MASTER OF SCIENCE IN CYBERSECURITY

The Master of Science in Cybersecurity degree program is designed to equip students with advanced knowledge and practical skills in safeguarding digital infrastructures against fast evolving cyber threats.

This program provides a rigorous curriculum that combines theoretical foundations with hands-on experience in areas such as computer security, network security, cryptography, ethical hacking, risk management, incident response and secure software development. Students will gain expertise in recognizing vulnerabilities, protecting critical assets and implementing cybersecurity solutions in diverse settings.

Through the Master of Science in Cybersecurity, graduate students in the Department of Computer Science and Engineering will specialize in cybersecurity. The program will require 30 hours of coursework. It will include courses focused on cybersecurity fundamentals and practice, as well as computer science elective courses. It is expected that students in this program will take approximately 2 years to complete the degree.

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

Program Requirements

Program Requirements

- Student's Advisory Committee (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/computer-science/cybersecurity-ms/#students-advisory-committee)
- Degree Plan (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/computer-science/cybersecurity-ms/#degree-plan)
- Credit Requirements (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/computer-science/cybersecurity-ms/#credit-requirement)
- Limitations on Credits and Coursework (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/computer-science/cybersecurity-ms/#limitations)
- Final Examination (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/computer-science/cybersecurity-ms/#final-examination)

Student's Advisory Committee

On-Campus and Distance Education Degree Programs

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 Science in Cybersecurity student's advisory committee will consist of no fewer than one member, where the chair must be from the student's major department. Typically, the departmental graduate advisor will serve in this role, or the departmental graduate advisor may appoint/approve another faculty member in the department to serve as the student's advisory committee chair.

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

On-Campus and Distance Education Degree Programs

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

On-Campus and Distance Education Degree Programs

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 Science in Cybersecurity.

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.

Limitations on Credits and Coursework

On-Campus and Distance Education Degree Programs

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.

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

Thesis Option Students

1. A maximum of 12 credit hours may be used, in any combination of the following, on a thesis master's degree plan:
   a. No more than 8 credit hours in any combination of the following:
      i. no more than 8 credit hours of 684 (Professional Internship) and
      ii. no more than 8 credit hours of 691 (Research).
   b. No more than 8 credit hours of 685 (Directed Studies).
   c. No more than 3 credit hours of 690 (Theory of Research).
   d. No more than 3 credit hours of 695 (Frontiers in Research).
2. Certain zero-credit courses may be allowed on a thesis master's degree plan:
   a. A zero-credit 681 (Seminar) course may be used.
   b. Other courses – including 684 (Professional Internship), 685 (Directed Studies), and 691 (Research) hours – are not eligible for zero credit.
3. 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.

Non-Thesis Option Students

1. A student pursuing a non-thesis option master's degree may not enroll in 691 (Research) courses for any reason. Under special circumstances, however, students in a non-thesis Master of Arts or Master of Science degree program may request application of 691 hours on a degree plan under the following conditions:
   a. The Department Head or interdisciplinary degree Program Chair (if applicable) for the program may approve an exception for a student who changes to a non-thesis option MA or MS degree program from a PhD (after at least one year of study) or a thesis option MA or MS degree.
   b. If approved, a maximum of 8 credit hours in combination of 685 (Directed Studies) and 691 (Research) may be used.
   c. Colleges/schools, departments, and interdisciplinary degree programs may establish additional requirements.
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.

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.

Final Examination

For non-thesis option Master of Science in Cybersecurity students, a Final Examination is not required.

Additional Requirements

Additional Requirements

- Continuous Registration (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/computer-science/cybersecurity-ms/#continuous-registration)
- Residence (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/computer-science/cybersecurity-ms/#residence)

- Scholastic Requirements (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/computer-science/cybersecurity-ms/#scholastic-requirements)
- Professional Internship or Practicum (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/computer-science/cybersecurity-ms/#internship)
- Foreign Languages (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/computer-science/cybersecurity-ms/#languages)
- Time Limits (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/computer-science/cybersecurity-ms/#time-limit)
- Graduation (https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/computer-science/cybersecurity-ms/#graduation)

Continuous Registration

On-Campus and Distance Education Degree Programs

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

On-Campus Degree Programs

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.

A student must complete 12 semester credit hours in resident study at Texas A&M University to satisfy the Residence Requirement for the Master Science in Cybersecurity.

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.

Distance Education Degree Programs

There is no Residence Requirement for the distance education modality.

Scholastic Requirements

On-Campus and Distance Education Degree Programs

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

On-Campus Degree Programs

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.

A student who undertakes a professional internship must return to the campus. Internship hours are in addition to the required 30 credit hours.

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

Distance Education Degree Programs

There are no internship or practicum requirements for distance non-thesis Master Science in Cybersecurity students.

Foreign Languages

On-Campus and Distance Education Degree Programs

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

For the Master of Science degree, a foreign language is not required.

Time Limits

On-Campus and Distance Education Degree Programs

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

On-Campus and Distance Education Degree Programs

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.