent, not just vibrate
7. Communicate with authorities if possible
8. Stay in place until all-clear is given by authorities

**Shelter-in-Place Procedures**

**Follow anytime there has been a large hazmat spill, radiation event, or other similar emergency**

1. Move all people inside a building immediately
2. Close all doors to the outside, close and lock all windows, close drapes & blinds
3. Close as many internal doors as possible
4. Turn off all ventilation, heating & air conditioning systems (Note: on campus, this has to be done by Physical Facilities)
5. Extinguish all ignition sources
6. Take shelter in upstairs, interior room without windows if possible
7. If possible, seal gaps around windows, door, ventilation ducts or air conditioning units with duct tape, plastic sheeting, aluminum foil, towels, clothing, whatever you have available
8. Tune into local radio or TV for information
9. Stay in place until all-clear is given by authorities
Have a question about information technology?

Check out the Montana Tech website or sign in and head over to the Knowledge Base, browse through the categories, or view the recent and popular articles. You'll find how-to guides, training resources, troubleshooting information, common questions, information about ongoing problems and more.

Need to request something?

Head over to the Services, browse through our services or view the popular services.

Not finding what you're looking for?

Click the "Search the client portal" box at the top and perform a quick search. Click on the globe to the left of the search box to limit your search to just the Knowledge Base or Service Catalog.

What is a Ticket?

When you "Request Service" or "Report a Problem" a new ticket is created, containing all the relevant information such as: how to contact you, correspondence related to the request, specifics about the nature of your request, and information on the progress of the request.

How to use Team Dynamix:
https://mtech.teamdynamix.com/TDClient/1921/Portal/KB/ArticleDet?ID=76200
BUSINESS SERVICES

General Information

- Located in Student Success Center 3.126
- Office Hours: 7:30-5:00
- Window Hours: 7:30-5:00
- Phone: (406) 496-4250, 1-800-445-TECH, Option #3
- Fax: (406) 496-4602
- Email: BusinessServices@mtech.edu

Services Provided

- Tuition and Fee Payment
- Disbursements of Financial Aid Refunds and Payroll
- **NOTE: All check disbursements require a Montana Tech DiggerCard**

Business Office Web Page

https://www.mtech.edu/administrative-services/business-office/

- Fee Schedules
- Answers to Frequently Asked Questions
- Link to Oredigger Web
- Link for tax information
- Contact to the Business Office

Fee Payment

- Bills will be available on Oredigger Web for all **pre-registered** students
- Balances are to be paid or a deferment contract signed (deferment fee $30.00) to avoid a $40 late fee
- Registration is not complete until your bill has been paid/finalized or a deferment contract has been signed (those in credit balance, must finalize on Oredigger Web).
- Payment Methods
  - Cash
  - Check
  - Credit Cards: Visa, MasterCard, and Discover
Complete Your Registration

You must enter the secure area on Orediggerweb to complete your registration by finalizing your charges, waive/accept your health insurance and pay your bill if you have a balance due.

**Step 1.** Go to: Montana Tech Home Page [http://www.mtech.edu/](http://www.mtech.edu/)

**Step 2.** In the top banner of the home page, select “OrediggerWeb”

**Step 3.** Enter Secure Area (You will need your single Login information)

**Step 4.** Select “Student Services & Financial Aid”

**Step 5.** Select “Student Records”

**Step 6.** Select “Account Detail for Term”

**Step 7.** Health Insurance options.

You must choose an option to proceed. Students taking 7 or more credits are required to be covered by some type of medical insurance either private or through the university system.

**Step 8.** Select “Finalize/Pay Now”

- **IF** your balance is zero: you must select finalize now button. You should receive congratulations that you have finalized your fall semester.
- **IF** your account has a balance owing, you will be given the option to pay by credit card or electronic check. *Please pay AMOUNT DUE balance from Student Schedule/Bill.*

Please note credit cards used online will be charged a $10 convenience fee.

You may also pay at the Business Office in the Student Success Center or by mail: MT Tech Business Office, 1300 W Park St, Butte, MT 59701

Financial aid will not post to a student’s account until the student has completed registration.

If you have any questions please contact the Business Office at 406-496-4250.