

# Engineering Education (Certificate)

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The Colleges of Engineering and Education jointly offer a Graduate Certificate Program (GCP) in Engineering Education. The program is intended for both working professionals, such as community college educators and working engineers who have teaching engineering topics as a part of their job responsibilities, and graduate students enrolled at NC State. Individuals who enroll in the program must have backgrounds in at least one field of engineering, applied mathematics, and/or engineering physics, and would select the program to provide distinction in their academic records that may improve career prospects. Students who wish to pursue a traditional engineering academic career may also choose to take the certificate to enhance their employability at a wider range of institutions and to prepare themselves for educating 21st century engineers.

We enroll both on-campus, and distance education students through Engineering Online (EOL) (including practicing professionals). The GCP will be attractive to individuals who work (or wish to work) in engineering education in academia or industry around the country. This includes engineering graduates who wish to become a tenure track professor and wish to bolster their teaching skills and engineering professionals who want to make a career transition from industry into academia. The course offerings have been structured such that students may tailor it to their individual goals. Each student will choose a minimum of four courses.

## More Information

Engineering Education Program Website (<https://eed.engr.ncsu.edu/our-offerings/>)

## Applicant Information

- **Delivery Method:** On-Campus, Online, Hybrid
- **Entrance Exam:** None
- **Interview Required:** None

Plan Requirements

Code	Title	Hours	Counts towards
<b>Engineering Requirements</b>		<b>6</b>	
Select two of the following courses:			
EED 501	Teaching Undergraduate Engineers (pending ABGS approval Fall 2022) <sup>1</sup>		
EED 502	Engineering Education : Content, Assessment, and Pedagogy		

EED 511 Diversity & Social Justice in Engineering Education (pending ABGS approval Fall 2022) <sup>2</sup>

EED 514 Ethics and Engineering Education (pending approval ABGS Fall 2022) <sup>2</sup>

**Education Requirements** **6**

Select two of the following courses:

TED 530 Foundations for Teaching Technology <sup>1</sup>

TED 558 Teaching Creative Problem Solving <sup>1</sup>

EAC 542 College Environments <sup>1</sup>

EAC 543 Student Development Theory <sup>1</sup>

**Total Hours** **12**

<sup>1</sup> The EED 501 and EED 502, TED 530, EAC 542, EAC 543, and TED 558 are offered yearly.

<sup>2</sup> EED 511 and EED 514 are offered at least in alternating years.

## Faculty

### Professor

Aaron Clark

### Associate Professor

Wendy Krause

### Assistant Professors

Veronica Catete

Tamecia Jones

### Teaching Professor

Sarah Heckman

## **Teaching Associate Professors**

Laura Bottomley

Kanton Reynolds

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## **Teaching Assistant Professor**

Tameshia Ballard Baldwin