

Bachelor of Science - Bioinformatics - 129 Credits

| Fall Semester | | | | Spring Semester | | | |
|------------------|-------------------------|-----------------------------------------------------|-----------|---------------------------|----------------------------------------------------|-----------|--|
| Freshman | R 120 - 101 | General Biology | 4 | R 120 - 102 | General Biology II | 4 | |
| | Math 111 | Calculus I | 4 | Math 112 | Calculus II | 4 | |
| | CHEM 125 | General Chemistry I | 3 | CHEM 124 | General Chemistry Lab | 1 | |
| | HUM 101 | English Composition: Writing, Speaking, Thinking I | 3 | CHEM 126 | General Chemistry II | 3 | |
| | BNFO 135 | Programming for Bioinformatics I | 3 | BNFO 236 | Programming for Bioinformatics II | 3 | |
| | CS 107 | Computing as a Career | 1 | | | | |
| | <i>Credits:</i> | | 18 | <i>Credits:</i> | | 15 | |
| Sophomore | R 120 - 201 | Foundations of Biology | 3 | R 120 - 356 | Molecular Biology | 3 | |
| | R 120 - 202 | Foundations of Biology Lab | 1 | HUM 211/212/HIST 213 | The Pre-Modern World/Modern World/20th-Century Wor | 3 | |
| | R 120 - 352 | Genetics | 3 | CHEM 243 | Organic Chemistry I | 3 | |
| | CS 241 | Foundations of Computer Science I | 3 | Social Science I | | 3 | |
| | Math 333 | Probability & Statistics | 3 | General Elective 1 | | 3 | |
| | HUM 102 | English Composition: Writing, Speaking, Thinking II | 3 | CS 207 | | 1 | |
| | <i>Credits:</i> | | 16 | <i>Credits:</i> | | 16 | |
| Junior | PHYS 111 | Physics I | 3 | Math 337 | Linear Algebra | 3 | |
| | PHYS 111 A | Physics I Lab | 1 | BNFO 340/602 | Foundations of Bioinformatics II | 3 | |
| | ENG 340/352 | Oral Presentations/Technical Writing | 3 | MGMT 390/IE 492 | Principles of Management/Engineering Management | 3 | |
| | BNFO 330/601 | Foundations of Bioinformatics I | 3 | CS 435 | Advanced Data Structures & Algorithm Design | 3 | |
| | CS 431 | Database System Design & Management | 3 | Specialty Elective 1 | | 3 | |
| | Social Science II | | 3 | CS 407 | Professional Development in Computing | 1 | |
| | <i>Credits:</i> | | 16 | <i>Credits:</i> | | 16 | |
| Senior | IS 350 | Computers, Society & Ethics | 3 | BNFO 491 | Computer Science Project | 3 | |
| | BNFO 482/644 | Data Mining and Management in Bioinformatics | 3 | Humanities Senior Seminar | | 3 | |
| | General Elective 2 | | 3 | General Elective 3 | | 3 | |
| | Specialty Elective 2 | | 3 | Specialty Elective 3 | | 3 | |
| | Upper LIT/PHIL/HIST/STS | | 3 | Specialty Elective 4 | | 3 | |
| | Physical Education I | | 1 | Physical Education II | | 1 | |
| | <i>Credits:</i> | | 16 | <i>Credits:</i> | | 16 | |