Potential Modified Bucknell CSE Curriculum Schedule for Study Abroad in Spring of 3rd Year

The CS majors in the College of Arts and Sciences have similar, less constrained options.

### COURSE REQUIREMENT FOR THE FINAL TWO YEARS

#### JUNIOR YEAR
First Semester:  CSCI 208; CSCI315; MATHS 226*; ELEC 101; Soc/Hum.................4.50  
Second Semester: CSCI 240*; CSCI 311; ELEC 245; CSCI Elective; Elective .................4.50

#### SENIOR YEAR
First Semester: CSCI 320; CSCI 475*; MATH 343; Two electives................4.50  
Second Semester: CSCI 476; One computer science elective; Two electives.........4.00

### COURSES AFFECTED BY SPRING JUNIOR YEAR ABROAD

1. **CSCI 240. Computers and Society (II; 2, 0) Half course.**  
The place of the computer in modern society. An in-depth study of the societal, ethical, and legal issues of computing. Historical as well as futurists’ views of computing and technology. Public perception of computers and computer scientists and how that influences the role of the computer scientist as a professional. Course work includes oral and written presentations. Prerequisite: junior or senior standing.

2. **CSCI 311. Algorithms and Data Structures (II; 3, 1)**  
Introduction to the algorithms and data structures used in implementing abstract data types including priority queues, dictionaries, and graphs. Includes complexity and analysis of various implementations. Prerequisites: MATH 241 and CSCI 205 or permission of the instructor.

3. **ELEC 245. Introduction to Digital Systems (II; 3, 3)**  
Analysis and design of digital systems. Boolean algebra and map simplification of logical functions. Combinational and sequential circuit designs. Laboratory experiments include design of digital systems using hardware components and computer simulation. Prerequisite: ELEC 101.

4. A CS Elective

5. An Elective

### Possible Matches for Spring Junior Year:

**University College of London (England):**

*COMP1004 – Theory II (for CSCI 311)*  
*COMP3058 – Artificial Intelligence and Neural Computing (for CSCI Elective)*  
*COMP3013 – Database and Information Management Systems (for CSCI Elective)*

**Move to senior year:**

CSCI 240  
ELEC245 (BCSE only)  
PHYS235 (BSCS only)

**University College of Cork (Ireland):**

*CS1108 – Computing: Profession and Society (for CSCI 240)*  
*CS3052 – Information System Security and Electronic Commerce (for CSCI elective)*  
*CS4612 – Web Search (for CSCI elective)*
Move to senior year:

CSCI 311

University of St. Andrews (Scotland):

CS3101 – Databases (for CSCI elective)
CS3105 – Artificial Intelligence (for CSCI elective)
CS4103 – Distributed Systems (for CSCI elective)

Move to senior year:

CSCI 240
CSCI 311
ELEC 245 (for BCSE)
PHYS 235 (for BSCS)

Other Universities CS Students Have Done Study-Abroad in Recent Years:

Queen Mary, University of London (England)
Nanzan University (Japan)
University of Auckland (New Zealand)
University of New South Wales (Australia)

Other potential matches may be identified by the student

To discuss options that best work for you, see Prof. Meng, the CS study abroad advisor. To learn more about study abroad in general, and logistics like cost and registration, contact Jen Fritz, the Engineering Study Abroad Adviser in the International Education Office. Her email is: jef025@bucknell.edu