

Harper College Transfer Guide Bachelor of Science in Computer Science

Available at: NEIU Main Campus (Chicago, IL)

Computer Science Program Description

The Bachelor of Science degree in Computer Science prepares students to pursue graduate study or to assume positions which include software engineering, technical programming, and the application of computers and related technologies to problems in industry such as computer security, network design and management and Web design. Students will also acquire sufficient theoretical background to enable them to keep up with the rapid changes in computer technology and methodology.

Contact Information

Northeastern Illinois University Transfer Center: Students who have questions about the program prior to admission may contact the Northeastern Transfer Center at (773) 442-4076 or email TransferSteps@neiu.edu.

Student Center for Science Engagement (SCSE): The SCSE supports students enrolled in majors in the biology, chemistry, computer science, earth science, math, physics, and psychology fields. For more information, please contact Laura West, Student Academic Services Specialist in STEM, at 773-442-5664 or L-West2@neiu.edu.

Admission Requirements

- Students must have earned a minimum cumulative grade point average of 2.0 or higher for all college or university course work attempted. Students must be in good academic standing at the last college or university attended.
- Required documents are: application for admission, \$30 nonrefundable application fee, and official transcripts from all colleges and universities.
- Additional Admission and application materials, including the option to apply online can be found at www.neiu.edu/Transfer.
- Application deadlines are as follows:

| | | International | |
|-----------|------------|-------------------|--|
| | | Applicants | |
| Fall | July 1 | June 1 | |
| Spring | November 1 | October 1 | |
| Summer I | April 1 | March 1 | |
| Summer II | May 1 | April 1 | |

Transfer Policies

- Students with an AA degree from an Illinois Community College and/or completion of the IAI will have fulfilled Northeastern Illinois University's general education requirements.
- A maximum of 64 semester hours may be transferred to Northeastern from a community college. In cases where both a community college and university were attended, a maximum of 90 semester hours are accepted, with a maximum of 64 semester hours allowed at the community college level.
- Additional information about transferring and transfer policies are available at www.neiu.edu/Transfer.

Northeastern Illinois University Degree Requirements

- 1.) General Education: 36 credit hours (see requirements below)
- 2.) English 101 or equivalent (grade of "C" or higher): At Harper, take ENG 101 Composition.
- 3.) Total Credits and Credit Levels: A minimum of 120 semester hours must be earned by every undergraduate student to be eligible to graduate from Northeastern. Students must complete a minimum of 40 semester hours at the 300 level to meet the Upper Division requirement.
- 4.) **Major Program:** Undergraduate students must declare and complete a major. Students must earn a grade of "C" or higher in all courses counted toward the major. No "P" grades will count toward a major.
- 5.) **Residency:** Must complete a minimum of 30 credit hours at Northeastern.
- 6.) **GPA:** Students must have a minimum cumulative 2.0 GPA (overall "C" average). Some academic programs and departments have other specific grade requirements.
- 7.) **Improving Human Relations:** The Improving Human Relations requirement may be met through the General Education program. Courses are available in both the Humanities and Social / Behavioral Sciences categories. You may choose a course that meets the Improving Human Relations requirement *and* Humanities or Social / Behavioral Sciences.
- 8.) Writing Intensive Program: Students must successfully complete a writing intensive course within their discipline. This course must be completed at Northeastern. Students completing the Bachelors of Science in Computer Science fulfill this requirement by taking CS 319 WIP: Fundamentals of Software Engineering.
- 9.) University Core Curriculum (UCC): Students must complete three Engaged Learning Experience (ELE) courses. ELE courses are either Boundary Crossing (ELE-X) or Discipline Specific (ELE-DS) and are chosen in consultation with the student's advisor. At least one course must be at the 300 level and one course must be an ELE-X course as part of meeting the requirement.

General Education Requirements

Four options are available to students who plan to complete their General Education requirements at Harper College.

- Associate of Arts: Students who transfer with an approved Illinois Community College Board (ICCB) Model
 Associate of Arts degree will have met Northeastern Illinois University's General Education Requirements. For
 information regarding completing an Associate of Arts at Harper, including assistance with course selection, please
 visit the Academic Advising and Counseling Center at Harper. More information is available at their website
 (http://goforward.harpercollege.edu/services/advising/currentstudent/index.php) or by calling (847) 925- 6393.
- Associate of Science: Students who transfer with an approved Illinois Community College Board (ICCB) Model Associate of Science degree granted August 2016 or earlier will have met Northeastern Illinois University's General Education requirements. Students who transfer with an approved ICCB Model Associate's degree granted December 2016 or later may need to take one additional Humanities course and one additional Social and Behavioral Sciences course to meet Northeastern's General Education requirements. For information regarding completing an Associate of Science at Harper, including assistance with course selection, please visit the Academic Advising and Counseling Center at Harper. More information is available at their website (http://goforward.harpercollege.edu/services/advising/currentstudent/index.php) or by calling (847) 925- 6393.

- Completion of the *Illinois Articulation Initiative (IAI):* Students who transfer after completing the Illinois Articulation Initiative (IAI) will have met their General Education requirements. For information regarding the Illinois Articulation Initiative, including courses at Harper that fulfill General Education requirements, please visit the iTransfer web site at www.itransfer.org.
- Transfer Course Lists for Harper College: Students may choose to meet their General Education requirements by selecting courses from Northeastern's Transfer Course Equivalency Guides, available at: www.neiu.edu/Transfer.
 When choosing this option, please use the following Northeastern Illinois University General Education guide:

| Northeastern Illinois University General Education Program | | | | | |
|---|---|---|--|--|--|
| The General Education Program requires a minimum of 36 credit hours of courses distributed among 5 areas. | | | | | |
| Northeastern Illinois University Requirement | | Harper College Equivalent (if any) | | | |
| Math / Quantitative Reasoning – one course (3 hours) | 3 | Students who major in Computer Science at Northeastern can fulfill this requirement by taking MTH 103 College Algebra (or MTH 201 Calculus with Analytic Geometry II for the Computer Science Concentration) at Harper. | | | |
| Social / Behavioral Sciences 3 courses (9 hours) | 9 | No more than two courses from the same department may be used. | | | |
| Natural Sciences 3 courses (9 hours) | 9 | No more than two courses from the same department may be used. One course must have a lab component. | | | |
| Fine Arts 2 courses (6 hours) | 6 | No more than one course from the same department may be used. | | | |
| Humanities 3 courses (9 hours) | 9 | No more than two courses from the same department may be used. No more than two foreign language courses may be used to fulfill this requirement. | | | |

Computer Science Major Requirements

| Northeastern Illinois University Computer Science Major: 48 credits (24 credits for Required Core Courses; 24 for Concentration Courses) Computer Science Major Core Requirements | | | | |
|--|---------|--|--|--|
| Northeastern Illinois University Course | Credits | Harper College Equivalent (if any) | | |
| CS 200 Programming I | 3 | No Equivalency at Harper College. | | |
| CS 201 Discrete Structures | 3 | MTH 220 Discrete Mathematics | | |
| CS 207 Programming II | 3 | No Equivalency at Harper College. | | |
| CS 301 Computer Organization | 3 | CSC 217 Assembler Programming and Machine Organization | | |
| CS 304 Data Structures | 3 | | | |
| CS 308 Operating Systems | | | | |
| CS 319 WIP: Fundamentals of Software Engineering (This course must be taken at Northeastern) | | No Equivalencies at Harper College. | | |
| CS 324 Introduction to the Design of Algorithms | | | | |

| Must select one concentration from the following: | | | | | |
|--|------------|--|--|--|--|
| Must select one concenti | ation fror | n the following: | | | |
| Computer Science Concentration | | | | | |
| CS 307 Programming Languages | | | | | |
| CS 325 Theory of Computation | | | | | |
| CS 335 Artificial Intelligence | | | | | |
| Three CS courses, chosen from the following list: | | | | | |
| CS 315 Data Base Management | | | | | |
| CS 331 Computer Networks | | | | | |
| CS 334 Open Source Systems | 24 | | | | |
| CS 340 Computer Graphics | | | | | |
| CS 341 Parallel Computing and Distributed Systems | | | | | |
| CS 342 Human Computer Interaction | | | | | |
| CS 343 Natural Language Processing | | | | | |
| CS 355 Cryptography | | | | | |
| Additional requirements: | | | | | |
| Two CS 300-level electives, approved by the CS Department | | CIS 231 Visual Basic Programming II (Equivalent to CS 317 at Northeastern) | | | |
| Computer Networks and Security Concentration | | | | | |
| CS 331 Computer Networks | | | | | |
| CS 355 Cryptography | | | | | |
| CS 360 Cyber Security | | | | | |
| Three CS courses, Chosen from the following list: | | | | | |
| CS 315 Data Base Management | | | | | |
| CS 323 Cyberlaw | | | | | |
| CS 334 Open Source Systems | 24 | | | | |
| CS 335 Artificial Intelligence | | | | | |
| CS 341 Parallel Computing and Distributed Systems | | | | | |
| CS 344 Computer Systems Administration | | | | | |
| CS 345 Network Security | | | | | |
| CS 361 Secure Programming and Testing | | | | | |
| Additional requirements: | | 0.0004.1/1. 1.0 | | | |
| Two CS 300-level electives | | CIS 231 Visual Basic Programming II (Equivalent to CS 317 at Northeastern) | | | |
| Information Technology Concentration | | | | | |
| CS 315 Data Base Management | | | | | |
| CS 331 Computer Networks | | | | | |
| CS 339 Fundamentals of IT Project Management | | | | | |
| Three CS courses, chosen from the following list: | | | | | |
| CS 300 Client Side Web Development | | | | | |
| CS 317 Event Driven Programming | | CIS 231 Visual Basic Programming II | | | |
| CS 321 Server Side Web Development | 24 | | | | |
| CS 334 Open Source Systems | | | | | |
| CS 335 Artificial Intelligence | | | | | |
| CS 342 Human Computer Interaction | | | | | |
| CS 347 Mobile Application Development | | | | | |
| CS 360 Cyber Security | | | | | |
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| Additional requirements: Two CS 300-level electives Computer Science Major Policies | | | | | |

Computer Science Major Policies

• Students must earn a grade of "C" or higher in all courses counted toward the major. No "P" grades will count toward a major. Computer Science courses with "D" grades may be used as university electives.

- Transfer courses must be approved by the department before being applied to the major or minors during the first term of enrollment.
- Transfer students must complete a minimum of 21 credit hours of 300-level courses at Northeastern and meet all major requirements.
- Transfer students who have completed a Java Programming courses at another institution (such as CIS 168 Java
 Programming I and CIS 178 Java Programming II at Harper College) and would like to place out of CS 200 Programming I
 and/or CS 207 Programming II will need to take a placement test with the Computer Science Department.

Tuition, Financial Aid and Scholarships

Northeastern Illinois University is committed to providing an affordable education. That's why our tuition and fees are among the most affordable of the Illinois Public Universities. We offer a **tuition guarantee program** that guarantees incoming students the same tuition rate for four years.

For information about financing your education at Northeastern, including Financial Aid and Scholarship opportunities, please see our website: http://www.neiu.edu/financial-aid/. You may also contact our Financial Aid Office directly at (773) 442-5016 or email Financial-Aid@neiu.edu. If you are completing the Free Application for Federal Student Aid (FAFSA), Northeastern's federal School code is **001693**.

Provost and Deans Merit Scholarships for TRANSFER students:

Provost Merit Scholarship

Scholarships in the amount of **\$2,000** will be awarded to new transfers who meet the following criteria and who apply early for admission. Scholarships will be awarded on a first-come first-serve basis:

- Admitted entering transfer students with an Associate of Arts or Associate of Science (or at least 60 earned credits).
- Must have at least a cumulative transfer GPA of 3.50.
- Must be an Illinois resident.
- Must be enrolled as a full-time student at Northeastern.

Deans Merit Scholarship

Scholarships in the amount of **\$1,000** will be awarded to new transfers who meet the following criteria and who apply early for admission. Scholarships will be awarded on a first-come first-serve basis:

- Admitted entering transfer students with an Associate of Arts or Associate of Science (or at least 60 earned credit hours.
- Must have at least a cumulative transfer GPA of 3.00.
- Must be an Illinois resident.
- Must be enrolled as a full-time student at Northeastern.

Until all of the scholarships are awarded, students who meet these qualifications will automatically be considered for the Provost and Deans Merit Scholarships at the time of applying for admission to Northeastern. Completing an additional application is not necessary. The Office of Scholarships may be reached at (773) 442-4606 or scholarships@neiu.edu.