

Proposed Change to the Mathematics for Teacher Licensure (B.A) degree program

The Department of Mathematics and Computer Science currently requires two courses in calculus-based probability and statistics (MAT 3701 and MAT 3702). Due to several changes in the department, our other degree programs, and state requirements, we are removing the second course (MAT 3702) in the sequence as a requirement for the degree. Additionally, several similar institutions in the state do not require a second course in probability and statistics. To keep degree hours the same, students will need to select an elective course from a pre-determined list.

We are also now allowing the use of MAT 2250 – Elementary Statistics as an allowable course for a student to use to count toward a Math GPA calculation as needed. Initially there was a belief the content of MAT 2250 was similar to MAT 3701 – Probability and Statistics I and MAT 3702 – Probability and Statistics II. However upon further consideration it is apparent that MAT 2250 is an applied statistics course and does not require calculus and thus the content is different enough to allow for Math GPA consideration.

Current

Semester Hours required for the Mathematics with Teacher Licensure Major: 84 semester hour

Mathematics and Computer Science Courses (50 Hours)

- [MAT 1441G - Calculus and Analytic Geometry I](#). Credits: 5
- [CSM 2170 - Computer Science I](#). Credits: 4
- [MAT 2270 - Technology in Mathematics](#). Credits: 3
- [MAT 2400 - Introduction to Teaching Secondary Mathematics](#). Credits: 1
- [MAT 2442 - Calculus and Analytic Geometry II](#). Credits: 5
- [MAT 2443 - Calculus and Analytic Geometry III](#). Credits: 4
- [MAT 2550 - Introduction to Linear Algebra](#). Credits: 3
- [MAT 2800 - Foundations of Mathematics](#). Credits: 3
- [MAT 3271 - College Geometry I](#). Credits: 3
- [MAT 3272 - College Geometry II](#). Credits: 3
- [MAT 3400 - Teaching Secondary Mathematics](#). Credits: 3
- [MAT 3530 - Abstract Algebra](#). Credits: 4
- [MAT 3701 - Probability and Statistics I](#). Credits: 3
- [MAT 3702 - Probability and Statistics II](#). Credits: 3
- [MAT 4900 - History of Mathematics](#). Credits: 3

Professional Education Core (34 Hours)

- [EDF 2555G - Education in a Diverse Society: The Multilingual/Multicultural Classroom](#). Credits: 3

- (May also be used to satisfy General Education (Social and Behavioral Sciences) and Diversity requirement.)
- [EDF 4550 - Critical Focus on Education](#). Credits: 3
- [EDP 2330 - Educational Psychology: Foundations for Teachers](#). Credits: 3
- [SED 2000 - Inquiry Into Teaching](#). Credits: 2
- [SED 3330 - Instructional Tasks in the Secondary School](#). Credits: 4
- [SED 4330 - Literacy, Assessment, and Differentiation in Secondary Schools](#). Credits: 3
- [SPE 4500 - The Education of Individuals with Exceptional Learning Needs: Access to the General Curriculum](#). Credits: 3
- (SPE 3500 may be substituted for SPE 4500 if previously taken.)
- [STG 4000 - Multicultural/Disabilities Practicum](#). Credits: 1
- [STG 4001 - Student Teaching](#). Credits: 12 to 16
- (Register for 12 semester hours)

Additional Hours in General Education to Complete the University Requirement

Footnote:

Major GPA based on all mathematics and computer science courses taken at EIU except for:

- Any course considered a prerequisite for MAT 1441G (e.g. MAT 1270, MAT 1271, MAT 1400).
- Any course intended for elementary/middle level majors (e.g. MAT 1420, MAT 2420G, MAT 2620, MAT 3420, MAT 3620, MAT 4810, MAT 4920).
- Any course that may have content similar to content from a required degree course (e.g. CSM 2345, MAT 2250G, MAT 2110G).

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- [MAT 3530 - Abstract Algebra](#). Credits: 4
- [MAT 3701 - Probability and Statistics I](#). Credits: 3
- ~~[MAT 3702 - Probability and Statistics II](#). Credits: 3~~
- [MAT 4900 - History of Mathematics](#). Credits: 3

Elective Course (3 Hours)

At least one course must be selected from the list below. Note that some courses may have additional prerequisites beyond the required set of core courses.

- MAT 3501 – Differential Equations I. Credits 3
- MAT 3702 – Probability and Statistics II. Credits 3
- MAT 4830 – Introduction to Complex Analysis with Applications. Credits 3
- MAT 4860 – Mathematical Analysis. Credits 4
- MAT 4855 – Topology. Credits 3

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Date approved by the department or school: 8/23/2019

Date approved by the college curriculum committee: 9/12/2019

Date approved by the Honors Council (*if this is an honors course*):

Date approved by CAA: CGS: