



Mar 8, 2025

Ahmad Gamal Ramadan

has successfully completed

Optical and X-Ray Characterization

an online non-credit course authorized by Arizona State University and offered through  
Coursera

*Trevor J. Thornton*

Trevor J. Thornton  
Professor of Electrical Engineering  
Arizona State University

COURSE  
CERTIFICATE



Verify at:  
<https://coursera.org/verify/IOQBOHW5ET6V>

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