

# BS in Mathematics - Statistics Emphasis

## Program Requirements

A minimum total of 120 credit hours is required for the BS in mathematics with an emphasis in statistics. In addition to meeting the requirements of the WSU General Education Program (<http://catalog.wichita.edu/undergraduate/academic-information/general-education-program/>) and the requirements of Fairmount College of Liberal Arts and Sciences, students must meet the following requirements:

| Course   | Title   | Hours      |
|--|---|------------|
| <b>General Education</b>   |   |            |
| Select courses to meet General Education requirements <sup>1</sup>   |   | 34-35      |
| <b>College Requirements</b>  |   |            |
| Select courses to complete all LAS Competency Areas <sup>1</sup>   |   | 24         |
| <b>Major Requirements</b>  |   |            |
| Complete all courses in Group R excluding MATH 613 <sup>2</sup>  |   | 18         |
| Select 12 additional credit hours of courses in Group B which must include one of the following sequences <sup>2</sup> |   | 12         |
| STAT 571<br>& STAT 572   | Statistical Methods I<br>and Statistical Methods II   |            |
| STAT 771<br>& STAT 772   | Theory of Statistics I<br>and Theory of Statistics II |            |
| Select one additional course from Group B or C <sup>2</sup>  |   | 3          |
| <b>Open Electives</b>  |   |            |
| Select enough electives to reach 120 credit hours  |   | 28-29      |
| <b>Total Credit Hours</b>  |   | <b>120</b> |

<sup>1</sup> Required major courses may also count towards General Education and/or LAS Competencies. Students will need to select additional electives to reach 120 credit hours required for graduation with assistance from an advisor.

<sup>2</sup> A list of courses in each group can be found at the beginning of the Mathematics section (<http://catalog.wichita.edu/undergraduate/fairmount-liberal-arts-sciences/mathematics-statistics-physics/mathematics/>).

Students under this option may select statistics courses from other departments with the approval of the department of mathematics, statistics and physics.

For students who are contemplating graduate work, it is highly recommended that they include MATH 613, MATH 547 and MATH 640 in their program, along with courses in one or more world languages.

## Applied Learning

Students in the BS in mathematics – statistics emphasis program are required to complete an applied learning or research experience to graduate from the program. The requirement can be met by completing one of the following:

1. The student completes a thesis.
2. The student attends a conference and presents at least a poster.
3. The student performs outreach in the local school district.
4. The student does a presentation in a venue involving members of the community, such as the Science Expo at Keeper of the Plains, or through participation in Math Circle, or Pi Mu Epsilon, or Math Awareness.

5. The student carries out a research project followed by a seminar presentation.