

PHYSICS EDUCATION CERTIFICATE - ONLINE

Important: This certificate plan is effective for those starting in the fall 2022 through summer 2023. This certificate plan will remain in effect for students who do not break enrollment or who do not change certificates.

The **add-on physics endorsement** is an option for:

Teachers who wish to add on an endorsement to teach physics courses in grades 6-12.

- Teachers who are already licensed in another science discipline
- Teacher Candidates who are enrolled in a teacher preparation program that leads to initial licensure in another science discipline. This certificate provides eligibility to add a physics endorsement, certifying them to teach physics courses in grades 6-12

Code	Title	Hours
Required Courses ¹		
PHYS 231	University Physics I	4
PHYS 232	University Physics II	4
PHYS 305	Introduction to Modern Physics	3
PHYS 321	Mechanics	3
PHYS 331	Electricity and Magnetism	3
PHYS 440	Wave Optics	4
EDSC 488	Science Lab Practicum in Schools ²	0
Total Hours		21

¹ Endorsement for teacher candidates with a science education major in another discipline

² EDSC 488 Science Lab Practicum in Schools (0 c.h.) is a required practicum course that requires a background check; candidates should not plan to take this course in a summer session.

Note: Relevant 300-400 level PHYS courses require successful completion of MATH 430 Multivariable Calculus (3 c.h.).

Completion Requirements

- 21 total hours
- A minimum of 25% of hours must be completed through Liberty University
- 2.0 GPA
- No grade of "D" may be applied to the certificate
- Submission of Certificate Completion Application at beginning of final semester