



3 Courses

**First Order Optical System Design**

**Optical Efficiency and Resolution**

**Design of High-Performance Optical Systems**



University  
of Colorado  
Boulder

Jul 4, 2021

**SAIKAT KAMAL**

has successfully completed the online, non-credit Specialization

# Optical Engineering

Optical instruments are how we see the world, from corrective eyewear to medical endoscopes to cell phone cameras to orbiting telescopes. This course will teach you how to design such optical systems with simple graphical techniques, then transform those pencil and paper designs to include real optical components including lenses, diffraction gratings and prisms. You will learn how to enter these designs into an industry-standard design tool, OpticStudio by Zemax, to analyze and improve performance with powerful automatic optimization methods.

*Robert R. McLeod, Amy Sullivan*

Robert McLeod, PhD,  
Richard and Joy Dorf  
Endowed Professor of  
Electrical, Computer,  
and Energy  
Engineering; Amy  
Sullivan, PhD

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