

Registration for the Spring 2018 semester begins Tuesday, November 14th. In order to ensure that you get a seat in a class, it is extremely important that you register as soon as possible. Due to the current budget situation we are forced to reduce the number of sections we will be offering. Once classes fill over allies will **not** be given. This applies to both undergraduate and graduate students graduating seniors or not. ***If you wait, you may find that the classes you want have been closed or cancelled due to low enrollment.***

If you are a graduating senior, you should already know what classes you need to graduate. Make sure to register for them immediately as the excuse "I am a graduating senior" will not be accepted and you will have to postpone your graduation. Similarly, pay your bills on time. We will not make exceptions for students who have been dropped from their courses because they have not paid their bills. Do not place yourself in an uncomfortable situation. If you do not earn a C (not C-) or better in a prerequisite course you will be dropped and may not have a chance to register for another course.

It is highly recommended that majors see a Deputy Chair each semester to plan out their schedule for the next semester.

You may meet with the advisors during their office hours or make an appointment via email.

- Undergraduate CLAS Deputy Chair – Professor Moshe Augenstein – augenstein@sci.brooklyn.cuny.edu
- Undergraduate SGS Deputy Chair – Professor Joseph Thurm – jthurm@juno.com
- Graduate Deputy Chair – Professor Paula Whitlock – whitlock@sci.brooklyn.cuny.edu
- Director of BS in Information Systems – Professor Ira Rudowsky – rudowsky@brooklyn.cuny.edu

Important News: Beginning in the Fall 2017 semester the CIS department is transitioning to Java as its primary programming language. This applies to all degree programs within the department (CS, IS, Multimedia, Computational Mathematics) and all minors. It is felt that Java is a simpler, more consistent, less idiosyncratic introductory programming language than C++.

Students who have already begun the major will be able to complete their major according to the following schedule.

Students who have already taken CISC 1110 (C++) and CISC 3110 should note the following dates:

Spring 2018 – CISC 3110, Advanced Programming Techniques, will no longer be offered. CISC 3115, Introduction to Modern Programming Techniques, (which has CISC 1115 as a prerequisite) will be offered in its place.

Fall 2018 – CISC 3130, Data Structures, will be offered using Java instead of in C++

Spring 2019 – CISC 3140, Design and Implementation of Software Applications 2, will now be called CISC 3140, Design and Implementation of Applications, and a new required course CISC 3142, Programming Paradigms in C++, will be offered for the first time.

What this means for you:

CISC 3110 was offered for the last time in Fall 2017

CISC 3120 will be offered for the last time in Spring 2018

CISC 3130 in C++ will be offered for the last time in Spring 2018

Thus it is essential that students who are in the C++ sequence, follow up with 3120 and 3130 in Spring 2018.

If you have any questions make sure you speak to an advisor!

1. In order to assist you in long term planning, a *tentative* schedule for the next three years is posted at <http://www.brooklyn.cuny.edu/web/academics/schools/naturalsciences/undergraduate/computers/forstudents.php>. This schedule is subject to enrollments.
2. Flowcharts for the majors as well as our Advice to Undergraduates and Graduate brochures are available online at <http://www.brooklyn.cuny.edu/web/academics/schools/naturalsciences/undergraduate/computers/forstudents.php>
3. **The registration system at Brooklyn College enforces prerequisites.** If you feel a prerequisite should be waived, please see the instructor of the course before you register and if the instructor approves have an email sent to me. The prerequisite of CISC 1050 that applies to several courses is readily waived if you know computer application tools such as Word, Excel, Access and/or PowerPoint. Also, if your courses from another school have not yet been evaluated and posted to your transcript, please make sure to come to the department office as early as possible for advisement and possible waiver of prerequisites. Once a course is closed over allies will not be considered and you will need to make alternative arrangements. As mentioned above we anticipate that classes will quickly fill and additional seats will **NOT** be available. **Plan ahead and register early!**
4. **Shortly before the beginning of the semester the Registrar will drop all students who do not have the proper prerequisites.** At that time, if the class is full, you will not be able to register for the class, even if the instructor waives the prerequisites.
5. Note that you must earn a C or higher in all CIS prerequisites to any CIS course. If you earn a C- or below in a prerequisite course, you should take the course over before going on to the next course. (However, if you earn below a C in a Math prerequisite for a CIS course, you may still register for the next CIS course, although the Math department may require a minimum grade for registration in a subsequent Math course.) Note also that the C requirement applies only to a prerequisite and to the 24 credits of advanced electives that must be taken at Brooklyn College. Thus, for example, you need not repeat CISC 3220 if you earn less than a C since CISC 3220 is not a prerequisite for another CIS course. Similarly, you need not repeat CISC 3320 if you earn less than a C unless you want to take CISC 4330 for which CISC 3320 is a prerequisite.) Transfer students should be especially careful that they present 24 credits of advanced electives

in the major (courses numbered CISC 2000 or higher) taken at Brooklyn College with a grade of C or better.

Note that the Math department allows CIS students who received a D in MATH 1206 to register for MATH 2501, but will not allow a student who received below C- in MATH 1201 to register for MATH 1206.

6. **Undergraduate** advanced electives being offered in the Spring include: CISC 2210, CISC 2531, CISC 2590, CISC 2810, CISC 2820W, CISC 3115, CISC 3120, CISC 3130, CISC 3140, CISC 3150, CISC 3171, CISC 3220, CISC 3310, CISC 3320, CISC 3325, CISC 3343, CISC 3415, CISC 3620, CISC 3650, CISC 3810, CISC 4900, CISC 4905, and CISC 5001-CISC 5003.
7. **Graduate** courses being offered in the Spring include: CISC 7124, CISC 7214, CISC 7226, CISC 7302, CISC 7310, CISC 7320, CISC 7334, CISC 7410, CISC 7510, CISC 7512, CISC 7520, CISC 7522, CISC 7530, CISC 7940, CISC 7900, CISC 7902, CISC 7990, 7992, 7994.
8. Students in CORC 3303, or CISC 1050 or CISC 1590 or CISC 2531 or CISC 2820W, who have not taken CISC 1115 and wish to major or minor in CIS should register for CISC 1115 which teaches programming in Java. Most advanced CIS courses present their concepts using the Java programming language. **If you have had a programming course in a language other than Java and do not know Java please see the Chairperson.**
9. Students who have taken CORC 3303, or CISC 1000 or CISC 1110 or CISC 1115 or CISC 1030 or CISC 1035 or CISC 1530 or CISC 1050 or CISC 1590 or CISC 2531 or CISC 2820W, **who do not wish to major in CIS** and:
 - who want proficiency in current application tools should register for **CISC 1050**.
 - who are interested in business applications of the Internet should register for **CISC 1530**.
 - who want to learn about multimedia computing should register for **CISC 1600**.
 - who are interested in how information systems operate in organizations should register for **CISC 1590**.
 - who are interested in media and business should register for **CISC 1597**.
 - who are interested in business applications of computing should register for **CISC 2531**.
 - who are interested in the dangers and ethics of computing should register for **CISC 2820W**.
10. If you plan on majoring or minoring in CIS and have taken CISC 3110, **you must take CISC 3130 and CISC 3120 this spring.**
11. Students who have completed CISC 1115 should register for CISC 3115 and can also register for either CISC 2210 (assuming you have taken MATH 1011 or have placed in MATH 1201, or CISC 2820W) (assuming you have taken ENGL 1012).

12. Students currently in CISC 3110 must register for CISC 3130. It is important to take CISC 3130 as soon as possible after CISC 3110 for two reasons: first, you want your knowledge of C++ to be as fresh and thorough as possible when you take CISC 3130, and, second, most other CIS courses have CISC 3130 as a prerequisite, so taking CISC 3130 enables you to take a wide variety of other courses in the future. You may also wish to take CISC 3310 along with CISC 3130 if you have taken CISC 2210. **CISC 3130 will be offered in C++ for the last time in Spring 2018.**
13. Students currently in CISC 2210 should take CISC 3310. Students, who have already passed CISC 2210, CISC 3110 and CISC 3130, all with a C or above, should take CISC 3310, CISC 3310 and/or CISC 3220 or CISC 3230. If you've taken CISC 3310, take CISC 3140 and/or CISC 3150.
14. CISC 2210 is required for the major and introduces important mathematics frequently used in computer science. The prerequisite for CISC 2210 (Discrete Structures) includes MATH 1011 or assignment to MATH 1201 on the basis of the Brooklyn College Mathematics Placement Test. It also requires either CISC 1110 or CISC 1180 or CISC 1115 or CISC 1170.
15. CISC 1050, Microcomputers in Business and Administration, teaches the use of word processing (Microsoft Word), spreadsheets (Excel), databases (Access), and presentation software (PowerPoint) on personal computers. There is no prerequisite for CISC 1050. This elective course may be of interest to all CIS students. It is a prerequisite for CISC 3800 and for CISC 3810. (However, CISC 1050 is often waived if you know computer application tools such as Word, Excel, Access and/or PowerPoint.)
16. CISC 1530 Electronic Commerce is being given in conjunction with the Department of Business and Finance Management. It is a survey of practices in doing business online over the Web. The prerequisite is either CORC 1312 or Core 5.1 or CISC 1000 or CISC 1110 or CISC 1115. It is open to CIS majors and non-majors.
17. CISC 1600 Introduction to Multimedia Computing is a course for majors or non-majors. It has no prerequisites.
18. Students who have completed CISC 3110 should register for CISC 3120. This course will cover how to develop application software and introduce the Java programming language. Courses that can be taken with CISC 3120 if you've completed CISC 3130 are CISC 2210, CISC 3220 or CISC 3230 (if you've also taken CISC 2210 and MATH 1201, and CISC 3310 (if you've already taken CISC 2210. Students who have taken CISC 3120 should take CISC 3140 and then CISC 3150. CISC 3140 and CISC 3150 are both required for the CIS major. **CISC 3120 will be offered for the last time in Spring 2018.**
19. All undergraduate students who entered or re-entered Brooklyn College in Fall 2001 or later are required to take a writing-intensive course (indicated with a W after the number). In CIS, you should register for CISC 2820W, Computers and Ethics. CISC 2820W is required for the CIS major. ENGL 1012 is a prerequisite for all W courses.
20. CISC 4900 or CISC 5001 is required of all CIS majors. They both require department permission for registration. CISC 4900 requires completion of a major computer science project (involving

approximately 15 hours/week of work). Students may find their own project, within or outside the school. Many students use projects at work for their CISC 4900 project.

Students generally do not take CISC 4900 before their senior year, but students who present an appropriate project may be given permission before then. Students who are unable to find a project and are seniors will be assigned a project and must arrange their schedule so that they have two complete days a week available for project-related activities.

Students who wish to receive permission to register for CISC 4900 should see Professor Augenstein, (Room 2122N, x5204, email: augenstein@sci.brooklyn.cuny.edu), or leave a message for him in the department office (Room 2109N, x5657). Students who have already taken CISC 4900 may take CISC 4905 to continue their project or do an additional project. **Please do not wait until the end of registration to contact Professor Augenstein. During the winter he is often on vacation and will not be available to give permission. The chair cannot give permission for this class.**

21. CISC 5001-CISC 5003 are honors courses that are only open to superior CIS majors. It involves doing a research project under the supervision of a senior faculty member. Students need permission from the faculty member and from the Chair of the Department. Prior to obtaining permission from the Chair a written proposal, in consultation with the sponsoring faculty member, must be submitted to and approved by the Honor Course Committee. Faculty members who have sponsored CISC 5001 (CIS 88.1) projects in the past are Profs. Bar-Noy, Dexter, Kletenik, Langsam, Levitan, Mandel, Raphan, Sokol, Tenenbaum, Weiss, and Whitlock. **Proposals must be submitted no later than 2 weeks before the beginning of the semester. Proposals that are submitted later, may not be approved.**
22. A number of courses are offered jointly with other departments. Although most are not required for the CIS major, majors may gain a lot of useful knowledge and skills from these courses. Some of these are required for the Information Systems major.
 - o **CISC 1530** (Electronic Commerce, also BUSN 3120).
 - o **CISC 1580W** (Computer Management Games, also BUSN 4202W).
 - o **CISC 1590** (Management Information Systems, also BUSN 3420) is a course that surveys how computers are used in large organizations for organizing and retrieving information.
 - o **CISC 1597** (Media and Business, also BUSN 3110 and TVRA 3537) is a course that surveys new media such as the Web and how it is used in Business applications.
 - o **CISC 2531** (Operations Management, also BUSN 3430 is offered jointly with the Department of Business and Finance Management. It teaches how to manage the operations of a company using computers. Students who want to go into commercial computing will find this course very useful.
 - o **CISC 2810** (Macromolecular Structure and Bioinformatics)
 - o **CISC 2820W** (Computers and Ethics, also PHIL 3318W).

23. The CIS Department offers a **Minor in Multimedia Computing**, for which computer science (and other) majors are eligible. The minor requires CISC 1110 or CISC 1180 or CISC 1115, CISC 1600, CISC 3110 or CISC 3115, CISC 3120, CISC 3130, CISC 3620 or CISC 3630, and two courses chosen from among CISC 3610, CISC 3620, CISC 3630, CISC 3650, CISC 3660, CISC 3665, and CISC 4610. You can have a major in computer science with a minor in multimedia computing if you satisfy the major requirements and take the above courses. Courses presented for the major in computer and information science may also be used to satisfy the minor in multimedia computing. Students who have begun their studies in Fall 2017 will take CISC 1115, 3115 instead of 1110, 3110 and 3120.
24. The CIS Department offers a **Minor in Cognitive Science** together with the Departments of Philosophy and Psychology. The minor consists of CISC 1110 or CISC 1115, PHIL 3422, PSYC 1000, PSYC 3530, and a choice of one course from each of the following groups: Group A: PHIL 3123, PHIL 3410, PHIL 3401, PHIL 3420 or PHIL 3601. Group B: CISC 3410 or CISC 1410; or PHIL 3423, or PSYC 3580. The minor can be taken together with the CIS major and deals with the issue of "What is cognition and how can it be created artificially?"
25. Advanced (senior year) students with good records can also consider taking a graduate course offered by the department, as an advanced elective, if they satisfy the prerequisite conditions. This requires the approval of both the department and the Academic Advisement Center. For information, contact Professor Paula Whitlock – whitlock@sci.brooklyn.cuny.edu
26. Urge your non-major friends who have not taken CIS classes to take CISC 1003 (CORC 3303), *Exploring Robotics*, to satisfy a Brooklyn College Pathways College Option requirement. See the Schedule of Classes for details.
27. You are welcome to visit our departmental website for all sorts of good stuff at:
<http://www.sci.brooklyn.cuny.edu/cis> . You will be able to link to the other items from this page.
28. You can also join the CIS department email list by clicking on the following link to get regular email about courses, jobs and other information of interest to CIS students:
<http://www.sci.brooklyn.cuny.edu/cis/majordomo?cistalk>