

University of Indianapolis – Shaheen College of Arts & Sciences & School of Education
2025-2026 Curriculum Guide for Mathematics (MATH) & Secondary Education (SED2)
 Bachelor of Arts

Semester I, Freshmen Year (8 credits)

- **MATH 185** Orientation to the Math Sciences (1) *
- **MATH 190** Calculus and Analytic Geometry I (4)
- **EDUC 100** Explorations in Education (3)

Semester II, Freshmen Year (7 credits)

- **MATH 191** Calculus and Analytic Geometry II (4)
- **COMM 201** Classroom Communication (3)

Required Computer Science and Physical Science Courses to be taken any semester:

- **CSCI 155** Introduction to Programming (3)
- **PHYS 153** General Physics I, Calculus Based (4)

Semester I, Sophomore Year (10.5 credits)

- **MATH 270** Calculus and Analytic Geometry III (4)
- **EDUC 203** Psychology of Development, Learning, & Instruction (3)
- **EDUC 204** Clinical Experience: Developing Human Potential (.5)
- **EDUC 290** Teaching in a Diverse Society (3)

Semester II, Sophomore Year (12 credits) SCED 274/275 are co-requisites

- **MATH 230** Calculus Sequence Seminar (1) **
- **MATH 280** Linear Algebra (4) **
- **MATH 300** Foundations of Abstract Mathematics (4) **
- **SCED 274** Literacy Development and Assessment (2) **
- **SCED 275** Clinical Experience: Literacy Development and Assessment (1) **

Advancement through Gateway #1 for Admission to Teacher Candidacy - See application process & requirements (School of Education), including COMM 201 & EDUC 290

Semester I, Junior Year (14 credits) SCED 320/344/345 courses are co-requisites

- **SCED 320** Content Area Multimodal Literacies: Teaching for IMPACT (3) *
- **SCED 344** Special Needs in the Secondary Classroom (3)
- **SCED 345** Pre-Residency in MS/HS (1) *
- **MATH 350** Probability and Statistics I (3) *
- **MATH 430** Abstract Algebra I (4) or MATH 480 Real Analysis I (4) *

Semester II, Junior Year (16 credits) SCED 362/363; 408/409 are co-requisites

- **SCED 362** Content Area Pedagogy (3) **
- **SCED 363** Pre-Residency Content Area Pedagogy (2) **
- **SCED 408** School, Teaching & Language Learning in a Global Society (3) **
- **SCED 409** Clinical Experience in Learning in a Global Society (1)
- **MATH 351** Probability and Statistics II (3) **
- **MATH 360** Proof & Linear Algebra Seminar (1) **
- **MATH 380** Modern Geometries (4)**

Semester I, Senior Year (8.5 credits) SCED 414/415 are co-requisites

- **SCED 414** Data Literacy for Learner Advocacy & Achievement (3) *
- **SCED 415** Clinical Experience in Data Literacy (.5) *
- **MATH 430** Abstract Algebra I (4) or MATH 480 Real Analysis I (4) *
- **MATH 460** Mathematics Capstone (1) *

Advancement through Gateway #2 for Admission to student teaching (see application process and requirement – School of Education)

Semester II, Senior Year (12.5 credits)

- **SCED 471** Residency in the Middle School (6)
- **SCED 472** Residency in the High School (6)
- **EDUC 492** Exit from the Program Portfolio (.5)

Advancement through Gateway #3 - Graduation & Recommendation for Licensure – see requirements (School of Education)

NOTE: Candidates pursuing a minor in MI or TELL will enroll in an alternative Residency course

*Fall only

**Spring only

- **NOTES:**
Students can also obtain credit towards a math elective through MATH 325 -Special Topics in Mathematics, or MATH 492- Research in Mathematics with consent of the department.
- A total of 49 hours is required for the Mathematics Major, plus 44 hours required for the Secondary Education Co-Major
- A grade of C- (1.7 on a 4.0 scale) or higher is required in all courses applying toward the Mathematics Major. The Bachelor of Arts and Bachelor of Science degrees require a minimum of 120 hours.
- See the General Education Core Guide for additional course requirements.

REMEMBER: If you have any questions about the Mathematics major and its requirements, contact Dr. Livia Hummel, Department of Mathematical Sciences (317-788-3320; hummell@uindy.edu; Martin Hall, Room 301D) or your academic advisor. For questions regarding your Education major and its requirements, contact Mrs. Jody Rose (317-791-5721; jrose@uindy.edu, Esch Hall, Room 244A). Courses and requirements sometimes change so keep in contact with your advisor.