MATHMATICS

College of Natural Science and Mathematics
Department of Mathematics and Statistics
907-474-7332
www.dms.uaf.edu

M.A.T., M.S., Ph.D. Degrees
Minimum Requirements for Degrees: M.A.T.: 36 credits;
M.S.: 30 – 35 credits; Ph.D.: 18 thesis credits

The number of new fields in which professional mathematicians find
employment grows continually. This department prepares students for
careers in industry, government, and education.

The M.S. in mathematics prepares students for Ph.D. work, in addi-
tion to providing a terminal degree for those planning to enter in-
dustry or education. The M.A.T. degree prepares graduates to teach
secondary school mathematics. The aim of the Ph.D. program is to
provide the student with the expertise to accomplish significant re-
search in applied or pure mathematics, as well as to provide a broad
and deep professional education.

In addition to the major programs, the department provides a num-
ber of service courses in support of other programs within the univer-
sity. Current and detailed information on mathematics degrees and
course offerings is available from the department.

The Department of Mathematics and Statistics also offers programs
in statistics (see separate listings).

Graduate Program — M.A.T. Degree
1. Complete the following admission requirements:
   a. Submit three letters of recommendation concerning the applicant’s
      educational background and quantitative training.
   b. Submit complete transcripts for all college-level work.
   c. Submit a resume.
   d. Submit a written statement of goals.
   e. The department does not require any GRE, but recommends
      applicants provide GRE general scores.
   f. Complete and submit a TOEFL score of at least 600 (this re-
      quirement is only for foreign applicants who seek a teaching
      assistantship).
   g. The department gives preference to foreign applicants who also
      submit results of the Test of Spoken English.
2. Complete the general university requirements (page 202).
3. Complete the M.A.T. degree requirements (page 208).
4. Complete the following:
   MATH courses* .............................................................. 18
5. Minimum credits required ................................................. 36
   * At least 12 credits must be at the F600-level.

Graduate Program — M.S. Degree
1. Complete the following admission requirements:
   a. Submit three letters of recommendation concerning the applicant’s
      educational background and quantitative training.
   b. Submit complete transcripts for all college-level work.
   c. Submit a resume.
   d. Submit a written statement of goals.
   e. The department does not require any GRE, but recommends appli-
      cants provide GRE general scores.
   f. Complete and submit a TOEFL score of at least 600 (this re-
      quirement is only for foreign applicants who seek a teaching
      assistantship).
   g. The department gives preference to foreign applicants who also
      submit results of the Test of Spoken English.
2. Complete the general university requirements (page 202).
3. Complete the M.A.T. degree requirements (page 208).
4. Complete the following mathematics (core) courses:
   MATH F631—Theory of Modern Algebra 1 ........................ 4
   MATH F641—Real Analysis ............................................. 4
   MATH F651—Topology .................................................. 4
5. Complete mathematics electives.
6. Complete a project or thesis.
7. Minimum credits required ................................................. 30 – 35

Graduate Program — Ph.D. Degree
1. Complete the following admission requirements:
   a. Submit three letters of recommendation concerning the applicant’s
      educational background and quantitative training.
   b. Submit transcripts indicating completion of a master’s degree in
      mathematics or equivalent.
   c. Submit a resume.
   d. Submit a written statement of goals.
   e. The department does not require any GRE, but recommends appli-
      cants provide GRE general scores.
   f. Complete and submit a TOEFL. (For teaching assistantship con-
      sideration, foreign applicants whose native language is not English.
      Score of at least 600.)
   g. The department gives preference to applicants who also submit
      results of the Test of Spoken English.
2. Complete the general university requirements (page 202).
3. Complete the Ph.D. degree requirements (page 207).
4. Minimum credits required ................................................. 18