# Post-Baccalaureate Certification in Mathematics

## Major Sequence and Requirements – Planning Guide

### I. Core Mathematics Requirements (pre-requisites indicated)

- _______ **MATH 161**: Calculus I
- _______ **MATH 211**: Calculus II (161)
- _______ **MATH 310/520**: Introduction to Proof (211)
- _______ **MATH 311**: Calculus III (211)
- _______ **MATH 322/502**: Linear Algebra I (311, rec. 310)
- _______ **MATH 333/503**: Introduction to Probability and Statistics (311)
- _______ **MATH 345/504**: Abstract Algebra (310, 322)
- _______ **MATH 353**: Survey of Geometry (310, 322)
  OR
- _______ **MATH 355/505**: Transformational Geometry (310, 322)
- _______ **MATH 464**: Real Analysis I (310, 311, 322, rec. 345)
- _______ **CSCI 161**: Intro Computing I

### II. Mathematics Electives (minimum 2 courses) – select from: **MATH 353**, 355*, 365, 370, 375, 393, 395, 422, 435, 445, 457, 465, 467, 471, 472, 483, 4X8, 535, 536, 566, 592 (*cannot be double-counted from Core)

**Note:** some courses are dual listed as graduate courses and can be taken in preparation for a masters degree

- **MATH**
- **MATH**

### III. Educational Core (4 courses, generally taken as 2 blocks, plus Student Teaching)

- **Foundations Block**
  1. _______ **EDFN 590** (or EDFN 211, 511, 603, 604) **and**
  2. _______ **EDFN 545** (or EDFN 241, PSYC 525, 526, 625) **and**

- **Professional Block**
  3. _______ **EDSE 321**: Issues in Secondary Education **and**
  4. _______ **MATH 405**: Teaching Secondary Math (333, 345, 353/355) **and**

- **Student Teaching**
  - _______ **EDMA 461**

### IV. Additional Requirements

- **APS Requirements** – see sheet upon acceptance
- **Content Portfolio Submissions** – see department for information
### Post-Baccalaureate: Timeline Planning Guide

**Including a Cross Reference of Sequence and Degree Requirements**

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| Calculus 1: **MATH 161 (MPT)**  
**COMM 100: Speech** | Calculus 2: **MATH 211 (161)**  
**CSCI 161**  
**ENGL Composition** | Intro to Proof: **MATH 310/520 (211)**  
Calc. 3: **MATH 311 (211)**  
**ENGL Lit course** |
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| **Linear Algebra: MATH 322/502 (311, rec. 310)**  
**Probability & Statistics: MATH 333/503 (311)**  
**Foundations of Education: EDFN 590/211 (clearances required)**  
**Educational Psychology: EDFN 545/241 (clearances required)** | **Abstract Algebra: MATH 345/504 (310, 322)**  
**Geometry: MATH 353/355/505 (310, 322)**  
**MATH Elec**  
**MATH Elec** | **Real Analysis: MATH 464/506 (310, 311, 322, rec. 345)**  
**Teaching of Secondary Math: MATH 405 (333, 345, 353/355)*  
**Issues in Secondary Education: EDSE 321*** |
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Pre-requisites are indicated in parenthesis. Cross-listed courses or options are indicated with multiple course numbers listed.

*denotes APS status needed – see School of Education for complete details. This includes a Communications course, an English Literature course, an English Composition course, a Minimum Overall GPA of 3.0, and all Field Experience clearances.

**denotes courses that MAY double-count toward the Masters of Education in Mathematics (M.Ed.). Important note, at most 2 courses below MATH 510 can be counted toward the Masters program.

*** these courses can be replaced with a full-year Post-Bacc Intern program in conjunction with the School District of Lancaster. Contact Miriam Witmer for more information on this option.