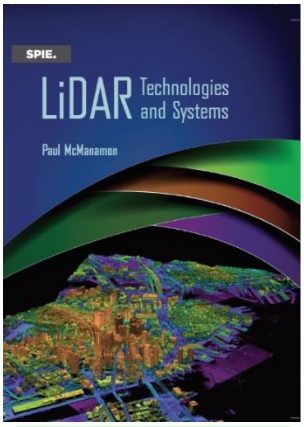
University of Dayton
School of Engineering

Department of Electro-Optics and Photonics

Summer Short Course on LIDAR Technologies and Systems

June 6-10



Cost: $1,005

Instructors:
Paul McManamon, paul@excitingtechnology.com
Edward Watson, edward.watson@vao-llc.com

Target Audience: engineers, scientists, managers of EO Sensor systems development.

June 6-10				
Mon	**Tues**	**Wed**	**Thurs**	**Fri**
	9am-12pm	9am-12pm	9am-12pm	9am-12pm
1-4pm	1-4pm	1-4pm	1-4pm	

Venue: Live lectures via Zoom or on-site at Fitz Hall 5th floor, 1519 Brown Street, Dayton, Ohio 45469.
In-person option has an enrollment cap of 28, so please sign up early.

Course Outline:

- Introduction
- History of Lidar
- Types of Lidar
- Atmospheric effects on Lidar
- Lidar Range Equation, signal-to-noise ratio, and basic detection theory
- Laser sources for Lidar
- Lidar Receiver hardware
- Beam Steering for Lidar
- Lidar Processing
- Testing of Lidars, and Lidar Performance Metrics
- Lidar Application Design Examples

Design Exercise – Design a lidar

Books: Textbook: *Lidar Technology and Systems*, by Paul McManamon
Additional Material: *Field Guide to Lidar*, by Paul McManamon

How to Register:

- Current UD students:
  - Please register for EOP 595-62 via Porches. This is a 1-credit hour class titled "Special Problems" - Introduction to LIDAR. The course CRN number is 3880.
- Everyone else:
  - If you just want to take the class, simply register and pay via this site.
  - If you want CEU credits, please register and pay via this site and let us know by email that you are seeking CEUs. This course is worth 2.4 CEUs.
  - A single company registering five or more people will qualify for a 10% discount. Please email us for a promo code.