


The Institute of   
**OPTICS**



## **Study Abroad Guide for Optics Students**

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## **Introduction**

The Institute of Optics recognizes that study abroad opportunities can be a valuable part of the University of Rochester educational experience. This informal guide is designed to provide you, the Optics student, with potential paths to a successful study abroad semester as well as answer frequently asked questions.

Optics students planning to study abroad should recognize that, generally speaking, a semester spent studying abroad results in Optics core classes being deferred to senior year. In addition, a one-semester independent summer reading session is required prior to the start of OPT 310/320 senior year (this independent reading may be completed from any location). In order to successfully realize your goal of studying abroad, early planning is essential!

### **When Should I Study Abroad?**

As an Optics student, you should study abroad in either the fall or spring semester of your junior year. When considering possible study abroad opportunities, keep in mind courses may be transferred for elective credit, or toward a major, minor, or certificate. It is possible to transfer a study abroad course towards a cluster. In fact, taking cluster courses abroad can be one of the most interesting aspects of a study abroad experience. To receive credit for your work, all courses taken abroad must be equivalent to a UR "C" or better.

### **Where Should I Study Abroad?**

While the College offers opportunities in over 40 countries, not all programs match up with the typical Optics student's academic needs. Courses are taught in both the host-nation language and in English. (Note of Caution: Carefully, and honestly, self-evaluate your fluency level prior to taking courses in a language other than English). In the past, College-approved courses that are suitable for the typical Optics major have been taught in Australia, Ireland, Israel, New Zealand, and Spain. This does not mean you are limited to studying only in countries that other Optics students have previously studied. If you wish to create your own plan, feel free to do so!

### **What are the Eligibility Requirements?**

The following are the basic requirements for program eligibility. Students must:

- Not be on academic or disciplinary probation (or have disciplinary action pending)
- Have a cumulative GPA of 2.8 or higher
- Be making satisfactory progress towards their major
- No missing or incomplete grades from the previous semester
- Ability to obtain a passport and visa

## **Aren't There Two Kinds of Study Abroad Schools? What is the Difference?**

Yes, study abroad programs fall into two categories:

### **1. University of Rochester-sponsored program**

UR sponsored programs have been reviewed and approved by the Faculty Committee on Study Abroad. Elective credit is automatically transferred to UR for approved courses with a grade of "C" or better. (Grades earned will show up on your transcript but will not factor into your GPA.) For courses to apply towards your Optics degree, or any minor, they must be approved in advance by appropriate faculty. In a sponsored program, students are charged UR tuition and housing rates during the semester abroad. Any UR specific financial aid will be applied to your study abroad program.

### **2. Non-affiliated or sponsored program**

Students choosing a non-affiliated program may discover that they provide greater flexibility than with UR sponsored programs. It is your responsibility to obtain course equivalency approval in advance from the appropriate faculty for all courses. The cost might be less as students pay tuition directly to their selected university rather than paying UR tuition (note: Students studying abroad will be charged an administrative fee of \$1,440 by UR).

## **Application Deadlines and Procedures**

Proposals are due September 15<sup>th</sup> for spring programs, and February 15<sup>th</sup> for fall or full-year programs. A proposal is simply an initial step towards studying abroad and is non-binding.

After you submit your proposal, apply to your chosen study abroad program. As copies of transcripts, letters of recommendations, and other administrative items are required, the sooner you start the process the better. If you don't have a passport, start the application process. If you have a passport, check the expiration date. It should be valid for a minimum of six months past the anticipated end of your study abroad date.

## **Okay, I'm Interested. How do I get Started?**

First, attend a study abroad general information meeting. A calendar of upcoming informational events, along with other important program information, may be found at the Study Abroad website:

<https://www.rochester.edu/college/abroad/>

After attending a meeting, make an appointment with a study abroad counselor, the program experts, located in Dewy 2-147. Talk to the counselor about where, and when, you wish to study and seek his/her feedback and suggestions.

During this process, you should use the suggested course sequence found on pages (5) and (6) as a starting point when planning your personal journey. Be sure to sit down with your faculty adviser to discuss your plan and how it impacts your senior year course selection. Once you and your faculty adviser have agreed upon an academic plan, you will submit your proposal to the Study Abroad office for approval. Once approved, you will be provided further instructions on how to proceed.

A listing of courses taken abroad by previous students can be found at the following link:

<http://www.rochester.edu/College/abroad/advisers/science/index.html>

Need further assistance? You may also discuss opportunities with The Institute's designated Study Abroad representatives:

Primary: Professor Andrew Berger (G 405) [ajberger@optics.rochester.edu](mailto:ajberger@optics.rochester.edu)

Secondary: Daniel Smith (W-106) [daniel.smith@rochester.edu](mailto:daniel.smith@rochester.edu)

***¡que tengas suerte!***



## Optics Curriculum with a Study Abroad Option Fall of Junior Year

### Freshman Fall

MTH 161  
CHM 131  
WRT 105  
OPT 101

### Freshman Spring

MTH 162  
PHY 121  
CSC 160  
Cluster or WRT 105

### Sophomore Fall

OPT 241 (Geometric Opt)  
OPT 201 (Geometric Opt Lab)  
PHY 122  
MTH 164  
Cluster or tech elec.

### Sophomore Spring

OPT 261 (Interference and Diffraction)  
OPT 202 (Physical Optics Lab)  
PHY 123  
Cluster or tech elec.

### Junior Fall\*

**MTH 165?**  
**OPT 287 (Math Methods)?**  
**OPT 262 or PHY 217 (EM Theory)?**  
**ECE 210?**  
**OPT 223 (Quantum)?**  
**Cluster course(s)?**  
**Tech Elective?**

### Junior Spring\*\*

OPT 225 (Sources and Detectors)  
OPT 204 (Sources Lab)  
(OPT 287, ECE 210, OPT 223, MTH 165)  
Cluster Course  
Tech Elective

### Summer

Reading/Independent Study (1 cr.)

### Senior Fall

OPT 310 or OPT 320  
OPT 242 (Aberrations and Testing)  
OPT 203 (Instrumentation Lab)  
OPT 262 (if required)  
Cluster or tech elective

### Senior Spring

OPT 311/321  
Any missing foundation requirements  
Cluster or tech Elective(s)

\*Note: Suggested courses. Four classes are required for study abroad program semester.

\*\*Select courses based on course work completed while completed abroad

## Optics Curriculum with a Study Abroad Option Spring of Junior Year

### Freshman Fall

MTH 161  
CHM 131  
WRT 105  
OPT 101

### Freshman Spring

MTH 162  
PHY 121  
CSC 160  
Cluster or WRT 105

### Sophomore Fall

OPT 241 (Geometric Opt)  
OPT 201 (Geometric Opt Lab)  
MTH 164  
PHY 122  
Cluster or tech elec.

### Sophomore Spring

OPT 287 (Math Methods)?  
OPT 261 (Interference and Diffraction)  
OPT 202 (Physical Optics Lab)  
PHY 123  
Cluster or tech elec.

### Junior Fall

OPT 262 (EM Theory)?  
OPT 242 (Aberrations and Testing)  
OPT 203 (Instrumentation Lab)  
MTH 165  
Cluster or tech elec.

### Junior Spring\*\*

**OPT 262?**  
**OPT 287 (Math Methods)?**  
**OPT 223 (Quantum)?**  
**ECE 210 (or similar circuits)?**  
**Cluster of tech elec?**

### Summer

Reading/Independent Study (1 cr.)

### Senior Fall\*

OPT 310 or OPT 320  
Cluster or tech elective(s)  
Any missing foundation requirements

### Senior Spring

OPT 311/321  
OPT 225 (Sources and Detectors)  
OPT 204 (Sources Lab)  
Cluster or tech elective

\*Note: Select courses based on course work while completed abroad

\*\*Note: Suggested courses. Four classes are required for study abroad program semester.