



May 7, 2025

**Muhammad Usman**

has successfully completed

**Equivalent Circuit Cell Model Simulation**

an online non-credit course authorized by University of Colorado Boulder and University of Colorado System and offered through Coursera

A handwritten signature in black ink, appearing to read 'Gregory Plett', written over a dotted line.

Gregory Plett  
Professor  
Electrical and Computer Engineering

**COURSE  
CERTIFICATE**



Verify at:  
<https://coursera.org/verify/QQXF8EHYS7E>

Coursera has confirmed the identity of this individual and  
their participation in the course.