## Concentration Contract: Sc.B. in Applied Math/CS

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Graduation Year \_\_\_\_\_

**General Instructions**: fill this out as well as possible, <u>print it</u>, and then complete it with your concentration advisor and have her/him sign it. Put in *only* those courses used for the concentration. Put check marks in the boxes in the leftmost column for those courses that have been completed. Any changes to your contract must be initialed and dated by your advisor. The contract must be reviewed and reapproved yearly. (If there are no changes, review is still required, but approval is automatic.) Electronic submission is not available at this time.

# Completed Will take when Placement Use Only

#### Math Prerequisites

Second-semester Calculus course (e.g. Math 0100, 0170, or 0190)

#### **Core Math and Applied Math Requirements**

Math 0180 or Math 0350 (Intermediate Calculus)	
Math 0520 or Math 0540 or CSCI 0530 (Linear Algebra)	
APMA 0350 (Methods of Appl Math I)	
APMA 0360 (Methods of Appl Math II)	
APMA 1170 or 1180 (Numerical Analysis)	

#### **Core Computer Science**

CSCI 0150 (Intro to Programming and CS)	Fall
CSCI 0160 (Intro to Algs & Data Structs)	Spring
or	
CSCI 0170 (CS: Integrated Approach I)	Fall
CSCI 0180 (CS: Integrated Approach II)	Spring
or	
CSCI 0190 (Programming and Data Structs & Algs)	Fall
Advanced CS course (see web page) #	
CSCI 0220 (Intro to Discrete Math) (math)	Spring
CSCI 0450 or 1450 (Intro to Prob. And Computing) (math)	
CSCI 0310 or 0330 (Intro to Computer Systems) (systems)	Fall
CSCI 0320 (Intro to Software Engineering) (systems)	Spring
CSCI 0320 (Intro to Software Engineering) (systems) CSCI 1010 (Models of Computation) (math)	Spring Fall

#### **Advanced Applied Math**

APMA 1200 (Operations Research: Prob. Models)	Fall
APMA 1210 (Operations Research: Det. Models)	Spring
APMA 1650 (Statistical Inference I)*	Fall
APMA 1660 (Statistical Inference II)	Spring
Other approved 1000-level course #	Fall
Follow-up approved 1000-level course #	Spring

\*CSCI 1450 and APMA 1650 may not both be taken for concentration credit.

### **One Additional 1000-level Applied Math Course**

#### Advanced Computer Science

Three courses in CS or related areas. All must be at the 1000 level or higher. Two of the courses must be either chosen from the list of approved pairs found at <a href="http://www.cs.brown.edu/ugrad/concentrations/approvedpairs">http://www.cs.brown.edu/ugrad/concentrations/approvedpairs</a> or approved by the director of undergraduate studies. If CSCI 1450 is used as an intermediate course, it may not also be used as an advanced course.

Course 1 of approved pair	#	
Course 2 of approved pair	#	
Other approved course		

#### **Capstone Course**

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The above is my plan for meeting the degree requirements. It is my responsibility to make certain that all courses taken at Brown for concentration credit, all courses taken at other schools for which transfer credit has been approved for concentration credit, and all AP credits appear on my transcript.

Student Signature

Advisor Signature

Date

Advisor Name (printed)

Form Revised July 2014

### Reviewed and reapproved (at yearly meeting with concentration advisor):

Student Signature	Advisor Signature
Date	Advisor Name (printed)
Reviewed and reapproved (at yearly meeti	ng with concentration advisor):
Student Signature	Advisor Signature

Date

Advisor Name (printed)