Well-trained statisticians are in high demand in various application areas including health and medicine, business, engineering, physical sciences, environmental studies, and government. The combined degree program enables ambitious and academically talented statistics majors at Texas A&M University to earn both a bachelor’s degree and a master’s degree within a period of five years after entering Texas A&M as a freshman. Depending on the electives selected, a student completing the combined program will be prepared to enter:

- Employment as a statistical analyst or as a data scientist;
- The professional job marketplace for quantitatively trained professionals;
- A career in secondary education;
- A doctoral program in statistics, biostatistics, or in a related discipline, at Texas A&M or another university.

Program Requirements

The Fast Track program enables a Statistics major to earn both a bachelor’s degree (120 undergraduate credit hours including 6 dual credit graduate hours) and a master’s degree (36 credit hours including the 6 dual credit graduate hours) in Statistics within a period of five years after entering Texas A&M. Students can complete the required credit hours for each degree without diminishing scope or quality of work. The scheduling of the graduate level courses is flexible since many of the MS electives are offered during the summer. A student completing this program will be prepared for employment as a senior statistical analyst or to continue to a Ph.D. program in statistics or a related field.

Students interested in this program will apply during the fall of their junior year and, if admitted, begin taking masters-level courses in the fall of their senior year with an undergraduate classification. Students are reclassified as degree seeking master’s students after completing 96 credit hours, typically in the following semester. These credit hours must include all specific course prerequisites for a baccalaureate degree in Statistics, as well as the courses required by the College of Science and by Texas A&M University for an undergraduate degree.

The following is a suggested schedule that includes the required courses for the combined BS/MS in Statistics. It is recognized that many students will change the sequence and number of courses taken in any semester. Deviations from the prescribed course sequence, however, should be made with care to ensure that prerequisites for all courses are met.

### First Year

#### Fall
- ENGL 104: Composition and Rhetoric (3)
- MATH 171: Calculus I (4)
- STAT 182: Foundations of Statistics (1)

#### Semester Credit Hours: 15

### Second Year

#### Fall
- MATH 221: Several Variable Calculus (4)
- POLS 206: American National Government (3)
- STAT 211: Principles of Statistics I (3)
- Communication requirement (3)
- Science elective (1)

#### Semester Credit Hours: 16

#### Spring
- MATH 304 or MATH 323: Linear Algebra or Linear Algebra (3)
- POLS 207: State and Local Government (3)
- STAT 212: Principles of Statistics II (3)
- Computer science elective (2)

#### Semester Credit Hours: 16

### Third Year

#### Fall
- STAT 404: Statistical Computing (3)
- STAT 414: Mathematical Statistics I (3)
- Mathematics elective (5)
- Outside specialization elective (6)

#### Semester Credit Hours: 15

#### Spring
- STAT 408: Introduction to Linear Models (3)
- STAT 415: Mathematical Statistics II (3)
- Outside specialization elective (6)

#### Semester Credit Hours: 15

### Fourth Year

#### Fall
- STAT 406: Design and Analysis of Experiments (3)
- STAT 641: The Methods of Statistics I (3)
- Mathematics or Statistics elective (5)
- Outside specialization elective (6)

#### Semester Credit Hours: 15

#### Spring
- STAT 482: Statistics Capstone (3)

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1. Science elective
2. Computer science elective
3. Communication requirement
4. Elective hours
5. Mathematics elective
6. Outside specialization elective
7. Outside specialization elective
Students must take STAT 641 and STAT 642. These 6 hours will be used towards both the BS and MS degree in Statistics.

The overall program hours (156 hours) includes 36 hours for a non-thesis option or 32 hours for a thesis option (up to six of which are STAT 691). STAT 641 and STAT 642 may double count toward both degrees. The remaining graduate hours must be taken from 600 level STAT courses not including STAT 601, STAT 651, STAT 652, or STAT 658. Students are required to take one semester hour of STAT 681 and two semester hours of STAT 684. For additional information concerning this and other requirements of the master’s program including the Master’s diagnostic examination, reference https://www.stat.tamu.edu/ms-statistics (https://www.stat.tamu.edu/ms-statistics/).

Students will not be permitted to receive credit for both the 400- and 600-level versions of certain courses because the content and learning outcomes are too similar (e.g. STAT 404/STAT 604, STAT 408/STAT 608, STAT 407/STAT 607, STAT 626, STAT 436/STAT 636, STAT 438/STAT 638, STAT 445/STAT 645, STAT 446/STAT 646, STAT 459/STAT 659).

*If a grade of D or F is earned in any of the following courses, MATH 151/MATH 171, MATH 152/MATH 172, MATH 221/MATH 251/MATH 253, MATH 300, MATH 304/MATH 323, STAT 211, or STAT 212, this course must be immediately retaken and a grade of C or better earned. The department will allow at most two D’s in upper-level (325-499) courses. If a third D is earned, one of the three courses in which a D was earned must be retaken and a grade of C or better earned.

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**STAT 642** The Methods of Statistics II 7 3
Outside specialization elective 6 3
Elective hours 4 4

**Semester Credit Hours** 13

**Fifth Year**

**Fall**
Graduate coursework 8 18

**Semester Credit Hours** 18

**Spring**
Graduate coursework 8 18

**Semester Credit Hours** 18

**Total Semester Credit Hours** 156

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1 Two lower-level science courses are to be selected from ASTR 111; BIOL 111; BIOL 112; CHEM 119; CHEM 120; PHYS 207/PHYS 227; PHYS 206/PHYS 226. A third science course (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#life-physical-sciences) is to be selected from any course satisfying the life and physical sciences requirement for the University Core Curriculum.

2 Select 8 hours from CSCE 110, CSCE 111, CSCE 121, or CSCE 206.

3 Select 3 hours from COMM 203, COMM 205, or COMM 243, which fulfills the communication (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#communication) requirement for the University Core Curriculum (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/).

4 Three elective hours must be chosen from the approved University Core Curriculum list for language, philosophy and culture (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture), three elective hours must be chosen from the approved University Core Curriculum list for creative arts (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts), and three elective hours must be chosen from the approved University Core Curriculum list for social and behavioral sciences (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#social-behavioral-sciences). In addition, 3 hours must be in the area of cultural discourse (CD) and 3 hours of courses must be in the area of international and cultural diversity (http://catalog.tamu.edu/undergraduate/general-information/degree-information/international-cultural-diversity-requirements/) (ICD). These may be in addition to University Core Curriculum courses, or if a course in this category satisfies an area of the Core, it can be used to meet both requirements.

5 The student must take a total of at least 6 hours of mathematics and statistics elective courses. Students must take at least one course from the following list of mathematics courses: MATH 300, MATH 302, MATH 308, MATH 409, MATH 410, MATH 417 or MATH 437, MATH 442, MATH 446, MATH 447, MATH 469, ISEN 320, ISEN 340, ISEN 355. The second elective course can be selected from the previously listed mathematics courses or from the following statistics courses: STAT 407, STAT 436, STAT 438, STAT 445, STAT 446, STAT 459, STAT 485, STAT 489, STAT 491, ISEN 350.

6 Students must take 12 hours in an outside specialization area upon approval by a departmental advisor. At least 6 hours must be upper level hours.