

*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.