

Applied Information Technology Major Requirements

Required AIT “Foundation” Courses

CSCI 152 – Programming with Visual Basic
 APIT 155 – Foundations of Information Technology
 APIT 200 – Web Technologies
 CSCI 260 – Introduction to Databases & Applications
 CSCI 300 – Networking I
 APIT 369 – Web Design

COMM 250 – Speech Communication
 ENGL 255 – Intro to Professional Writing
 MATH 150 – Elementary Discrete Math
 MSTI 130 – Math Modeling &
 Quantitative Analysis

APIT 309 – Professional Development
 APIT 401 – Organizing IT in a Global Age
 APIT 480 – Senior Project
 APIT 490 – Internship

Biology Second Discipline

Why Biology?

One of the biggest growth areas in health care is medical devices and the management of remote diagnostics. Via the Internet, data is taken off of devices at hospitals, labs, clinics and analyzed looking for trends and information’s quality assurance. These devices are getting much more complex and systems-driven. By choosing a second discipline in Biology, you will be tapping into courses relative to the human body’s functions as they relate to aging, lifespan, health, and illness in addition to medical terminology, devices, and diagnostic systems.

Required

BIOL 120C – General Biology: Genes, Cells, Evolution (3)
 BIOL 127L – General Biology Lab (1)
 BIOL 128C – Zoology & Lab (4)
 CHEM 101 or 103 - Principles of Chemistry I & Lab or General Chemistry I & Lab (4)
 CHEM 102 or 104 – Principles of Chemistry II & Lab or General Chemistry II & Lab (4)
 BIOL 214 – Microbiology & Lab (4)
 BIOL 311 – Cell Biology (3)
 BIOL 311L – Techniques in Cell Biology (2)
 BIOL 349 – Junior Seminar (2)

Three of the following (one of which must be 400 level):

BIOL 310 – Reproductive Biology (3)
 BIOL 318 – Genetics (3)
 BIOL 322 – Neurobiology (3)
 BIOL 405 – Evolution (3)
 BIOL 416 – Biological Imaging (3)
 BIOL 418 – Immunology (3)

Biology Notes:

Course and Lab credit hours indicated in parenthesis.

Chemistry listings meet some Biology course pre-requisites.

The three upper-division electives chosen from the six biology course offerings are intended to match a student’s interests and career goals. Alternate 300- and 400- level biology courses may be considered pending approval of the student’s advisor or the advisor and the Chair of the Biology department in fulfillment of the three upper-division electives based on availability, special limited offering, and/or suitability.

Note: All courses listed are three (3) credit hours unless otherwise noted.

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Biology Second Discipline

Freshman

Fall	Credit Hours
- Foundations of IT (APIT 155)	3
- Elementary Discrete Math (MATH 150)	3
- <i>General Biology: genes, Cells, Evolution</i>	3
- <i>General Biology Lab (BIOL 120 & 127)</i>	1

Spring	Credit Hours
- Programming with Visual Basic (CSCI 152)	3
- Math Modeling and Quantitative Analysis (MSTI 130)	3
- <i>Zoology (BIOL 128)</i>	4

Sophomore

Fall	Credit Hours
- Web Technologies (APIT 200)	3
- Intro to Professional Writing (ENGL 255)	3
- <i>General Chemistry (CHEM 101 or 103)</i> (co-req 101L or 103L)	4

Spring	Credit Hours
- Networking I (CSCI 300)	3
- Speech Communication (COMM 250)	3
- <i>General Chemistry (CHEM 102 or 104)</i> (co-req 102L or 104L)	4

Junior

Fall	Credit Hours
- Intro to Databases & Applications (CSCI 260)	3
- Professional Development (APIT 309)	3
- <i>Cell Biology & Lab (BIOL 311 & 311L)</i>	5
- <i>Biology elective</i>	3

Spring	Credit Hours
- Web Design (APIT 369)	3
- Org IT in a Global Age (APIT 401)	3
- <i>Microbiology & Lab (BIOL214)</i>	4
- <i>Junior Seminar (BIOL 349)</i>	2

Senior

Fall	Credit Hours
- Internship (APIT 490)	3
- <i>Biology elective</i>	3

Spring	Credit Hours
- Senior Project (APIT 480)	3
- <i>Biology elective</i>	3