



(Required certification sequence for UABTeach Program for Mechanical Engineering Majors)

Program: GENERAL SCIENCE (6-12)

Total Hours: \*

\*This certification requires a minimum of 120-hours for degree including 21 hours of UAB Teach courses.

**CLASS B EDUCATION PROGRAM CHECKLIST**

Institution: UNIVERSITY OF ALABAMA AT BIRMINGHAM

Date Approved: 06/09/2022  
Date Expires: 06/30/2028  
Revisions: \_\_\_\_\_

**General Studies**

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

**Humanities:**

EH 101 English Composition I	3
EH 102 English Composition II	3
Literature (See AGSC List)	3-6
Humanities/Fine Arts (See AGSC List)	3-6
Fine Arts (See AGSC List)	3

**Social Science:**

History	3-6
Non-History Social Science	3-9

**Science:**

BY 123 Introductory Biology with Lab	4
CH 115/116 Chemistry I with Lab	4
CH 117/118 Chemistry II 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
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**Other:**

PHL 270 Science, Knowledge, and Reality	
<b>OR</b>	
HY 275 Perspectives on Science and Mathematics	3

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

\*For candidates pursuing general science certification, completion of courses in biology, chemistry, Earth and space sciences, and physics is required.

Prospective and admitted students should NOT begin any coursework without seeking advisement from the UABTeach Advisor/Academic Coach 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 Approaches to Teaching	1
EHS 325 Knowing and Learning in Science and Mathematics	3
EHS 326 Classroom Interactions	3

These courses require admission to TEP before they can be taken.

EHS 327 Problem-Based Instruction	3
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**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 at least 30 semester hours in the teaching field with a minimum of 18 hours at the upper division level. (List all courses required for the teaching field.)

See attached requirements on page 2.

Dean of Education: Michelle Robinson

Date: 10/13/2022



STATE OF ALABAMA DEPARTMENT OF EDUCATION  
TEACHER EDUCATION AND CERTIFICATION

(Required certification sequence for UABTeach Program for Mechanical Engineering Majors)

## Class B General Science (6-12) Program Checklist: 30 /18 Teaching Field Analysis

### Lower Division Courses

Choose two (2) of the following:

BY 123 Introductory Biology I	4
CH 115/116 Chemistry I with Lab	4
CH 117/118 Chemistry II with Lab	4
PH 221 General Physics I with Lab	4
PH 221 General Physics II with Lab	4

Choose two (2) of the following:

CE 210 Statics	3
CE 220/221 Mechanics of Solids with Lab	3
ME 241 Thermodynamics I	3
ME 242 Thermodynamics II	3
ME 215 Dynamics	3

**14 Hours**

### Upper Division Courses

ME 321 Introduction to Fluid Mechanics	3
ME 360 System Modeling and Controls	3
ME 370 Kinematics and Dynamics of Machinery	3
Mechanical Engineering Research Methods OR Mechanical Engineering Capstone	3

Choose three (3) of the following:

ME 322 Introduction to Heat Transfer	3
ME 361 Thermo-Fluids Systems	3
ME 364 Linear Algebra & Numerical Methods	3
ME 371 Machine Design	3
ME 461 Mechanical Systems and Lab	3

**21 hours**

**FOR GENERAL SCIENCE CERTIFICATION (If not included on major checklist)**

**One Course and Lab Sequence from the Following:**

BY 123 Introductory Biology I and Lab  
BY 124 Introductory Biology II and Lab

**One Course and Lab Sequence from the Following:**

CH 115/116 General Chemistry I and Lab  
CH 117/118 General Chemistry II and Lab

**One Course and Lab Sequence from the Following:**

PH 202 College Physics and Lab  
PH 221 General Physics I and Lab  
PH 222 General Physics II and Lab

**One Course and Lab Sequence from the Following:**

AST 101/111 Astronomy of the Universe and Lab  
AST 102/112 Astronomy of Stellar Systems and Lab  
ES 101/102 Physical Geology and Lab  
ES 103/104 History of the Earth and Lab