

**COMPUTER SCIENCE (BS)
BIOMETRICS SPECIALTY**

2014-2015 RECOMMENDED PROGRAM SEQUENCE (Full-time)

120 CREDITS

COMP SCIE BS

FRESHMAN YEAR

| Fall Semester | | | Winter Semester | | |
|----------------------|--|---------------------|-------------------------|--|---------------------|
| | | (16 credits) | | | (16 credits) |
| ACES100 | Achieving Career and Education Success | 3 | COMM120 | Presentation Techniques | 3 |
| BIOL120 | Essentials of Anatomy and Physiology | 4 | ENGL110 | Advanced Composition | 3 |
| CISP111 | Requirements Planning and Development | 3 | IAAS221 | Security Foundations | 3 |
| ENGL109 | Composition | 3 | MATH150 | Pre-Calculus | 4 |
| MATH125 | Intermediate Algebra | 3 | PHYS100 and PHYS100L | Applied Physics and Applied Physics Lab | 3 |

SOPHOMORE YEAR

| Fall Semester | | | Winter Semester | | |
|----------------------|-----------------------------|---------------------|------------------------|-------------------------|---------------------|
| | | (16 credits) | | | (15 credits) |
| CISP250 | Discrete Structures | 3 | CISP247 | Database Design | 3 |
| CSCI222 | Biometric Fundamentals | 3 | CSCI234 | C# Programming II | 3 |
| CSCI231 | Introduction to Programming | 3 | CSCI260 | Software Engineering | 3 |
| MATH215 | Calculus I | 4 | CSCI280 | Artificial Intelligence | 3 |
| | Open Elective | 3 | MATH205 | Applied Linear Algebra | 3 |

JUNIOR YEAR

| Fall Semester | | | Winter Semester | | |
|----------------------|----------------------------|---------------------|------------------------|----------------------------------|---------------------|
| | | (15 credits) | | | (15 credits) |
| CSCI350 | Biometric Algorithms | 3 | BUSN210 | Professional Ethics | 3 |
| ENGL311 | Professional Writing | 3 | CSCI312 | Data Structures and Algorithms | 3 |
| SOSC201 | Diversity in Society | 3 | CSCI326 | Biometric Spoofing | 3 |
| STAT220 | Introduction to Statistics | 3 | GPMT287 | Principles of Project Management | 3 |
| | Open Elective | 3 | | Open Elective | 3 |

SENIOR YEAR

| Fall Semester | | | Winter Semester | | |
|----------------------|-----------------------------------|---------------------|------------------------|---------------------------|---------------------|
| | | (12 credits) | | | (15 credits) |
| CSCI380 | Computer Vision | 3 | CSCI411 | Pattern Recognition II | 3 |
| CSCI410 | Pattern Recognition I | 3 | CSCI425 | Biometric Architectures | 3 |
| SOSC301 | Globalization and World Diversity | 3 | CSCI446 | Advances in Biometrics | 3 |
| TECH489 | Field Experience in Technology | 3 | CSCI497 | Computer Science Capstone | 3 |
| | | | | Open Elective | 3 |



COMPUTER SCIENCE (BS)
GAMING AND SIMULATION SPECIALTY
 2014-2015 RECOMMENDED PROGRAM SEQUENCE (Full-time)
 120 CREDITS

COMP SCIE BS

| FRESHMAN YEAR | | | | | |
|----------------------|--|---|-------------------------|--|---|
| <u>Fall Semester</u> | | | <u>Winter Semester</u> | | |
| (15 credits) | | | (16 credits) | | |
| ACES100 | Achieving Career and Education Success | 3 | ENGL110 | Advanced Composition | 3 |
| CISP111 | Requirements Planning and Development | 3 | COMM120 | Presentation Techniques | 3 |
| ENGL109 | Composition | 3 | MATH140 | Finite Mathematics | 3 |
| MATH125 | Intermediate Algebra | 3 | MATH150 | Pre-Calculus | 4 |
| | Open Elective | 3 | PHYS100 and PHYS100L | Applied Physics and Applied Physics Lab | 3 |

| SOPHOMORE YEAR | | | | | |
|----------------------|-----------------------------|---|------------------------|-------------------------------------|---|
| <u>Fall Semester</u> | | | <u>Winter Semester</u> | | |
| (15 credits) | | | (15 credits) | | |
| CISP247 | Database Design | 3 | CSCI234 | Object-Oriented Programming with C# | 3 |
| CISP250 | Discrete Structures | 3 | CSCI258 | Introduction to Game Design | 3 |
| CSCI231 | Introduction to Programming | 3 | MATH205 | Applied Linear Algebra | 3 |
| CSCI244 | Introduction to Game Theory | 3 | STAT220 | Introduction to Statistics | 3 |
| MATH215 | Calculus I | 4 | | Open Elective | 3 |

| JUNIOR YEAR | | | | | |
|----------------------|--------------------------------|---|------------------------|----------------------------------|---|
| <u>Fall Semester</u> | | | <u>Winter Semester</u> | | |
| (15 credits) | | | (15 credits) | | |
| CSCI312 | Data Structures and Algorithms | 3 | CSCI280 | Artificial Intelligence | 3 |
| CSCI260 | Software Engineering | 3 | CSCI370 | 3D Game Development | 3 |
| CSCI335 | 2D Game Development | 3 | CISP246 | 3D Modeling | 3 |
| SOSC201 | Diversity in Society | 3 | GPMT287 | Principles of Project Management | 3 |
| | Open Elective | 3 | | Open Elective | 3 |

| SENIOR YEAR | | | | | |
|----------------------|-----------------------------------|---|------------------------|---|---|
| <u>Fall Semester</u> | | | <u>Winter Semester</u> | | |
| (15 credits) | | | (13 credits) | | |
| CISP340 | Mobile Application Development I | 3 | BUSN210 | Professional Ethics | 3 |
| CSCI448 | Collaborative Game Development | 3 | CSCI340 | Introduction to Modeling and Simulation | 3 |
| SOSC301 | Globalization and World Diversity | 3 | CSCI497 | Computer Science Capstone | 3 |
| TECH489 | Field Experience in Technology | 3 | ENGL311 | Professional Writing | 3 |
| | Open Elective | 3 | | Open Elective | 1 |