

## **Bachelor of Science in Mathematics      Sample Schedule**

A typical student planning to get a B.S. in Mathematics (who in this example entered SPU in the fall of 2023) would follow the schedule below. Courses in normal print are required for the major, while courses in *italics* are upper-division electives. A total of 19 credits of upper-division math electives are required for the B.S.

**Because many upper-division courses are only offered alternating years, all students are strongly encouraged to consult with an advisor from the faculty in the Mathematics Department to carefully plan their schedule.**

	<b>Autumn</b>	<b>Winter</b>	<b>Spring</b>
<b>Freshman Year</b> (23-24)	<b>MAT 1234</b> Calculus I  <b>MAT 2360</b> Intro Stats for the Sciences*	<b>MAT 1235</b> Calculus II	<b>MAT 1236</b> Calculus III
<b>Sophomore Year</b> (24-25)	<b>MAT 3238</b> Vector Calculus or <b>MAT 2401</b> Linear Algebra	<b>MAT 3360</b> *** <i>Probability and Statistics</i>  <b>MAT 3237</b> Differential Equations	<b>MAT 2401</b> Linear Algebra  <b>MAT 2720</b> Discrete Mathematics  <b>MAT 4363</b> ** <i>Mathematical Statistics (alternate years)</i>
<b>Junior Year</b> (25-26)	<b>MAT 3749</b> Introduction to Analysis  <b>MAT 3401</b> <i>Number Theory</i> *** (alternate years)  <b>MAT 3730</b> <i>Complex Variables</i> (alternate years)	<b>MAT 3751</b> Real Analysis II** (alternate years)  <b>MAT 3380</b> <i>Intro to Data Science</i>	<b>MAT 4402</b> Modern Algebra I  <b>MAT 3899</b> <i>Mathematical Writing</i>  <b>MAT 3333</b> *** <i>Statistical Modeling</i>
<b>Senior Year</b> (26-27)	<b>MAT 4899</b> Senior Capstone Seminar  <b>MAT 3442</b> <i>Geometry</i> (alternate years)	<b>MAT 4402</b> Modern Algebra I  <b>MAT 4830</b> ** <i>Mathematical Modeling</i> (alternate years)	<b>MAT 4403</b> Modern Algebra II (alternate years)  <b>MAT 4363</b> ** <i>Mathematical Statistics</i> (alternate years)

\*MAT 2360 can be taken any quarter in the first two years but must be taken before MAT 3360 (and MAT 3333 and MAT 3380).

\*\*MAT 4363 and 4830 are strongly recommended as two of the elective courses for the B.S. 15 credits in related approved courses in which mathematics is applied are also required.

Note that a number of courses are offered on alternate years. It is therefore quite important that students wishing to major in mathematics start out by taking the calculus sequence in their freshman year. Also, since a number of upper-division courses require MAT 3749 as a prerequisite, it is important to take that course during the autumn quarter of the junior year.