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

NEIU Transfer Center: Students who have questions about the program prior to admission may contact the NEIU 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:

<table>
<thead>
<tr>
<th></th>
<th>International Applicants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td>July 1</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td>November 1</td>
</tr>
<tr>
<td><strong>Summer I</strong></td>
<td>April 1</td>
</tr>
<tr>
<td><strong>Summer II</strong></td>
<td>May 1</td>
</tr>
<tr>
<td></td>
<td>June 1</td>
</tr>
<tr>
<td></td>
<td>October 1</td>
</tr>
<tr>
<td></td>
<td>March 1</td>
</tr>
<tr>
<td></td>
<td>April 1</td>
</tr>
</tbody>
</table>
# Computer Science Major Requirements

<table>
<thead>
<tr>
<th>Northeastern Illinois University Course</th>
<th>Credits</th>
<th>Oakton Community College Equivalent (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 200 Programming I</td>
<td>3</td>
<td>Students completing Java Programming courses at Oakton need to take a placement test with the Computer Science department in order to place out of this course.</td>
</tr>
<tr>
<td>CS 201 Discrete Structures</td>
<td>3</td>
<td>MAT 144 Discrete Mathematics</td>
</tr>
<tr>
<td>CS 207 Programming II</td>
<td>3</td>
<td>Students completing Java Programming courses at Oakton need to take a placement test with the Computer Science department in order to place out of this course.</td>
</tr>
<tr>
<td>CS 301 Computer Organization with Assembly Language Programming</td>
<td>3</td>
<td>CIS 215 Assembly Language for the Microcomputer</td>
</tr>
<tr>
<td>CS 304 Data Structures</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CS 308 Operating Systems</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CS 319 WIP: Fundamentals of Software Engineering (This course must be completed at NEIU)</td>
<td>3</td>
<td>No Equivalencies at Oakton.</td>
</tr>
<tr>
<td>CS 324 Introduction to the Design of Algorithms</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Must select one concentration from the following:**

### Computer Science Concentration
- CS 307 Programming Languages
- CS 311 Modern Computer Architecture
- CS 325 Theory of Computation
- CS 331 Computer Networks
- Two CS 300-level electives, approved by the CS Department

18 credits

No Equivalencies at Oakton.

### Technical Programming Concentration
- CS 302 Systems Programming
- CS 317 Event-Driven Programming
- CS 320 Object Oriented Programming
- CS 334 Open Source Systems
- Two CS 300-level electives, approved by the CS Department

18 credits

No Equivalencies at Oakton.

### Computer Security Concentration
- CS 323 Cyberlaw
- CS 331 Computer Networks
- CS 345 Network Security
- CS 355 Cryptography
- CS 360 CyberSecurity
- One CS 300-level elective, approved by the CS Department

18 credits

No Equivalencies at Oakton.

### Information Technology Concentration
- CS 300 Client-Side Web Development
- CS 315 Data Base Management
- CS 320 Object Oriented Programming
- CS 321 Server-Side Web Development
- CS 331 Computer Networks
- One CS 300-level elective, approved by the CS Department

18 credits

No Equivalencies at Oakton.
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 NEIU and meet all major requirements.
- Transfer students who have completed a Java Programming courses at another institution 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.

General Education Requirements

Three options are available to students who plan to complete their General Education requirements at Oakton.

- **Associate of Arts or Associate of Science**: Students who transfer with an approved Illinois Community College Board (ICCB) Model Associate of Arts or Sciences degree will have met NEIU’s General Education Requirements. For information regarding completing an Associate of Arts or Sciences at Oakton Community College, including assistance with course selection, please visit the Office of Advising and Counseling. More information is available at their website (http://www.oakton.edu/studentservices/advisingcounseling/contactus.php) or by calling (847) 635-1741 (Des Plaines campus) or (847) 635-1400 (Skokie campus).

- **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 Oakton that fulfill General Education requirements, please visit the iTransfer web site at www.itransfer.org.

- **Transfer Course Lists for Oakton**: Students may choose to meet their General Education requirements by selecting courses from NEIU’s Transfer Course Equivalency Guides, available at: www.neiu.edu/Transfer. When choosing this option, please use the NEIU General Education guide on the following page:

<table>
<thead>
<tr>
<th>Northeastern Illinois University General Education Program</th>
<th>Credits</th>
<th>Oakton Community College Equivalent (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Math / Quantitative Reasoning – one course (3 hours)</strong></td>
<td>3</td>
<td>Students who major in Computer Science at Northeastern can fulfill this requirement by taking MAT 140 College Algebra (or MAT 251 Calculus II for the Computer Science Concentration) at Oakton.</td>
</tr>
<tr>
<td><strong>Social / Behavioral Sciences 4 courses (12 hours)</strong></td>
<td>12</td>
<td>• No more than two courses from the same department may be used.</td>
</tr>
</tbody>
</table>
| **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. |
NEIU Degree Requirements

1.) General Education: 39 credit hours (see requirements above)

2.) English 101 or equivalent (grade of “C” or higher): At Oakton, take EGL 101 – Composition I.

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 24 semester hours at the 300 level and 18 semester hours at the 200 or 300 levels.

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 NEIU. Students completing the Bachelors of Science in Computer Science fulfill this requirement by taking CS 319 – WIP: Fundamentals of Software Engineering.

Transfer Policies

- Students with an AA or AS degree from an Illinois Community College and/or completion of the IAI will have fulfilled NEIU’s general education requirements.
- A maximum of 90 semester hours may be transferred to NEIU (no more than 64 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.

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 NEIU, including Financial Aid and Scholarship opportunities, please see our website: www.neiu.edu/FinAid.htm. 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 NEIU. Completing an additional application is not necessary.* The Office of Scholarships may be reached at (773) 442-4606 or scholarships@neiu.edu.