

## Bachelor of Science in: Applied Software Engineering

For Students Following the: 2021-2022 catalog 2022-2023 catalog 2023-2024 catalog

## **COLLEGE OF INFORMATICS**

COMPUTATION = INFORMATION = COMMUNICATION

Name:

Student ID:

Catalog Year:

|                      | OFFICE USE ONL                      |   |         |      |       |   |
|----------------------|-------------------------------------|---|---------|------|-------|---|
|                      | Course                              | Pre-req                                     | Credits | Term | Grade | Approved<br>Exceptions                      |
| MAT 185              | Introductory Discrete Mathematics   | MAT 103 or placement                        | 3       |      |       |   |
| STA 205<br><b>OR</b> | Statistical Methods                 | MAT 101 or placement                        | 3       |      |       | Successful<br>Completion of STA<br>205 DSST |
| STA 205R             | Statistical Methods with Recitation |   | 3       |      |       |   |
| PHI 310              | Information Ethics                  | Sophomore Standing<br>or Instructor Consent | 3       |      |       | Successful<br>Completion of PH<br>310 DSST  |
| ENG 347              | Technical Writing                   | ENG 102, HNR 102, or<br>equivalent          | 3       |      |       |   |
| LDR 205              | Human Relations in Organizations    |   | 3       |      |       |   |

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|----------|--|---|---------|------|-------|---|
|          | Course                                   | Pre-req   | Credits | Term | Grade | Approved<br>Exceptions                      |
| INF 100  | Orientation to College of Informatics    | Freshman Standing or<br>Department Consent                        | 1       |      |       |   |
| INF 201  | Foundations of Informatics Professionals | Sophomore Standing  | 1       |      |       |   |
| INF 120  | Elementary Programming<br>(or placement) | MAT 102 or MAT 114<br>or placement                                | 3       |      |       | Successful<br>Completion of INF<br>120 CPLE |
| INF 284  | Introduction to Computer Networks        | MAT 103 & INF 110 or<br>INF 120 or CIT 130                        | 3       |      |       |   |
| INF 286  | Introduction to Web Development          | MAT 103 & INF 110 or<br>INF 120 or CSC 260<br>(pre-req or co-req) | 3       |      |       | Successful<br>Completion of INF<br>286 CPLE |
| CIT 171  | Introduction to Linux                    | ENG 101 or ENG<br>101R or placement                               | 1       |      |       |   |
| CSC 260  | Object-Oriented Programming I            | MAT 103 and INF 110,<br>INF 120, or CSC 270                       | 3       |      |       | Successful<br>Completion of<br>CSC 260 CPLE |
| CSC 260L | Object-Oriented Programming Lab          | CSC 260 (co-requisite)  | 1       |      |       |   |
| CSC 350  | Database Programming                     | CSC 360   | 3       |      |       |   |
| CSC 360  | Object-Oriented Programming II           | MAT 119 (B- or better)<br>& CSC 260                               | 3       |      |       | Successful<br>Completion of<br>CSC 360 CPLE |

| APPLIED SOFTWARE ENGINEERING CORE (21 Hours) |                                    |   |         |      |       |  |  |
|--|------------------------------------|---|---------|------|-------|--|--|
|  | Course                             | Pre-req   | Credits | Term | Grade |  |  |
| ASE 220                                      | Full-Stack Application Development | INF 120 & INF 286                                       | 3       |      |       |  |  |
| ASE 230                                      | Server-Side Programming            | INF 286 & CSC 260 or<br>CIT 383 (pre-req or co-<br>req) |         |      |       |  |  |

## OFFICE USE ONLY Approved Exceptions

| ASE 285 | Software Engineering & Sec.<br>Fundamentals | ASE 220  | 3 |  |  |
|---------|---|--|---|--|--|
| ASE 330 | Human-Computer Interaction                  | ASE 230 or ASE 220   | 3 |  |  |
| ASE 420 | Software Design                             | CSC 360  | 3 |  |  |
| ASE 456 | Cross-Platform Development                  | ASE 220 or ASE 230<br>& Junior Standing                      | 3 |  |  |
| ASE 485 | Applied Software Engineering Capstone       | ASE 230, ASE 285,<br>ASE 330, ASE 456,<br>ASE 420, & CSC 350 | 3 |  |  |

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|-----------------------------|-----------------|---------|---------|------|-------|------------------------|
| Course                      |                 | Pre-req | Credits | Term | Grade | Approved<br>Exceptions |
| ASE/CIT/<br>CSC/CYS<br>/DSC | Зхх-4хх         |         | 3       |      |       |                        |

|            | EXPERIENTIAL LEARNING R  | EQUIREMENT (0-3 H  | lours)  |      |          | OFFICE USE ONLY        |
|------------|--|--|---------|------|----------|------------------------|
| If the cou | rse used for the experiential learning requ<br>hours, it can also be used to fulfill |  |         |      | 3 credit |                        |
|            | Course   | Pre-req  | Credits | Term | Grade    | Approved<br>Exceptions |
| ASE 305    | ASE Department Peer Mentorship<br>Training   | Department<br>Permission                                   | 3       |      |          |                        |
| OR         |  |  |         |      |          |                        |
| ASE 292    | Introductory Research Experience   | Department<br>Permission                                   | 0-3     |      |          |                        |
| OR         |  |  |         |      |          |                        |
| ASE 392    | Intermediate Research Experience   | Sophomore Standing<br>& Department<br>Permission           | 0-3     |      |          |                        |
| OR         |  |  |         |      |          |                        |
| ASE 396    | Applied Software Engineering Practicum   | ASE 456, Junior<br>Standing, &<br>Department<br>Permission | 0-3     |      |          |                        |
| OR         |  |  |         |      |          |                        |
| CEP 300    | Cooperative Education  |  | 1-3     |      |          |                        |

Students must earn a grade of "C-" or better to meet pre-requisites for all courses unless otherwise indicated. Students must earn a grade of "C-" or better and a 2.00 GPA in all courses that apply to the major. Please consult with your advisor and the appropriate University Course Catalog for all other degree requirements.