## A Guide for BA Transfer Students

The place to check the precise requirements is the appropriate Quick Guide; they're all linked to from here. The Quick Guides are more up to date than the CC and GS bulletins. There are three general rules :

1. Your school advisor is in charge of whether you can transfer credits from another schoolyour CS advisor has nothing to say about that.
2. You can transfer in at most four CS courses. If you've taken more courses than that, we don't want you to repeat something you already know, but you and your advisor together will find acceptable substitutes.
3. The person who can approve "importing" a course for credit is the person who teaches it here; your CS advisor cannot, though they can often offer guidance. Your CS advisor can help you find the right person to ask; you want to pass along a detailed syllabus and not just a catalog description. When you get approval, email that to advising@cs.columbia.edu and CC your CS advisor.
Here are the advisors for the courses most commonly imported.

| W1004 (Introduction to <br> Programming) | Prof. Adam Cannon | cannon@cs.columbia.edu |
| :--- | :--- | :--- |
|  | Prof. Paul Blaer | pblaer@cs.columbia.edu |
| W3134 (Data Structures) | Prof. Paul Blaer | pblaer@cs.columbia.edu |
|  | Prof. Daniel Bauer | bauer@cs.columbia.edu |
| W3157 (Advanced <br> Programming) | Prof. Jae Woo Lee | jae@cs.columbia.edu |
| W3203 (Discrete Mathematics) | Prof. Ansaf Salleb-Aouissi | ansaf@cs.columbia.edu |
| W3827 (Fundamentals of <br> Computer Systems) | Prof. Simha Sethumadhavan | simha@columbia.edu |
|  | Prof. Martha Kim | martha@cs.columbia.edu |
| Calculus | Prof. Dan Rubenstein | danr@cs.columbia.edu |
|  | Prof. George Dragomir | dragomir@math.columbia.edu |

We teach introductory programming using Java; many other places use C++. That's probably fine, and will probably let you import W1004. However, we teach data structures using Java, not C++; if you only know the latter, you'll have to teach yourself the former. That shouldn't be too hard, since the essential concepts are the same (and any Columbia CS major should be capable of learning a new language that way). Very few people can import 3157 (Advanced Programming), and it's a prerequisite for most of the 4000-level courses. 3857 (Fundamentals of Computer Systems) is a toss-up; some people can import it, some can't. The required math courses are a bit more complex:

- Although we prefer our Computational Linear Algebra class (COMS W3241), we will accept Linear Algebra (MATH 2010, APMA 3101, or APMA 2101).
- If you plan to take Machine Learning, you may need a course in probability as well, e.g., STAT 4001 or IEOR 4150.
- Our version of Discrete Mathematics has a significant probability component; if you've taken discrete mathematics elsewhere and probability in some separate course, you may be able to test out of the course; see http://www.cs.columbia.edu/~ansaf/more.html for details.
- The calculus requirement is changing to require Calculus III, though for now we'll accept Calculus II instead. However, for Calculus II or equivalent (e.g., getting a 5 on the AP Calculus BC exam) to count, it has to show up on your transcript as 3 credits towards Columbia graduation. If you've only taken the AP exam but no other calculus class here, this will not happen.

Finally, if you have any questions about your program, contact your CS advisor. If you have questions about whether you have the prerequisites for a given course (perhaps through a job rather than formal study), contact the person who is teaching it-though there are a few exceptions, most of us don't bite...

