

# MATHEMATICS (B.A.)

The Bachelor of Arts (B.A.) curriculum provides students with a solid foundation in mathematics, while allowing them to combine the study of mathematics with an in-depth study of another field. For example, students can acquire excellent credentials for medical school by combining their B.A. in Mathematics with at least two years of chemistry and at least one year each of biology and physics. Additionally, the B.A. in Mathematics provides strong credentials for law school as well as for graduate school in mathematics.

Mathematics majors complete a minimum of 120 credits to earn a bachelor's degree, including 41–44 credits of core courses (<https://catalog.salve.edu/undergraduate/curriculum-degree-programs/>) and 53 credits of major courses.

Students seeking the degree of Bachelor of Arts in Mathematics are required to take the following courses:

Code	Title	Credits
MTH-173	Discrete Mathematics	3
MTH-195	Calculus I	4
MTH-196	Calculus II	4
MTH-203	Calculus III	4
MTH-211	Linear Algebra	3
MTH-213	Differential Equations	3
MTH-315	Geometry	3
MTH-411	Analysis I	3
MTH-412	Analysis II	3
MTH-421	Abstract Algebra	3
MTH-490	Senior Seminar Capstone	3
STA-341	Statistical Theory I	3
STA-342	Statistical Theory II	3
CSC-103	Computer Programming I	3
Science core requirement		
PHY-205	Principles of Physics I	4
PHY-206	Principles of Physics II	4
<b>Total Credits</b>		<b>53</b>

## GPA requirement

To remain in the Mathematics major program, a student must maintain an average of C in all required courses for the Mathematics major, with no grade less than C- in any of the Mathematics major foundational courses, which consist of:

Code	Title	Credits
MTH-173	Discrete Mathematics	3
MTH-195	Calculus I	4
MTH-196	Calculus II	4
MTH-203	Calculus III	4
MTH-211	Linear Algebra	3

## Degree Plan for Mathematics (B.A.) (Starting in an odd year)

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
FYT-101	First Year Studio	1
UNV-101	University Seminar	3
MTH-195	Calculus I	4
CSC-103	Computer Programming I	3
Core Course		3
<b>Credits</b>		<b>14</b>
<b>Spring</b>		
Core Course		3
Core Course		3
UNV-102	University Seminar II	3
MTH-196	Calculus II	4
MTH-173	Discrete Mathematics	3
<b>Credits</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
GST-098	Sophomore Studio <sup>1</sup>	1
RTS-225 or PHL-225	The Quest for the Ultimate: Dialogue with Global Religious Traditions <sup>2</sup> or Quest for the Good Life	3
MTH-203	Calculus III	4
MTH-211	Linear Algebra	3
PHY-205	Principles of Physics I	4
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
RTS-225 or PHL-225	The Quest for the Ultimate: Dialogue with Global Religious Traditions <sup>2</sup> or Quest for the Good Life	3
MTH-213	Differential Equations	3
PHY-206	Principles of Physics II	4
Core Course		3
Core Course		3
<b>Credits</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
STA-341	Statistical Theory I	3
MTH-421	Abstract Algebra	3
Core Course		3
Core Course		3
Core Course		3
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
STA-342	Statistical Theory II	3
Elective		3
Elective		3
Elective		3
Elective		3
<b>Credits</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
MTH-411	Analysis I	3
MTH-315	Geometry	3
MTH-490	Senior Seminar Capstone	3
Elective		3
Elective		3
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
MTH-412	Analysis II	3

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Elective	3
Elective	3
Elective	3
Elective	3
<b>Credits</b>	<b>15</b>
<b>Total Credits</b>	<b>121</b>

<sup>1</sup> This weekend workshop may be taken in either the fall or spring semester of sophomore year.

<sup>2</sup> One each semester.

### Degree Plan for Mathematics (B.A.) (Starting in an even year)

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
FYT-101	First Year Studio	1
UNV-101	University Seminar	3
MTH-195	Calculus I	4
CSC-103	Computer Programming I	3
Core Course		3
<b>Credits</b>		<b>14</b>
<b>Spring</b>		
Core Course		3
Core Course		3
UNV-102	University Seminar II	3
MTH-196	Calculus II	4
MTH-173	Discrete Mathematics	3
<b>Credits</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
GST-098	Sophomore Studio <sup>1</sup>	1
RTS-225 or PHL-225	The Quest for the Ultimate: Dialogue with Global Religious Traditions <sup>2</sup> or Quest for the Good Life	3
MTH-203	Calculus III	4
MTH-211	Linear Algebra	3
PHY-205	Principles of Physics I	4
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
RTS-225 or PHL-225	The Quest for the Ultimate: Dialogue with Global Religious Traditions <sup>2</sup> or Quest for the Good Life	3
MTH-213	Differential Equations	3
PHY-206	Principles of Physics II	4
Core Course		3
Core Course		3
<b>Credits</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
MTH-315	Geometry	3
MTH-411	Analysis I	3
Core Course		3
Core Course		3
Core Course		3
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
MTH-412	Analysis II	3
Elective		3
Elective		3
Elective		3

Elective		3
<b>Credits</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
STA-341	Statistical Theory I	3
MTH-421	Abstract Algebra	3
MTH-490	Senior Seminar Capstone	3
Elective		3
Elective		3
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
STA-342	Statistical Theory II	3
Elective		3
Elective		3
Elective		3
Elective		3
<b>Credits</b>		<b>15</b>
<b>Total Credits</b>		<b>121</b>

<sup>1</sup> This weekend workshop may be taken in either the fall or spring semester of sophomore year.

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