MASTER OF SCIENCE IN
BIOMEDICAL SCIENCES

The Biomedical Sciences (BIMS) Graduate Program is an interdepartmental program of study. Focusing on cross-disciplinary education and training in the biomedical sciences and the numerous associated domains of research, the faculty teach and mentor students in fields that have a critical mass of faculty, exceptional productivity, and international recognition. These areas of research strength include:

- Biomedical Genomics and Bioinformatics
- Diagnostics and Therapeutics
- Infection, Immunity and Epidemiology
- Physiology and Developmental Biology

There are two MS options available from which a student may choose, the thesis concentration and the non-thesis concentration. The Master of Science in Biomedical Sciences with a thesis concentration provides an academic and research experience that educates students within the context of cross-disciplinary knowledge and prepares students to excel in a research career in areas as diverse as academia, government, industry, and others. Additionally, a Master of Science in Biomedical Sciences with a non-thesis concentration has a curriculum designed for students who wish to gain academic preparation beyond the undergraduate degree before entering a professional program of study or employment in human or animal healthcare.

This program is also approved for delivery via asynchronous or synchronous distance education technology.

Additional details, including information about the admissions process, can be found at Biomedical Sciences (BIMS) Graduate Program (tamu.edu) (https://vetmed.tamu.edu/bims-graduate-program/).

Steps to Fulfill a Masters Program (http://catalog.tamu.edu/graduate/academic-expectations-general-degree-requirements/#stepstoffulfillgraduateprogramtext)

Program Requirements

Program Requirements

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Student’s Advisory Committee

On-Campus and Distance Education Degree Programs

Non-Thesis
The student’s advisory committee for the master’s degree with a non-thesis concentration will consist of only the chair selected during the first semester of enrollment. The chair of the advisory committee must be from a department within the College of Veterinary Medicine and Biomedical Sciences. Only graduate faculty members located on a campus of Texas A&M University may serve as chair of a student’s advisory committee.

Thesis
The student’s advisory committee for the master’s degree with a thesis concentration will consist of no fewer than three members of the graduate faculty representative of the student’s field(s) of study and research. The chair or the co-chair of the advisory committee must be from a department within the College of Veterinary Medicine and Biomedical Sciences and selected during the admission process. Only graduate faculty members located at a campus of Texas A&M University may serve as chair of the advisory committee for students enrolled in the on-campus degree program. At least one or more of the advisory committee members must have an appointment to a department other than the department of the chair or co-chair.

On-Campus Thesis-Option Degree Program

Graduate faculty members located off campus from any other department may serve as a member or co-chair (but not chair) for students enrolled in the on-campus degree programs when a faculty member from a campus of Texas A&M University is the chair. The chair, in consultation with the student, will select the remainder of the advisory committee. The chair of the committee, who usually has immediate supervision of the student’s research and thesis, has the responsibility for calling required meetings of the committee and for calling meetings at any other time considered desirable.

Distance Education Thesis-Option Degree Program

Students enrolled in the distance education degree program must have an approved chair or co-chair from their off-campus location. At least one or more of the advisory committee members must have an appointment to a department other than the department of the chair or co-chair. The chair, in consultation with the student, will select the remainder of the advisory committee. The chair of the committee, who usually has immediate supervision of the student’s research and thesis, has the responsibility for calling required meetings of the committee and for calling meetings at any other time considered desirable.

On-Campus and Distance Education Degree Programs

For both thesis and non-thesis options, if the chair of a student’s advisory committee voluntarily leaves the University and the student is near completion of the degree and wants the chair to continue to serve in this role, the student is responsible for securing a current member of the University Graduate Faculty, from the student’s academic program and located near the Texas A&M University campus site, to serve as the co-chair of the committee. The Department Head or Chair of Intercollegiate faculty may request in writing to the Associate Provost and Dean of the Graduate and Professional School that a faculty member who is on an approved leave of absence or has voluntarily separated from the university, be allowed to continue to serve in the role of chair of a student’s advisory committee without a co-chair for up to one year. The students should be near completion of the degree. Extensions beyond the one year period can be granted with additional approval of the Dean.

If the chair of the student’s advisory committee is unavailable for an extended 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, 691, 692 or 693, the
student may request, in writing, that the department head appoint an
alternate advisory committee chair during the interim period.

The duties of the committee include responsibility for the proposed
degree plan, the research proposal, the thesis and the final examination.
In addition, the committee as a group and as individual members are
responsible for advising the student on academic matters, and, in the
case of academic deficiency, initiating recommendations to the Graduate
and Professional School.

The committee members’ approval on the degree plan indicate their
willingness to accept the responsibility for guiding and directing the
entire academic program of the student and for initiating all academic
actions concerning the student. Although individual committee members
may be replaced by petition for valid reasons, a committee cannot
resign en masse.

Degree Plan
On-Campus and Distance Education Degree Programs

The student’s advisory committee, in consultation with the student, will
develop the proposed degree plan. The degree plan must be completed
and filed with the Graduate and Professional School prior to the deadline
imposed by the student’s college or interdisciplinary degree program,
if applicable, and no later than 90 days prior to the date of the final oral
examination or thesis defense.

A student should submit the degree plan using the online Document
Processing Submission System (http://ogsdpss.tamu.edu).

A student submitting a proposed degree plan for a Master of Science
degree should designate on the official degree plan the appropriate
program option.

Additional coursework may be added to the approved degree plan
by petition if it is deemed necessary by the advisory committee to
correct deficiencies in the student’s academic preparation. No changes
can be made to the degree plan once the student’s Request for Final
Examination or Request for Final Examination Exemption is approved by
the Graduate and Professional School.

Credit Requirement
On-Campus and Distance Education Degree Programs

The master’s with a non-thesis concentration requires successful
completion of a minimum of 30 semester credit hours of approved
coursework.

The master’s with a thesis concentration requires successful completion
of a minimum of 32 semester credit hours of approved courses and
research.

Ordinarily the student will devote the major portion of his or her time to
work in one or two closely related fields. Other work will be in supporting
fields of interest.

Transfer of Credit
On-Campus and Distance Education Degree Programs

A student who has earned 12 hours of graduate credit in residence
at Texas A&M University may be authorized to transfer courses in
excess of the limits prescribed below upon the advice of the advisory
committee and with the approval of the Graduate and Professional
School. Courses taken in residence at an accredited U.S. institution or
approved international institution 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. Otherwise, the
limitations stated in the following section apply. Coursework in which
no formal grades are given or in which grades other than letter grades
(A or B) are earned (for example, CR, P, S, U, H, etc.) is not accepted for
transfer credit. Courses appearing on the degree plan with grades of D,
F or U may not be absolved by transfer work. Credit for thesis research
or the equivalent is not transferable. Credit for coursework submitted for
transfer from any college or university must be shown in semester credit
hours or equated to semester credit hours. An official transcript from
the university at which the transfer coursework was taken must be sent
directly to the Office of Admissions.

Courses used toward a degree at another institution may not be applied
for graduate credit. If the course to be transferred was taken 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.

Grades for courses completed at other institutions are not included in
computing the GPA.

Limitations on the Use of Transfer, Extension and
Certain Other Courses
On-Campus and Distance Education Degree Programs

Some departments may have more restrictive requirements for transfer
work. If otherwise acceptable, certain courses may be used toward
meeting credit-hour requirements for the master’s degree under the
following limitations.

1. The maximum number of credit hours which may be considered for
transfer credit is the greater of 12 hours or one-third (1/3) of the total
hours of a degree plan. The following restrictions apply:

   • Graduate and/or upper-level undergraduate courses taken
     in residence at an accredited U.S. institution, or approved
     international institution with a final grade of B or greater will be
     considered for transfer credit if, at the time the courses were
     completed, the student was in degree-seeking status at Texas
     A&M University, or the student was in degree-seeking status at
     the institution at which the courses were taken; and if the courses
     would be accepted for credit toward a similar degree for a student
     in degree-seeking status at the host institution.

   • Courses previously used for another degree are not acceptable for
degree plan credit.

2. 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.

3. A zero credit 684 or 685 course is only allowed for non-thesis
option master’s students. A zero credit 681 course can be used for
either thesis or non-thesis option master’s students. Other courses,
including 691 research hours, are not eligible for zero credit.

4. Not more than 12 hours may be used in any combination of the
following categories:

   • Not more than 8 hours in the combination of 691 (research), 684
     (Professional Internship) or  may be used.

   • Not more than 8 hours of 685 (Directed Studies) may be used.

   • Not more than 3 hours of 690 (Theory of Research) may be used.
1. Manuscript must be resubmitted as a new document, and the entire
   department head (or chair of the intercollegiate faculty, if applicable)
   School. This processing fee is for the thesis/dissertation services
   time thesis/dissertation processing fee through Student Business
   Each student who submits a document for review is assessed a one-
   the
   Deadline dates for submitting the thesis are announced each semester
   originally signatures must be received by the Graduate and Professional
   file must be uploaded to the
   submit his/her thesis in electronic format as a single PDF file. The PDF
   advisory committee and the head of the student's major department
   significance and results of the student's original research. Guidelines for
   must reflect a comprehensive understanding of the pertinent literature
   An acceptable thesis is required for the Master of Science degree for
   On-Campus and Distance Education Degree Programs
   is required to pass a student on his or her exam. A department, or
   will excuse themselves from the proceedings. A positive vote
   advanced degrees. Upon completion of the questioning of the candidate,
   option student must be registered in the University in the semester or
   the thesis-option student must be registered in the University in the
   adequate time to review the document. The examination is conducted
   examination may not be administered
   The final examination may not be administered
   review process must begin again. All original submittal deadlines must be
   Not more than 3 hours of 695 (Frontiers in Research) may be
   5. A maximum of 2 hours of Seminar (681).
   6. A maximum of 9 hours of advanced undergraduate courses (300- or
   400-level).
   7. For graduate courses of three weeks’ duration or less, taken at other
   institutions, up to 1 hour of credit may be obtained for each five-day
   week of coursework. Each week of coursework must include at least
   15 contact hours.
   8. Continuing education courses may not be used for graduate credit.
   9. Extension courses are not acceptable for credit.
   10. For non-distance degree programs, no more than 50 percent of the
   credit hours required for the program may be completed through
   distance education courses.

11. To receive a graduate degree from Texas A&M University, students
must earn one-third or more of the credits through the institution's
own direct instruction. This limitation also applies to joint degree
programs.

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

**Thesis Option**

**On-Campus and Distance Education Degree Programs**

An acceptable thesis is required for the Master of Science degree for
a student who selects the thesis option program. The finished work
must reflect a comprehensive understanding of the pertinent literature
and express in clear English, the problem(s) for study, the method,
significance and results of the student’s original research. Guidelines for
the preparation of the thesis are available in the *Thesis Manual*, which
is available online at the Graduate and Professional School (https://
grad.tamu.edu/) website.

After successful defense (or exemption) and approval by the student’s
advisory committee and the head of the student’s major department
(or chair of the intercollegiate faculty, if appropriate), the student must
submit his/her thesis in electronic format as a single PDF file. The PDF
file must be uploaded to the Graduate and Professional School (https://
grad.tamu.edu/) website. Additionally, a signed paper approval form with
original signatures must be received by the Graduate and Professional
School. The PDF file and the signed approval form are required by the
deadline.

Deadline dates for submitting the thesis are announced each semester
or summer term in the “Graduate and Professional School Calendar” (see
Time Limit statement). These dates also can be accessed via
the Graduate and Professional School (https://grad.tamu.edu/) website.

Each student who submits a document for review is assessed a one-
time thesis/dissertation processing fee through Student Business
Services. This processing fee is for the thesis/dissertation services
provided. After commencement, theses and dissertations are digitally
stored and made available through the Texas A&M Libraries.

A thesis that is deemed unacceptable by the Graduate and Professional
School because of excessive corrections will be returned to the student’s
department head (or chair of the intercollegiate faculty, if applicable). The
manuscript must be resubmitted as a new document, and the entire

**Thesis Proposal**

**On-Campus and Distance Education Degree Programs**

For the thesis option Master of Science degree, the student must prepare
a thesis proposal for approval by the advisory committee and the
head of the major department or chair of the interdisciplinary faculty,
if applicable. This proposal must be submitted to the Graduate and
Professional School at least 20 working days prior to the submission of
the request for the final examination.

Compliance issues must be addressed if a graduate student is
performing research involving human subjects, animals, infectious
biohazards and recombinant DNA. A student involved in these types
of research should check with the Office of Research Compliance and
Biosafety at (979) 458-1467 to address questions about all research
compliance responsibilities. Additional information can also be obtained
on the Office of Research Compliance and Biosafety website.

**Final Examination/Thesis Defense**

**On-Campus and Distance Education Degree Programs**

A student must pass a final examination by dates announced each
semester or summer term in the Graduate and Professional School
Calendar. To be eligible to take the final examination, a student’s GPA
must be at least 3.00 for courses on the degree plan and for all courses
completed at Texas A&M which are eligible to be applied to a graduate
degree, and there must be no unabsolved grades of D, F or U for any
course listed on the 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. All coursework on the degree plan must have been completed
with the exception of those hours for which the student is registered. For
thesis-option students, an approved thesis proposal must be on file in the
Graduate and Professional School according to published deadlines prior
to the final examination or submission of the request for exemption from
the final examination.

A request to hold and announce the final examination must be submitted
to the Graduate and Professional School a minimum of 10 working days
in advance of the scheduled date for the examination. The Graduate and
Professional School must be notified in writing of any cancellations. A
student may be given only one opportunity to repeat the final examination
for the master’s degree and that must be within a time period that does
not extend beyond the end of the next regular semester (summer terms
are excluded).

For thesis option students, the final examination covers the thesis and
all work taken on the degree plan and at the option of the committee may
be written or oral or both. The final examination may not be administered
before the thesis is available to all members of the student's advisory
committee in substantially final form, and all members have had
adequate time to review the document. The examination is conducted
by the student's advisory committee as finally constituted. A thesis
option student must be registered in the University in the semester or
summer term in which the final examination is taken. Persons other
than members of the graduate faculty may, with mutual consent of
the candidate and the major professor, attend final examinations for
advanced degrees. Upon completion of the questioning of the candidate,
all visitors must excuse themselves from the proceedings. A positive vote
by all members of the graduate committee with at most one dissension
is required to pass a student on his or her exam. A department, or
interdisciplinary degree program, may have a stricter requirement provided there is consistency within all degree programs within a department or interdisciplinary degree program.

The Report of the Final Examination Form must be submitted with original signatures of only the committee members approved by the Graduate and Professional School. If an approved committee member substitution (1 only) has been made, his/her signature must also be submitted to the Graduate and Professional School. If necessary, multiple copies of the form may be submitted with different committee member original signatures. If an approved committee member substitution (1 only) has been made, his/her signature must be included on the form submitted to the Graduate and Professional School.

A thesis option candidate may petition to be exempt from his/her final examination provided his/her degree plan GPA is 3.500 or greater and he/she has the approval of the advisory committee, the head of the student’s major department, or intercollegiate chair, if appropriate, and the Graduate and Professional School. It is required that the petition for exemption be submitted the same semester the student intends to submit the thesis.

Non-Thesis Option
The final examination is not required for the non-thesis option Master of Science in Biomedical Sciences. The student will instead be required to successfully complete a capstone experience defined in the curriculum of the degree program.

A student pursuing the non-thesis option is not allowed to enroll in 691 (research) for any reason and 691 may not be used for credit toward a non-thesis option Master of Science degree. A maximum of 4 credit hours of 684 (Professional Internship), 8 credit hours of 685 (Directed Studies), and up to 3 credit hours of 690 (Theory of Research) or 695 (Frontiers in Research) may be used toward the non-thesis option Master of Science degree. In addition, any combination of 684, 685, 690 and 695 may not exceed 25 percent of the total credit hour requirement shown on the individual degree plan. All requirements for the non-thesis option Master of Science degree other than those specified above are the same as for the thesis option degree.

The department head or the chair of an intercollegiate faculty (if appropriate) for the program may approve an exception for a PhD student who changes to a non-thesis option MS degree program after at least one year of PhD studies to use 691 credits toward a non-thesis option Master of Science degree. The department head or chair of an intercollegiate faculty (if appropriate) for the program may approve an exception for a master’s student who changes from a MS thesis option degree to a MS non-thesis option degree program to use 691 credits toward a non-thesis option Master of Science degree. In both cases, the student is allowed to use a maximum of 8 credit hours of 685 and 691 combined. Departments, Colleges, and Interdisciplinary Degree Programs may opt to establish higher standards. Further any combination of 684, 685, 690, 691 and 695 may not exceed 25 percent of the total credit hour requirement shown on the individual degree plan. All requirements for the non-thesis option Master of Science degree other than those specified above are the same as for the thesis option degree.

Additional Requirements

Additional Requirements

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- Continuous Registration (p. 4)
- Time Limit (p. 4)
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Residence

On-Campus Degree Program
In partial fulfillment of the residence requirement for the degree of Master of Science, the student must complete 9 resident credit hours during one regular semester or one 10-week summer semester in resident study at Texas A&M University. Upon recommendation of the student’s advisory committee, department head or Chair of the Interdisciplinary Program, if appropriate, 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 total residence requirements by completion of less-than-full time course loads each semester. In order to be considered for this, the student is required to submit a Petition for Waivers and Exceptions along with verification of his/her employment to the Graduate and Professional School.

See Residence Requirements (http://catalog.tamu.edu/graduate/academic-expectations-general-degree-requirements/
degreerequirementstext).

Distance Education Degree Program
The distance education modality does not have a residence requirement.

Continuous Registration

On-Campus and Distance Education Degree Programs
A student in the thesis option of the Master of Science program who has completed all coursework on his/her degree plan other than 691 (research) is required to be in continuous registration until all requirements for the degree have been completed.

See Continuous Registration Requirements (http://catalog.tamu.edu/graduate/academic-expectations-general-degree-requirements/
#registrationandacademicstatustext).

Time Limit

On-Campus and Distance Education Degree Programs
All degree requirements must be completed within a period of seven consecutive years for the degree to be granted. A course will be considered valid until seven years after the end of the semester in which it is taken. Graduate credit for coursework which is more than seven calendar years old at the time of the final examination (oral or written) may not be used to satisfy degree requirements.

A student who has chosen the thesis option must have the final corrected copies of the thesis cleared by the Graduate and Professional School within one year of the semester in which the final exam is taken, or a final exam exemption petition was approved. Exams taken in between terms will expire at the end of the term that ended prior to the exam. For example, a final exam taken and passed during the fall 2022 semester will expire at the end of the fall 2023 semester. A final exam taken in the time between the summer and fall 2022 semesters will expire at the end of the summer 2023 semester.
Foreign Languages
On-Campus and Distance Education Degree Programs

No specific language requirement exists for the Master of Science degree.