A B.S. degree in photonic science and engineering will enable students to analyze and design optical and laser systems for a broad set of applications including manufacturing, healthcare, telecommunication, defense, security, and entertainment.

Optics and photonics technologies are central to modern life. For example, they are needed to make and inspect the integrated circuits in nearly every electronic device we use. They are used in high-efficiency lighting, displays, and the harvesting of solar power. Optical fibers have enabled the Internet and lasers are essential to precision manufacturing and metrology, and a plethora of medical applications including clinical diagnosis, surgery, and genome mapping.

Public companies that are focused on optics and photonics create more than 10% of all U.S. public revenue, or more than $3 trillion. They also create 6%, or 7.4 million, of public company jobs.

The University of Central Florida is one of the world’s foremost institutions for teaching and research in optics and photonics. The faculty are recipients of numerous awards and honors and are world-renowned for their contributions to fundamental and applied optics and photonics.