COSI “Meet the Majors”

Fall 17

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Fall '17: Instructor COSI 29a
Agenda

• Resources Available To You When You Have Questions
• COSI Courses, Majors and Minors
• FAQ
• Your Questions
Resources

• Department Web Page: http://www.cs.brandeis.edu

• UGrad Advising FAQ: http://www.bit.ly/BrandeisCS

• Sage: http://sage.brandeis.edu

• Registrar Web Page: http://www.brandeis.edu/registrar


• Undergraduate Advising Head (Me!)
  • Drop-in Office Hours: Tuesdays, 2:00-3:30, Volen 259 (No appt needed)
Brandeis COSI Courses + Prereqs

- 11a Intro to Java
- 29a Discrete Structures
- 12b Advanced Java
- 123a Statistical ML
- 130a Theory of Comp’n
- 121b Scheme
- 131a Operating Systems
- 129a Intro to Big Data
- 21a Data Structures
- 153a Mobile App Dev
- 127b Intro to DBs
- 101a Intro to AI
- 177a MATLAB

Fall: 11a, 12b, 129a, 177a, 121b, 21a, 101a
Spring: 29a, 123a, 130a, 127b, 131a, 153a
COSI Minors and Majors

• BA: **Good with multiple majors**
  • 11a: Intro to Java
  • 12b: Advanced Programming Techniques
  • 21a: Data Structures and Algorithms
  • 29a: Discrete Structures
  • 131a: Operating Systems

• **4 COSI electives with at most, 1 cross-listed**
  • Excluding COSI 99d (Senior Research) and COSI 2a
COSI Minors and Majors

• **BS:** Good if grad school in COSI a consideration
  • 11a: Intro to Java
  • 12b: Advanced Programming Techniques
  • 21a: Data Structures and Algorithms
  • 29a: Discrete Structures
  • 131a: Operating Systems
  • 121b: Structure and Interpretation of Computer Programs
  • 130a: Theory of Computation
  • Math 8a: Intro to Probability and Statistics
  • Math 10a: Techniques of Calculus

• 5 COSI electives with at most, 2 cross-listed
  • Excluding COSI 99d (Senior Research) and COSI 2a
COSI Minors and Majors

• Minor:
  • 11a: Intro to Java
  • 12b: Advanced Programming Techniques
  • 21a: Data Structures and Algorithms
  • 29a: Discrete Structures
  • 131a: Operating Systems
  • 121b: Structure and Interpretation of Computer Programs
  • 130a: Theory of Computation
  • Math 8a: Intro to Probability and Statistics
  • Math 10a: Techniques of Calculus

• 3 COSI electives with at most, 1 cross-listed (can include COSI 2a)
  • Excluding COSI 99d (Senior Research)
Advising FAQ

• A good place to start when you have a question:

bit.ly/BrandeisCS
Q) How do I declare the major or minor in COSI?

A) Send an email to the UAH telling him (me):

• What is your name?
• What is your SAGE ID?
• What do you want to declare? (i.e., BA, BS or minor)
Q) How do I drop the major/minor in COSI or change from a BA to BS or vice versa?

A) Send an email to the UAH telling him (me):

• What is your name?
• What is your SAGE ID?
• What do you want to change to? (i.e., BA, BS or minor)
Q) How do I get exempted from COSI 11a?

A) If you got a 5 on AP Computer Science A exam, it is automatic.
   If you got a 4 on AP Computer Science A exam or passed an equivalent course at another university you may take a placement exam
   • offered once per semester (1st Wed after classes start)
   • must receive permission from UAH prior to taking
   • this semester: Wed, 9/13 at 4:30 PM (location TBA)

If none of these apply to you, you cannot get an exemption
Q) Can I take a course that has 11a as a prerequisite if I haven’t taken 11a?

A) No. You must 1st receive an exemption from 11a as described before. Exemption from 11a accomplishes two things:

• it exempts you from major/minor requirement of taking 11a
• it allows you to take courses that have 11a as a prerequisite
Q) Can I take 12b without either having taken or been exempted from 11a?

A) No.
Q) Can I take 21a without either having taken or been exempted from 11a?

A) No.
Q) Can I take 21a without either having taken or been exempted from 12b?

A) Only if you receive an A- or better in 11a or the 11a placement exam. 12b was made a prerequisite to 21a (and not just recommended) as of Fall 2016.
Q) Can I take X without either having taken or been exempted from prerequisite Y?

A) No. Prerequisites are there for a reason. Mastery of topics covered in a prerequisite course are assumed in the course for which they are a prerequisite.
Q) How do I get exempted from COSI 29a?

A) If you have taken Math 23b (Intro to Proofs) and a Probability or Statistics course (e.g., Math 8a or Math 36a).
Q) How do I get exempted from other COSI courses?

A) Exemptions from core courses other than 11a and 29a are rare and done on a case-by-case basis. Usually requires taking an equivalent course at a comparable university + permission of the UAH and instructor.
Q) If I get exempted from a course, must I take another COSI course in its place?

A) Yes. All exemptions from core courses must be replaced with a COSI elective.
Q) How do I make my exemption official?

A) Save the evidence that you were granted an exemption, as UAH’s change or can have limited memories. Once you have taken the replacement course(s), file a petition off of the registrar website to get official approval to substitute the replacement course from the exempted course.
Q) How do I meet with the UAH?

A) First, make sure that your question is not answered in the Advising FAQ found at bit.ly/BrandeisCS.

If your question is not answered there, you may pop in without an appointment during the UAH Office Hours, which this year, are held Tuesdays, 2:00-3:30 in Volen 259.
Q) The reqts for the degree have changed since I declared. What are my options?

A) All students have the option of following the current requirements for the major or minor as specified in the current version of the bulletin (see: www.brandeis.edu/registrar) or following the requirements that were in effect when you declared. You can tell which requirements with which you are currently associated by performing a degree audit on sage. If you wish to change the requirements to an earlier or later version of the bulletin, you may request this by emailing the registrar at registrar@brandeis.edu
Q) Does COSI 2a count as an elective for the major?

A) No. COSI 2a is a course designed for non-majors and thus does not count towards the major.
Q) Can courses I take while studying abroad count towards the major?

A) As is recommended university-wide, core courses for the major should be taken at Brandeis prior to studying abroad.

The rule-of-thumb for electives taken during study abroad as that they will count as electives for the COSI major if those courses count towards the COSI major at the university where you took them.
Q) How can I substitute for Math courses that are required for the BS in COSI?

A) Substitutions for Math courses must be approved by the Math department. Correspondence from the Math department approving a given substitution should be forwarded to the UAH before filing an online petition for the substitution for it to be approved for COSI requirements. This includes AP courses used to substitute for Math courses.
Q) I am seeing a mistake on my sage record. How do I get this corrected?

A) All questions about sage course audits should be addressed with the registrar at registrar@brandeis.edu
Q) What courses are cross-listed electives for COSI?

A) These can be found in the course bulletin:

- ANTH 138a: Anthropology of Digital and Biotechnologies
- LING 130a: Formal Semantics: Truth, Meaning, and Language
- LING 131a: Intro to NLP Processing with Python
- MATH 36a: Probability
- MATH 39a: Introduction to Combinatorics
- MATH 100a: Introduction to Algebra, Part I
- MATH 100b: Introduction to Algebra, Part II
- MATH 108b: Introduction to Number Theory
- PHIL 106b: Mathematical Logic
- PHYS 29a: Electronics Laboratory I
Q) Can any other courses be accepted as cross-listed electives for COSI?

A) Most likely, no. This list was chosen carefully.

Exception: if the course in question is a new course (i.e., introduced in last 3 years), it may be that we haven’t considered it. You can make the case with the UAH, but we will be looking for significant Computer Science content.
Q) How do I do an Independent Study?

A)

• Criteria for independent study differs by faculty (e.g., for me, usually a course w/ syllabus, assignments, readings etc.)

• Between you and supervising faculty member. Does not need UAH approval

• Suggestions:
  • Choose a faculty member who has gotten to know you and with whom you have done well
  • Speak to the faculty member a semester before you want to do the IS
  • Be prepared with ideas and plans of your own. Stress is on “Independent”
Q) Can I get credit for an internship?

A) No, though COSI 93a gives credit for working in a faculty member’s research lab.

Are looking into ways to give some credit for an internship so that foreign students can do. Would not reduce course requirements for major.
Q) How do I become a TA?

A) I’m so glad you asked! Effective TAs are essential to the Department!

If you do well in a course and enjoyed it, express your interest in TA’ing to the faculty member the next time they teach it. Remind them when you see the course on the schedule. If you TA more than once, try to TA for different courses

Benefits:
- Money on the side (international students included!)
- You really learn the material
- Gratitude from students who like you more than the professor
- Grading is fun!
Questions?

• Your questions come here ...