MATHEMATICS (B.A.) LEADING TO ELECTRICAL, MECHANICAL, OR SYSTEMS SCIENCE AND ENGINEERING (B.S.)

Students enrolled in the 3+2 engineering dual degree and majoring in mathematics complete a minimum of 120 credits to earn a bachelor's degree. While enrolled at Salve Regina University, students complete a minimum of 40 credits of core courses (https://catalog.salve.edu/undergraduate/curriculum-degree-programs/), 41 credits of major courses, and up to 12 credits of elective courses. The remaining 27 credits are completed after transfer to Washington University. Before conferral of the B.A. in Mathematics from Salve Regina University, the student must request that Washington University forward transcripts to verify completion of all required coursework. See Engineering Dual Degree (https://catalog.salve.edu/undergraduate/academic-programs/engineering-32-dual-degree/) for more information.

Courses required of all mathematics majors (32 credits):

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
CSC-103	Computer Programming I	3
PHY-205	Principles of Physics I	4
PHY-206	Principles of Physics II	4
Select one option depending on calendar year:		9
Courses required for mathematics majors entering in an EVEN calendar year (9 credits):		
MTH-315	Geometry	
MTH-411	Analysis I	
MTH-412	Analysis II	
Courses required for mathematics majors entering in an ODD calendar year:		
MTH-421	Abstract Algebra	
STA-341	Statistical Theory I	
STA-342	Statistical Theory II	
Modified core curriculum		
FYT-101	First Year Studio	1
UNV-101	University Seminar	3
UNV-102	University Seminar II	3
PHL-225	Quest for the Good Life	3
RTS-225	The Quest for the Ultimate: Dialogue with Global Religious Traditions	3
Seven additional core courses, including 6 themed courses in 4 themes, includes one MTH and one PHY		21
Capstone course may be completed at Washington University		

Depending on the choice of engineering degree, students should also consider taking:

CHM-113	General Chemistry I	
CSC-104	Computer Programming II	
Physical or Life Science Elective at or above the 200-level		
Total Credits		**75**

Degree Plan for Mathematics (B.A.) Leading to Electrical, Mechanical, or Systems Science and Engineering (B.S.) (Starting in an even year)

Course	Title	Credits
First Year		
Fall		
UNV-101 & FYT-101	University Seminar and First Year Studio	4
MTH-195	Calculus I	4
CSC-103	Computer Programming I	3
Core Course or Elective		3
	Credits	**14**
Spring		
UNV-102	University Seminar II	3
MTH-196	Calculus II	4
MTH-173	Discrete Mathematics	3
Core Course or Elective		3
Core Course or Elective		3
	Credits	**16**
Second Year		
Fall		
RTS-225 or PHL-225	The Quest for the Ultimate: Dialogue with Global Religious Traditions [1] or Quest for the Good Life	3
MTH-203	Calculus III	4
MTH-211	Linear Algebra	3
PHY-205	Principles of Physics I	4
Core Course or Elective		3
	Credits	**17**
Spring		
RTS-225 or PHL-225	The Quest for the Ultimate: Dialogue with Global Religious Traditions [1] or Quest for the Good Life	3
MTH-213	Differential Equations	3
PHY-206	Principles of Physics II	4
Core Course or Elective		3
Core Course or Elective		3
	Credits	**16**
Third Year		
Fall		
MTH-411	Analysis I	3
MTH-315	Geometry	3
CHM-113	General Chemistry I	4
Core Course or Elective		3
Core Course or Elective		3
	Credits	**16**
Spring		
MTH-412	Analysis II	3
Physical or Life Science [2]		3
Core Course or Elective		3
Core Course or Elective		3

Core Course or Elective		3
	Credits	**15**
	Total Credits	**94**

1 One each semester.
2 Required for Mechanical Engineering track.

Students should consult with the Mathematical Sciences Adviser & Engineering Liaison as early as possible. Minimum of 120 credits required for degree conferral.

Degree Plan for Mathematics (B.A.) Leading to Electrical, Mechanical, or Systems Science and Engineering (B.S.) (Starting in an odd year)

Course	Title	Credits
First Year		
Fall		
UNV-101 & FYT-101	University Seminar and First Year Studio	4
MTH-195	Calculus I	4
CSC-103	Computer Programming I	3
Core Course or Elective		3
	Credits	**14**
Spring		
UNV-102	University Seminar II	3
MTH-196	Calculus II	4
MTH-173	Discrete Mathematics	3
Core Course or Elective		3
Core Course or Elective		3
	Credits	**16**
Second Year		
Fall		
RTS-225 or PHL-225	The Quest for the Ultimate: Dialogue with Global Religious Traditions [1] or Quest for the Good Life	3
MTH-203	Calculus III	4
MTH-211	Linear Algebra	3
PHY-205	Principles of Physics I	4
Core Course or Elective		3
	Credits	**17**
Spring		
RTS-225 or PHL-225	The Quest for the Ultimate: Dialogue with Global Religious Traditions [1] or Quest for the Good Life	3
MTH-213	Differential Equations	3
PHY-206	Principles of Physics II	4
Core Course or Elective		3
Core Course or Elective		3
	Credits	**16**
Third Year		
Fall		
STA-341	Statistical Theory I	3
MTH-421	Abstract Algebra	3
CHM-113	General Chemistry I	4
Core Course or Elective		3
Core Course or Elective		3
	Credits	**16**
Spring		
STA-342	Statistical Theory II	3
Physical or Life Science [2]		3
Core Course or Elective		3
Core Course or Elective		3
Core Course or Elective		3
	Credits	**15**
	Total Credits	**94**

1 One each semester.
2 Required for Mechanical Engineering track.

Students should consult with the Mathematical Sciences Adviser & Engineering Liaison as early as possible. Minimum of 120 credits required for degree conferral.