

University of the Incarnate Word®

## Bachelor of Science in Mathematics

School of Mathematics, Science and Engineering

### PROGRAM OVERVIEW

The Bachelor of Arts (B.A.) and Bachelor of Science (B.S.) in Mathematics at the School of Mathematics, Science and Engineering and the University of the Incarnate Word shape mathematically minded leaders to guide businesses, organizations and government agencies through insight, logic and analytical skills.

The Department of Mathematics offers a Bachelor of Arts and a Bachelor of Science. Both the B.A. and the B.S are 120-hour degree programs that emphasize concepts, procedures and connections. All courses develop reasoning abilities along with skills in precise communication of concepts. Problem solving is addressed throughout the program.

The B.S. in Mathematics requires 24 hours of core mathematics courses that include advanced calculus, higher mathematics and theory. Students may choose from a wide array of mathematics courses, including all those available in the B.A., to fulfill the 24 hours of required electives.

Students are provided with a solid mathematical foundation that well prepares them for advanced graduate study or careers in education, business, industrial or other professional fields and practical skills and methods to deal with realistic problems in those fields.

Students are well supported through the program by faculty who provide mentoring and guidance, and through the Math Tutoring Lab, which offers individual guidance and help through the subject's challenges.

### ADMISSION REQUIREMENTS

The requirements for admission to the B.A. and the B.S. in Mathematics programs are the same as the requirements for admission to the University of the Incarnate Word.

### CONTACT

**UIW Admissions**  
(210) 829-6005  
admission@uiwtx.edu

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WE BECOME  
THE WORD  
IN THE WORLD**

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Mathematics (B.S.)



## B.S. in Mathematics

### FRESHMAN YEAR

#### Fall

ENGL 1311: Composition I (3 hours)  
 PHIL 1381: Intro to Philosophy (3 hours)  
 MATH 2312: Calculus I (3 hours)  
 MATH 2322: Linear Algebra (3 hours)  
 MATH 2340: Programming (3 hours)

**Total Hours: 15**

#### Spring

ENGL 1312: Composition II (3 hours)  
 PHIL 3312: Logic (3 hours)  
 DWHP 1200: Dimension of Wellness (2 hours)  
 PE Activity Course (1 hour)  
 MATH 2313: Calculus II (3 hours)  
 MATH 2303: Intro to Probability & Statistics (Math Elective)(3 hours)

**Total Hours: 15**

### SOPHOMORE YEAR

#### Fall

ENGL 2310: World Literature (3 hours)  
 Fine Arts Core Course (3 hours)  
 MATH 3320: Foundation of Higher Math (3 hours)  
 MATH 3314: Calculus III (3 hours)  
 Math or General Electives (3 hours)

**Total Hours: 15**

#### Spring

RELS 1305, 1315, 1325, 1335 or 1327H (3 hours)  
 History Core Course (3 hours)  
 MATH 2314: Differential Equation (3 hours)  
 MATH 3325: Abstract Algebra (3 hours)  
 Math Upper Level Elective (3 hours)

**Total Hours: 15**

### JUNIOR YEAR

#### Fall

Social Sciences Core Course (3 hours)  
 Modern Language I (3 hours)  
 Math Upper Level Elective (3 hours)  
 Minor course (3 hours)  
 Minor course (3 hours)

**Total Hours: 15**

#### Spring

PHYS 2305/2105: Physics I with Lab (4 hours)  
 Modern Language II (3 hours)  
 MATH 3325: Intro to Real Analysis (3 hours)  
 Math Upper Level Elective (3 hours)  
 Minor course (3 hours)

**Total Hours: 16**

### SENIOR YEAR

#### Fall

Math Upper Level Elective (3 hours)  
 Math Upper Level Elective (3 hours)  
 Minor course (3 hours)  
 Minor course (3 hours)  
 Math or General Upper Level Elective (3 hours)

**Total Hours: 15**

#### Spring

Math Upper Level Elective (3 hours)  
 Math Upper Level Elective (3 hours)  
 Minor course (3 hours)  
 Math or General Elective (3 hours)  
 Math or General Elective (2 hours)

**Total Hours: 14**

120 hours needed to complete the B.A. in Mathematics.