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## Sample 4-Year Plan: Applied Software Engineering B.S.

Northern Kentucky University

This is an example of one way a student can complete this program in four years. Students may be required to complete additional prerequisite courses based on placement.

**MAJOR:** Applied Software Engineering

### First Year

**Fall Semester**
- Gen Ed: Communication; Written I
- Gen Ed: Culture and Creativity I
- Gen Ed: Scientific and Quantitative Inquiry; Mathematics and Statistics
  - MAT 185 Introductory Discrete Mathematics
- Gen Ed: Scientific and Quantitative Inquiry; Natural Sciences without lab
  - INF 120 Elementary Programming*

**Spring Semester**
- ASE 220 Full-Stack Development
- CIT 171 Introduction to Linux
- CSC 260 Object-Oriented Programming I
- CSC 260L Object-Oriented Programming Lab
- Gen Ed: Communication; Oral
- Gen Ed: Self and Society; Individual and Society I
- INF 201 Foundations of Informatics Professionals

**Total** 16  
**Total** 15

*INF 120 is recommended but not required to fulfill this Gen Ed. Students who test out of this course can take a different science course.

### Second Year

**Fall Semester**
- ASE 230 Server-side Scripting
- Gen Ed: Communication; Written II
- Gen Ed: Cultural Pluralism
- Gen Ed: Self and Society; Individual and Society II
- INF 284 Introduction to Networks and Data Communication

**Spring Semester**
- ASE 285 Software Engineering and Security Fundamentals
- CSC 360 Object Oriented Programming II
- Gen Ed: Culture and Creativity II
- LDR 205 Human Relations in Organizations
- STA 205 Statistical Methods

**Total** 15  
**Total** 15

### Third Year

**Fall Semester**
- ASE 330 Human-Computer Interaction
- ENG 347 Technical Writing
- Gen Ed: Scientific and Quantitative Inquiry; Natural Sciences with lab
- Minor or elective
- Minor or elective

**Spring Semester**
- ASE/CIT/CYS/DSC elective 300 level or above
- CSC 350 Database Programming
- Minor or elective 300 level or above
- Minor or elective 300 level or above
- PHI 310 Information Ethics

**Total** 16  
**Total** 15

### Fourth Year

**Fall Semester**
- ASE 420 Software Design
- ASE 456 Cross-Platform Development
- Gen Ed: Global Viewpoints
- Minor or elective 300 level or above
- Minor or elective 300 level or above

**Spring Semester**
- ASE 485 ASE Capstone
- Experiential Learning
- Experiential Learning or Free Elective
- Free Elective
- Minor or elective 300 level or above

**Total** 16  
**Total** 15
### Notes:

This degree plan is for students who are admitted with ALEKS or ACT score placing the student in Calculus A (MAT 128). Students with a lower score will need to take additional mathematics such as MAT 119 (required for CSC 360).

A secondary area of study (minor, second major, or focus area) is required for graduation.

A total of 45 credits in 300-level or above courses is required for graduation.

A total of 120 credits is required for graduation.

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
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<tr>
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<td>TOTAL 15</td>
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<td>TOTAL 13</td>
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<td>GRAND TOTAL OF CREDITS 120</td>
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