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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 <br> Understand the ASE program, meet new friends through department social events, get involved in campus life, and, most importantly, establish your professional profiles. Join professional organizations related to the field, such as ACM and IEEE. | Fall Semester |  | Spring Semester |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Gen Ed: Communication; Written I | 3 | ASE 220 Full-Stack Development | 3 |
|  | Gen Ed: Culture and Creativity I | 3 | CIT 171 Introduction to Linux | 1 |
|  | Gen Ed: Scientific and Quantitative Inquiry; Mathematics and Statistics MAT 185 Introductory Discrete Mathematics | 3 | CSC 260 Object-Oriented Programming I | 3 |
| *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. | Gen Ed: Scientific and Quantitative Inquiry; Natural Sciences without lab INF 120 Elementary Programming* | 3 | CSC 260L Object-Oriented Programming Lab | 1 |
|  | INF 286 Intro to Web Development | 3 | Gen Ed: Communication; Oral | 3 |
|  | INF 100 Orientation to the College of Informatics | 1 | Gen Ed: Self and Society; Individual and Society I | 3 |
|  |  |  | INF 201 Foundations of Informatics Professionals | 1 |
|  | TOTAL 16 |  | TOTAL | 15 |
| SECOND YEAR <br> Expand your development skills and knowledge. Start the creation of your professional portfolio. Work with career services to start identifying and applying for internships and co-ops. | Fall Semester |  | Spring Semester |  |
|  | ASE 230 Server-side Scripting | 3 | ASE 285 Software Engineering and Security Fundamentals | 3 |
|  | Gen Ed: Communication; Written II | 3 | CSC 360 Object Oriented Programming II | 3 |
|  | Gen Ed: Cultural Pluralism | 3 | Gen Ed: Culture and Creativity II | 3 |
|  | Gen Ed: Self and Society; Individual and Society II | 3 | LDR 205 Human Relations in Organizations | 3 |
|  | INF 284 Introduction to Networks and Data Communication | 3 | STA 205 Statistical Methods | 3 |
|  | TOTAL 15 |  | TOTAL | 5 |
| THIRD YEAR <br> Continue to enhance your knowledge and skills, gain applied development experience, and continue to incorporate works in your portfolio. Consider becoming a mentor to students new to the ASE program. | Fall Semester |  | Spring Semester |  |
|  | ASE 330 Human-Computer Interaction | 3 | ASE/CIT/CSC/CYS/DSC elective 300 level or above | 3 |
|  | ENG 347 Technical Writing | 3 | CSC 350 Database Programming | 3 |
|  | Gen Ed: Scientific and Quantitative Inquiry; Natural Sciences with lab | 4 | Minor or elective 300 level or above | 3 |
|  | Minor or elective | 3 | Minor or elective 300 level or above | 3 |
|  | Minor or elective | 3 | PHI 310 Information Ethics | 3 |
|  | TOTAL 16 |  | TOTAL | 15 |
| FOURTH YEAR <br> Learn agile methodologies and use them to build high quality, secure and usable applications. Work with career-services and leverage your professional portfolio to obtain full-time employment. | Fall Semester |  | Spring Semester |  |
|  | ASE 420 Software Design | 3 | ASE 485 ASE Capstone | 3 |
|  | ASE 456 Cross-Platform Development | 3 | Experiential Learning | 0 |
|  | Gen Ed: Global Viewpoints | 3 | Experiential Learning or Free Elective | 3 |
|  | Minor or elective 300 level or above | 3 | Free Elective | 1 |
|  | Minor or elective 300 level or above | 3 | Minor or elective 300 level or above | 3 |
|  |  |  | Minor or elective 300 level or above | 3 |


|  | TOTAL | 15 | TOTAL |  |
| :--- | ---: | ---: | ---: | ---: |
| 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. |  |  |  |  |

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## 4

4-Year Plan
Computer Science B.S

