



Graduate Certificate Program Application
(Graduate and Non-Graduate School Students)

- 1. Last or Family Name (print) First Middle
2. Current Mailing Address: Street City State Zip
3. Telephone number(s) at which you can be reached: Day Evening
4. Email address:
5. Year of enrollment in certificate program: Year: 20 Check one: Fall Spring Summer
6. Certificate program in which you would like to enroll: PHOTONICS
7. School and department in which you are currently enrolled:

Students admitted to a graduate certificate program are subject to the general policies and procedures of the Graduate School. Your signature below indicates your understanding and acceptance of this.

Signature of Applicant

Date

Return application to the coordinator (Dr. Adam Wax) of the certificate program in which you are applying to enroll.

For Office Use Only - Certificate Program Approval

Your signature below indicates your approval of this student to participate in the certificate program noted above.

Dr. Adam Wax, DGS
Fitzpatrick Institute for Photonics
(certificate program coordinator)

Date

Return application to: Graduate Enrollment Services Office, 127 Allen Building, Box 90065
Telephone: 919-684-3913
Fax: 919-684-2277



RIDER
for
Photonics Graduate Certificate

1. _____
Last or Family Name (print) First Middle

2. Desired **year of graduation** from certificate program: Year: 20 _____ Fall ____ Spring ____ Summer ____

3. Requirements to be fulfilled and sent to Professor Adam Wax for final approval **at least one month before graduation:**

- Completion of four photonics courses from the approved course listing, of which one course must be a qualified "Introductory Survey Course." (See Certificate Course List on next page)
- Presentation of research at a Fitzpatrick Institute Student Group meeting (includes FIP Friday Breakfast Poster Presentation).
- Attendance of 1 semester of Optics and Photonics Seminar Series - BME 609/ ECE 549/ PHY 549
- **For Ph.D. candidates:** Ensure at least one member of the FIP is on the student's Ph.D. dissertation committee.

Students are required to provide the proof of requirements (copy of transcript) to Professor Wax at least one month prior to graduation for review. Your signature below indicates your understanding and acceptance of this.

Signature of Applicant

Date

Return application and this rider to Mrs. August Burns, Box 90271, Durham, NC 27708.

Certificate Course List

The following is a list of approved certificate courses. This list is subject to change over time as new courses are offered, including special topics offerings. Please consult with the certificate DGS for guidance and approval. Courses marked with an asterisk qualify as an introductory survey course.

Courses:

- *BME 552/ECE 541/PHY 621 Advanced Optics ^[L]_{SEP}
- *BME 555/CHEM 630 Advances in Photonics
- BME 436L Biophotonics Instrumentation
- BME 550 Modern Microscopy
- BME 551 Biomedical Optical Spectroscopy
- BME 436L Biophotonics Instrumentation
- CHEM 890-4 Molecular and Biomolecular Imaging
- ECE 545 Nanophotonics
- ECE 546 Optoelectronic Devices
- ECE 523/PHY 627 Quantum Information Science
- ECE 573 Optical Communications Systems
- ECE 675 Optical Imaging and Spectroscopy
- ECE 590 Laser Systems
- ECE 722 Quantum Electronics
- ECE 676 Lens Design
- ME 555 Optical Properties of Nanostructured Materials
- PHY 671 Quantum Optics
- PHY 562 Fundamentals of Electromagnetism
- PHY 719 Advanced Electromagnetism
- PHY 732 Advanced Quantum Optics
- ECE 574 Waves in Matter