

SPECIAL TOPICS IN OPTICS

GLOBAL EDUCATION & TRAINING Undergraduate Summer Course

July 13 - August 2, 2025

Global Education and Training's Optics Undergraduate Summer Course at the University of Illinois Urbana Champaign offers students an innovative introduction to the current research areas in Optics and Photonics. Learn more about these emergent technologies from expert faculty, who will lead students in a live classroom space. Students are expected to participate in live discussions and problem solving during each live class session on the Illinois campus.. The Optics summer course offers a multidisciplinary approach to leading research in Optics and Communication Systems. This course will prepare students for the next phase in their education, and career.

GET is offering this program in collaboration with faculty from the Grainger College of Engineering, a global leader in engineering education and research across every discipline. The college emphasizes cutting-edge theory coupled with high-impact engineering research and hands-on learning.

FACULTY PROFILE



Professor Peter Dragic is an associate professor in the Department of Electrical and Computer Engineering, Grainger College of Engineering at the University of Illinois Urbana-Champaign, where he leads the Fiber Optics Research & Glass Engineering Lab. His research and design methodology of optical fibers relies heavily on a highly interdisciplinary approach that marries waveguide engineering and materials science. His research areas include coherent optics/imaging, lasers and optical physics, modeling and simulation of laser systems, nano-materials, nano-photonics, etc. For more information, visit his profile on the <u>ECE website</u>.





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UNDERGRADUATE ELECTRICAL ENGINEERING PROGRAM UNDERGRADUATE ENGINEERING PROGRAM GRADUATE ELECTRICAL ENGINEERING PROGRAM NATIONAL U.S. PUBLIC UNIVERSITY

PROGRAM COMPONENTS Academic Sessions (38 Hours)

Live academic sessions with faculty lectures, discussions, Q&A sessions, and research project. Lectures cover topics of optics and photonics, optical communications, optical fiber technologies, imaging, and optical sensors. Teaching assistants guide students' understanding by highlighting key points from the readings and answering questions. The overall course will conclude with a learning outcome showcase and a course recognition ceremony led by University of Illinois staff.

Co-Curricular Sessions (6 Hours)

Co-curricular sessions diversify students' learning experiences and outcomes through guest speaker/panelist sessions with university Ph.D. students and alumni. Topics include applications and graduate admissions processes; writing personal statements; conducting research; keys to a successful engineering career; and more.

Independent Learning

Students are expected to devote time each day to learning activities such as reading assignments, homework, discussions, and the final research project.

Week Overview	Activity	Duration (3hrs)
WEEK 1	Faculty lectures	10
	Lab work	6
	TA led office hours	2
	Co-Curricular hours	2
WEEK 2	Faculty lectures	10
	Lab work	6
	TA led office hours	2
	Co-Curricular hours	2
WEEK 3 FINAL PROJECT WEEK	Lab work	6
	TA led office hours	1
	Co-Curricular hours	2
	Final Presentations	2
	Program Recognition	1
	TOTAL HOURS	52

Student Testimonials

"The course is fantastic. I really appreciate it that the course could lead us from what we've learned to deeper knowledge naturally."

"I really appreciate the professor's expertise. He is really a kind person and really an expert."

TECHNOLOGY REQUIREMENTS

Participants should bring their own Wi-Fi compatible device (laptop, or tablet) suitable for participation in live classroom sessions and completion of homework and required reading assignments for the duration of the program.

COURSE FORMAT

The program will be conducted in-person on the University of Illinois Urbana-Champaign campus. Students will attend live lecture sessions, TA-led office hours, and laboratory work.

COURSE FEE \$5,400/PP

Includes: Instructor and classroom fees; course materials; transportation costs (city bus pass, airport to campus, cultural travel); access to recreation facilities; tickets for tours and cultural activities; access fees for UIUC network and ID cards; housing for the program duration; 2 meals / day. Does NOT include international airfare or health insurance.

Minimum of 25 participants needed to run program.

Contact Us

Please direct questions to Global Education and Training staff via email:

Rob Marinelli, *Associate Director* <u>remarine@illinois.edu</u>

Wendy Spencer, Program Coordinator wendyas2@illinois.edu

Wang Nianhua, Representative, China Training Programs <u>nianhua@yahoo.com</u>

Karen Weng, Shanghai Office Prog. Specialist wweng@illinois.edu

Please reach out to your university's international office to apply for the program.

SCAN THE QR CODE TO LEARN MORE ABOUT GET.

