# Required Certification Sequence for UABTeach Candidates Majoring in Electrical Engineering

**Program:** MATHEMATICS  
**Total Hours:** *

*This certification requires a minimum of 120-hours for a degree in electrical engineering including 18 hours of UABTeach courses.*

## CLASS B EDUCATION PROGRAM CHECKLIST

<table>
<thead>
<tr>
<th>Institution: UNIVERSITY OF ALABAMA AT BIRMINGHAM</th>
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## General Studies

Shall include courses and/or experiences in written composition, humanities, social studies, mathematics, and science.

- **EH 101** English Composition I 3
- **EH 102** English Composition II 3

## Humanities:

- Humanities/Fine Arts (See AGSC List) 9

## Social Science:

- *History (See AGSC List)* 3
- Non-History Social Science (See AGSC List) 6

## Science:

- Natural Sciences (lab required with each course) 4
- **CH 115/116** Chemistry I with Lab 4
- **PH 221** General Physics I and Lab 4
- **PH 222** General Physics II and Lab 4

## Mathematics:

- **MA 125** Calculus I 4
- **MA 126** Calculus II 4
- **MA 227** Calculus II and MA 252 Differential Equations 4
- OR **EGR 265** Math Tools for Engineers and EE 254 Applied Numerical Methods 7

## Other:

- **PHL 275** or HY 275 Perspectives on Science and Mathematics 3

## SPECIAL NOTES:

*To be eligible for Class B certification in mathematics, candidates will need to complete all courses on this checklist, meet Teacher Education Program requirements for certification, AND complete all degree requirements for Electrical Engineering.

Prospective and admitted students should NOT begin any coursework without seeking advisement from the Office of Student Services (call: 205-934-7530) each term. Students who ignore this admonition assume responsibility for their own mistakes.

## Professional Studies

**These courses must be taken prior to admission to TEP.**
- **EHS 125** Step 1: Inquiry Approaches to Teaching 1
- **EHS 126** Step 2: Inquiry-Based Lesson Design 1
- **EHS 325** Knowing and Learning in Science and Mathematics 3

**These courses require admission to TEP before they can be taken.**
- **EHS 326** Classroom Interactions 3
- **EHS 327** Project-Based Instruction 3

## Internship:

Students must take EHS 425 and EHS 426 in the same term.
- **EHS 425** Apprentice Teaching 6
- **EHS 426** Apprentice Teaching Seminar 1

## Teaching Field

Must include an academic major of at least 32 semester hours with a minimum of 19 hours in the upper division. (List all courses required for the teaching field.)

See Attached Requirements

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Dean of Education: [Signature]  
Date: 7/15/15
Class B Mathematics Education Program Checklist
Teaching Field Courses (32/19 Analysis)

Teaching Field Courses

Lower Division Courses

MA 125 Calculus I
MA 126 Calculus II
MA 227 Calculus II and MA 252 Differential Equations
OR EGR 265 Math Tools for Engineers and EE 254 Applied Numerical Methods
EE 210 Digital Logic
EE 233 Engineering Programming Methods

Upper Division Courses (At least 19 hours of coursework from the list below)

MA 361 Mathematical Modeling
EE 316 Electrical Networks and Lab
EE 300 Engineering Problem Solving
EE 318 Methods of Systems Analysis
EE 351 Electronics with Lab
EE 426 Control Systems
EE 421 Communication Systems
EE 431 Analog Integrated Electronics
EE 499 Senior Design Team Project