



(Required certification sequence for UABTeach Program for Materials 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:

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
BY 115-499	3-4

Mathematics:

MA 125 Calculus I	4
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Other:

PHL 270 Science, Knowledge, and Reality	
OR	
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 Materials 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 Materials Engineering Majors)

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

Lower Division Courses

Choose four (4) of the following:

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 222 General Physics II with Lab	4
CE 210 Statics	3
CE 220/221 Mechanics of Solids with Lab	3
MSE 280 Engineering Materials	3
MSE 281 Physical Materials I with Lab	4

13-16 Hours

Upper Division Courses

MSE 380 Thermodynamics of Materials	3
MSE 381 Physical Materials	3
MSE 382 Mechanical Behavior of Materials	3
MSE 401 Materials Processing <u>OR</u>	3
MSE 430 Polymeric Materials	3
MSE 465 Characterization of Materials with Lab <u>OR</u>	4
MSE 470 Ceramic Materials with Lab	4
Materials Engineering Research Methods <u>OR</u>	3
Materials Engineering Capstone	3

19 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