MASTER OF WATER MANAGEMENT AND HYDROLOGICAL SCIENCE

The Master of Water Management and Hydrological Science (MWM) degree is a non-thesis degree designed to prepare students for careers in the critically important areas of water management.

The Water Management and Hydrological Science (WMHS) graduate degree program is supervised by an interdisciplinary faculty from multiple departments and colleges. The faculty have expertise in the bio-physical, geo-chemical, management, public health, social sciences and engineering fields. The program offers two master's degrees (thesis Master of Science and non-thesis Master of Water Management) and a Doctor of Philosophy (PhD). The curriculum is designed to allow students to become leaders in their focal areas of water while making connections with colleagues in other related disciplines.

The Master of Water Management and Hydrological Science (MWM) is structured to enhance problem solving using technical and managerial skills. The degree incorporates principles from economics, engineering, management, policy analysis and science and requires a comprehensive final examination. This approach provides students with the education and training to contribute to advancements in managing water quality and quantity for the world, the nation and the State of Texas.

For more information on degree application, course requirements and program advisors go to the Water Management and Hydrological Science Program website (http://waterprogram.tamu.edu).

Program Requirements

Program Requirements

- Student's Advisory Committee (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/interdisciplinary/water-management-hydrological-science-mwm/#students-advisory-committee)
- Degree Plan (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/interdisciplinary/water-management-hydrological-science-mwm/#degree-plan)
- Credit Requirements (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/interdisciplinary/water-management-hydrological-science-mwm/#credit-requirement)
- Limitations on Credits and Coursework (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/interdisciplinary/water-management-hydrological-science-mwm/#limitations)
- Final Examination (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/interdisciplinary/water-management-hydrological-science-mwm/#final-examination)
  - Eligibility (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/interdisciplinary/water-management-hydrological-science-mwm/#final-exam-eligibility)
  - Scheduling (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/interdisciplinary/water-management-hydrological-science-mwm/#final-exam-scheduling)
  - Format (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/interdisciplinary/water-management-hydrological-science-mwm/#final-exam-format)
  - Grading (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/interdisciplinary/water-management-hydrological-science-mwm/#final-exam-grading)
  - Expiration (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/interdisciplinary/water-management-hydrological-science-mwm/#final-exam-expiration)

Student's Advisory Committee

After receiving admission to graduate studies, students will consult with the graduate program concerning selection of a chair and members (if applicable) for an advisory committee representative of the student's field(s) of study and research.

A non-thesis option Master of Water Management and Hydrological Science student's advisory committee will consist of no fewer than three members, where the chair or co-chair must be from the student's intercollegiate faculty. At least one or more of the members must have a primary appointment with an academic unit external to the student's major department. The external member for a student in an interdisciplinary degree program must be from an academic unit different from the chair of the student's advisory committee. The chair, in consultation with the student, will select the remainder of the advisory committee.

This program does not offer a thesis option.

Only members of the Graduate Committee Faculty located on Texas A&M University campuses may serve as chair of a student's advisory committee. Other members of the Graduate Committee Faculty – including those located off-campus or outside the university (if permitted by program, department, and college/school policy) – may serve as a co-chair or member, but not as chair.

The advisory committee as a group – and as individual members – are responsible for advising students on academic matters. These duties include the responsibility for approving a student's proposed degree plan; research proposal (if applicable); thesis, dissertation, or record of study (if applicable); and conducting examinations (if required). The advisory committee members' approval of a degree plan indicates their willingness to accept the responsibility for guiding and directing a student's entire academic program and for initiating all academic actions concerning a student. Additionally, in cases of academic deficiency, the advisory committee is responsible for initiating recommendations to the academic unit and the Graduate and Professional School.

The chair of an advisory committee, who usually has immediate supervision of a student's degree program, has the responsibility for calling meetings at any time considered desirable.

If the chair of a student's advisory committee is unavailable for an extended period of time in any academic period during which the student is involved in activities relating to an internship, thesis, or professional paper – and is registered for courses such as 684 (Professional Internship), 691 (Research), 692 (Professional Study), or 693 (Professional Study) – the Department Head or interdisciplinary degree Program Chair (if applicable) may appoint an alternate advisory committee chair during the interim period.

If a student's advisory committee chair is on an approved leave of absence – and the student wants the chair to continue to serve in this role – a written request must be submitted by the Department Head, or interdisciplinary degree Program Chair (if applicable), to the Associate Provost and Dean of the Graduate and Professional School, for the

faculty member who is on an approved leave of absence to be allowed to continue serving as chair of the advisory committee – without a co-chair – for up to one year. The request must confirm that the faculty member is able to engage in the required duties as chair during the leave of absence. Extensions beyond the one-year period (if necessary) may be granted with additional approval of the Associate Provost and Dean of the Graduate and Professional School.

If a student's advisory committee chair voluntarily separates from the university, and the student is nearing completion of the degree, the chair may continue to serve in this role – at the student's request – for up to one year. Two options are available:

1. The chair may continue, with a co-chair, without additional approval by the Graduate and Professional School. The student must select a current member of the Graduate Committee Faculty – from the student's academic program and located near the Texas A&M University campus site – to serve as co-chair of the advisory committee.
2. The chair may continue, without a co-chair, with approval by the Graduate and Professional School. A written request must be submitted through the Graduate Committee Faculty Office to the Associate Provost and Dean of the Graduate and Professional School by the Department Head or interdisciplinary degree Program Chair to allow the faculty member to continue as chair, without a co-chair, of the advisory committee.

For both options, extensions beyond the one-year period (if necessary) may be granted with approval of the Associate Provost and Dean of the Graduate and Professional School.

Although individual members may be replaced by petition for valid reasons, all members of a student's advisory committee cannot resign *en masse.*

Degree Plan

Upon commencement of graduate studies, an advisory committee will evaluate the student's previous education, and outline a program of study and/or research topics(s) based upon the student's degree objectives. Graduate students, in consultation with the advisory committee, will then develop a degree plan which includes those courses to be applied toward a particular degree and formally establish the advisory committee.

The degree plan must be created, submitted, and approved through the online Document Processing Submission System (https://ogsdpss.tamu.edu/) (DPSS). The degree plan must be submitted prior to the deadline imposed by the student's college or school and approved by the Graduate and Professional School no later than 90 days prior to the last day for completion of a Final Examination. Students must select the appropriate program option(s) when submitting a proposed degree plan.

Coursework included on the degree plan is subject to the requirements and restrictions detailed in the Credit Requirements and Limitations on Credits and Coursework sections in each degree program page, or as required by the student's advisory committee and/or academic unit. Coursework included on the degree plan may not satisfy requirements for more than one degree, except for approved combination degree programs.

Changes to an approved degree plan, if deemed necessary by the advisory committee, may be made through a petition to the Graduate and Professional School. No changes can be made to a degree plan once a student's Final Examination Request or Final Examination Exemption Request is approved by the Graduate and Professional School.

Degree program time limits apply to courses listed on a degree plan. For additional information, students should check the Time Limits section under Additional Requirements.

Credit Requirements

All graduate students must complete sufficient semester credit hours to satisfy their degree requirements.

A minimum of 30 semester credit hours of approved coursework is required for the non-thesis option Master of Water Management and Hydrological Science.

This program does not offer a thesis option.

Coursework may be completed in one or a combination of academic units. Ordinarily, students will devote the major portion of their time on work in one or two closely related fields of study; but other work may be required in supporting areas of interest. A student is required to complete 8 hours of required core water courses, 12 hours of common body of knowledge courses, and 10 hours of designated water courses.

Limitations on Credits and Coursework

Credit hour requirements for all graduate degrees at Texas A&M University are subject to the following limitations:

1. To receive a graduate degree, students must earn one-third or more of the credits through the institution's own direct instruction. These limitations also apply to joint degree programs.
2. Transfer credits may be used to meet the credit hour requirements under the following limitations:
   a. The maximum number of credit hours which may be considered for transfer credit is the greater of 12 credit hours or one-third (1/3) of the total hours of a degree plan.
   b. Graduate and/or upper-level undergraduate courses (400-level only) taken in residence at an accredited United States or international institution (recognized by the Office of Admissions), with a final grade of B or greater, may be considered for transfer credit if – at the time the courses were completed – the courses would be accepted for credit toward a similar degree for a student in degree-seeking status at the host institution.
   c. An official transcript from the institution at which the transfer coursework was taken must be sent directly to the Office of Admissions. Coursework credit submitted for transfer from any institution must be shown in semester credit hours or equated to semester credit hours.
   d. Up to 1 hour of credit may be obtained for each five-day week of coursework for graduate courses of three weeks' duration or less taken at other institutions. Each week of coursework must include at least 15 contact hours.
   e. Grades for courses completed at other institutions are not included in computing the GPA.
   f. Coursework in which no formal grades were given, or in which grades other than A or B were earned (for example, CR, P, S, U, H, etc.), is not accepted for transfer credit.

g. Courses completed at Texas A&M University and appearing on the degree plan with grades of D, F, or U may not be absolved by transfer work.
h. Except for officially approved cooperative doctoral programs, credit for thesis or dissertation research – or the equivalent – is not transferrable.
i. Courses used toward a degree at another institution may not be applied for transferred graduate credit.
j. Courses used toward a certificate, but not applied to an awarded degree, may be considered for transfer. If the course to be transferred was taken for a certificate or prior to the conferral of a degree at the transfer institution, a letter from the registrar at that institution stating that the course was not applied for credit toward the degree must be submitted to the Graduate and Professional School.
k. Credit for internship coursework in any form, or taken by extension, is not transferable.
l. Courses for which transfer credits are sought must be approved by the student's advisory committee and the Graduate and Professional School.
m. A student who has earned 12 credit hours of graduate credit in residence at Texas A&M University may be authorized to transfer courses in excess of the limits upon the advice of the advisory committee and with the approval of the Graduate and Professional School.

3. The maximum number of credit hours taken in post-baccalaureate non-degree (G6) classification at Texas A&M University which may be considered for application to the degree plan is 12.
4. Only grades of A, B, C, and S are acceptable for graduate credit.
5. Graduate courses on a degree plan may not be taken on an S/U basis except for 681 (Seminar), 684 (Professional Internship), 690 (Theory of Research), 691 (Research), 692 (Professional Study), 693 (Professional Study), 695 (Frontiers in Research), 697 (Methods), 791 (Doctoral Capstone), or SOPH 680 (Public Health Capstone).
6. Approval to enroll in any professional course should be obtained from the Department Head or interdisciplinary degree Program Chair (if applicable) in which the course will be offered before including such a course on a degree plan.
7. No more than 50 percent of the non-research coursework required for an in-person degree program may be completed through distance education courses.
8. No graduate credit may be obtained by continuing education, correspondence study, extension, or for any course of fewer than three weeks duration.

Some academic units may have additional or more restrictive requirements.

The foregoing limitations apply to all graduate programs. Exceptions will be permitted only in unusual cases, when petitioned through the student's advisory committee, and approved by the Graduate and Professional School.

Non-Thesis Option Students

Credit hour requirements for non-thesis master's degrees are subject to the following additional limitations:

1. A student pursuing a non-thesis option master's degree may not enroll in 691 (Research) courses for any reason.
2. A maximum of 12 credit hours may be used, in any combination of the following, on a non-thesis master's degree plan:
   a. No more than 4 credit hours in any combination of the following:
      i. no more than 2 credit hours of 681 (Seminar),
      ii. no more than 4 credit hours of 684 (Professional Internship), and
      iii. no more than 3 credit hours of 685 (Directed Studies).
   b. No more than 8 credit hours in any combination of the following:
      i. no more than 4 credit hours 684 (Professional Internship),
      ii. no more than 3 credit hours of 685 (Directed Studies), and
      iii. no more than 8 credit hours of 691 (Research), if permitted.
   c. No more than 3 credit hours of 690 (Theory of Research).
   d. No more than 3 credit hours of 695 (Frontiers in Research).
3. Certain zero-credit courses may be allowed on a non-thesis master's degree plan:
   a. A zero-credit 681 (Seminar), 684 (Professional Internship), or 685 (Directed Studies) course may be used.
   b. Other courses – including 691 (Research) hours, if permitted – are not eligible for zero credit.
4. A maximum of 9 credit hours of advanced undergraduate courses (300- or 400-level only) may be considered for application to a master's degree plan.

Exceptions will be permitted only in unusual cases, when petitioned through the student's advisory committee, and approved by the Graduate and Professional School.

Exceptions

The foregoing limitations apply to all master's degrees, except for the following approved exceptions for the Master of Water Management and Hydrological Science:

1. A maximum of 12 credit hours may be used, in any combination of the following, on a non-thesis master's degree plan:
   a. No more than 2 credit hours of 681 (Seminar).
   b. No more than 4 credit hours of 684 (Professional Internship).
   c. No more than 6 credit hours of 685 (Directed Studies).
   d. No more than 3 credit hours of 690 (Theory of Research).
   e. No more than 3 credit hours of 695 (Frontiers in Research).

All other exceptions will be permitted only in unusual cases, when petitioned by the student's advisory committee, and approved by the Graduate and Professional School.

Final Examination

Candidates for all thesis-option and certain non-thesis option master's degrees must pass a Final Examination by deadlines announced through the Graduate and Professional School Dates and Deadlines Calendar (https://grad.tamu.edu/knowledge-center/dates-and-deadlines/dates-and-deadlines).

Master's students may be given only one opportunity to repeat a Final Examination, and that must be within a time period that does not extend beyond the conclusion of the next regular semester (Summer terms excluded).

Eligibility

For master's degree students, eligibility to schedule a Final Examination requires that

1. a student's cumulative and degree plan GPA must be at least 3.00;
2. no unabsolved grades of D, F, or U for any course may be listed on a degree plan (to absolve a deficient grade, the student must repeat the course at Texas A&M University and achieve a grade of C or better); and
3. all coursework on the degree plan must be completed, with the exception of those hours for which the student is registered.

Master's students may be given only one opportunity to repeat a Final Examination, and that must be within a time period that does not extend beyond the conclusion of the next regular semester (Summer terms excluded).

For non-thesis option students, a Final Examination may be required for the Master of Water Management and Hydrological Science. The examination cannot be held prior to the mid-point of the student's final semester if questions on the Final Examination are based on courses in which the student is currently enrolled.

If a student has completed all required degree plan coursework, the student is not required to register for classes in the semester a Final Examination is administered (unless the student holds a graduate assistantship).

Non-thesis option candidates may petition to be exempt from the Final Examination – provided the Degree Plan GPA is 3.50 or greater – with approval of the advisory committee, the academic unit, and the Graduate and Professional School. Requests for exemption from the Final Examination must be submitted the same semester the student intends to graduate.

Scheduling

The Final Examination request must be submitted to the Graduate and Professional School *via* the Academic Requirements Completion System (ARCS) a minimum of ten (10) working days in advance of the requested examination date, or the deadline listed on the Graduate and Professional School Dates and Deadlines Calendar (https://grad.tamu.edu/knowledge-center/dates-and-deadlines/dates-and-deadlines) – whichever comes first. Any changes to the Degree Plan must be approved by the Graduate and Professional School prior to submission of the request.

Any cancellations will be notated in ARCS.

Format

The Final Examination shall be conducted by the student's advisory committee as approved on a graduate degree plan, and the format shall be determined by the student's academic unit and/or advisory committee and communicated to the student in advance of the examination. The Final Examination may consist of a written component, oral component, or combination of both.

The examination may cover the broad field of the candidate's training and closely related topics.

Only one committee member substitution is allowed – with prior approval of the Graduate and Professional School – to provide an evaluation decision for a student's Final Examination. The advisory committee Chair may not be replaced by a substitute. If the degree program requires the advisory committee to include at least one External Member, and the substitution is for the sole external member of the advisory committee, then the substitute must also be external to the chair's academic unit. In extenuating circumstances, with approval of the Graduate and Professional School, an exception to this requirement may be granted.

Persons other than members of the advisory committee may – with mutual consent of the candidate and the advisory committee chair – attend Final Examinations. Upon completion of a candidate's questioning, all visitors must excuse themselves from the proceedings.

Grading

A positive evaluation of the Final Examination by the members of a student's advisory committee – with at most one dissension – is required to pass a student on the examination. If the chair is the sole member of the student's advisory committee, a positive vote is required to pass a student on the Final Examination. Academic units may have stricter requirements provided there is consistency in all degree programs within a given department or interdisciplinary degree program.

Final Examination results must be reported to the Graduate and Professional School *via* ARCS within ten (10) working days of completion of the examination.

Expiration

For restrictions on Final Examination validity, please see the Time Limits section under Additional Requirements.

Additional Requirements

Additional Requirements

- Continuous Registration (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/interdisciplinary/water-management-hydrological-science-mwm/#continuous-registration)
- Residence (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/interdisciplinary/water-management-hydrological-science-mwm/#residence)
- Scholastic Requirements (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/interdisciplinary/water-management-hydrological-science-mwm/#scholastic-requirements)
- Professional Internship or Practicum (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/interdisciplinary/water-management-hydrological-science-mwm/#internship)
- Foreign Languages (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/interdisciplinary/water-management-hydrological-science-mwm/#languages)
- Time Limits (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/interdisciplinary/water-management-hydrological-science-mwm/#time-limit)
- Graduation (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/interdisciplinary/water-management-hydrological-science-mwm/#graduation)

Continuous Registration

Students in master's degree programs must satisfy Continuous Registration Requirements until completion of all degree requirements.

Students in degree programs requiring a thesis who have completed all coursework on an approved degree plan – other than 684 (Professional Internship), 691/791 (Research), or 692 (Professional Study) – are required to maintain continuous registration until completion of all requirements for a degree. Registration for zero-credit courses does not satisfy the Continuous Registration Requirement. For more information, please see Continuous Registration Requirements under the Registration and Academic Status (https://catalog.tamu.edu/graduate/academic-expectations-general-degree-requirements/#registrationandacademicstatustext) tab on the Academic Expectations and Program Requirements page in the Graduate and Professional Catalog.

Residence

A major purpose of the Residence Requirement for graduate degrees is to ensure that students have an opportunity to benefit from the advantages of a university environment.

In partial fulfillment of the Residence Requirement for the Master of Water Management and Hydrological Science degree, the student must complete 9 semester credit hours during one regular semester or one 10-week Summer semester in resident study at Texas A&M University. A minimum of 1 credit hour must be in a non-distance education delivery mode. Semesters during which the student is enrolled in all distance education coursework will not count toward fulfillment of the residence requirement. Upon recommendation of the student's advisory committee, interdisciplinary degree Program Chair, and with approval of the Graduate and Professional School, a student may be granted exemption from this requirement. Such a petition, however, must be approved prior to the student's registration for the final 9 credit hours of required coursework.

Students who are employed full-time while completing their degree may fulfill the total Residence Requirement by completion of less-than-full time course loads each semester. To be eligible, the student is required to submit a Petition for Waivers and Exceptions through the Document Processing Submission System (DPSS) along with verification of employment to the Graduate and Professional School.

For more information, please see the Residence Requirements section under the Degree Requirements (https://catalog.tamu.edu/graduate/academic-expectations-general-degree-requirements/#degreerequirementstext) tab on the Academic Expectations and Program Requirements page in the Graduate and Professional Catalog.

Scholastic Requirements

Students in graduate degree programs must maintain good academic standing and meet minimum university scholastic requirements throughout the duration of their graduate studies. Academic units may have additional or higher requirements. For more information, please see the Scholastic Requirements section under the Academic Expectations (https://catalog.tamu.edu/graduate/academic-expectations-general-degree-requirements/) tab on the Academic Expectations and Program Requirements page in the Graduate and Professional Catalog.

Professional Internship or Practicum

Professional internship or practicum requirements for graduate programs at Texas A&M University are administered and monitored by the individual academic units overseeing graduate studies.

Students should contact their graduate program office regarding any professional internship or practicum requirements.

Foreign Languages

Foreign language requirements for graduate programs are administered and monitored by the individual academic units overseeing graduate studies.

For the Master of Water Management and Hydrological Science degree, a foreign language is not required.

Time Limits

All requirements for master's degree programs must be completed within a period of seven consecutive calendar years for the degree to be granted.

A course will be considered valid until seven (7) years after the end of the semester in which it is taken. Students in non-thesis option master's degree programs must complete all other degree requirements within one (1) year of the semester in which a Final Examination (if required) was taken. Failure to do so will result in the degree not being awarded.

For more information, please see the Time Limits section under the Degree Requirements (https://catalog.tamu.edu/graduate/academic-expectations-general-degree-requirements/#degreerequirementstext) tab on the Academic Expectations and Program Requirements page in the Graduate and Professional Catalog.

Graduation

Candidates for an advanced degree who expect to complete their work at the end of a given semester may apply for graduation. For more information, please see the Graduation section under the Degree Requirements (https://catalog.tamu.edu/graduate/academic-expectations-general-degree-requirements/#degreerequirementstext) tab on the Academic Expectations and Program Requirements page in the Graduate and Professional Catalog.