Computer Applications in Biotechnology

Certificate of Accomplishment: Computer Applications in Biotechnology

The field of Computer Applications in Biotechnology is a complex hybrid of two distinct scientific disciplines--computer technology and bioscience. This certificate is designed to provide an understanding of bioinformatics and other computer related subjects to students with some computer and/or life science background. This program is useful for students who desire to explore this new information science in which computers help to simulate, visualize, and analyze genetic and biological information. The certificate also provides an introduction to the fundamental scientific and computational concepts, methods, and tools central to the growing field of computer applications in biotechnology.

Certificates of Accomplishment are awarded upon the completion of an organized course of study for a specific course, usually career or job related. Certificates of Accomplishment consist of a maximum of 17.5 units and allow students to finish the program in a shorter period of time. In order to earn a Certificate of Accomplishment students must:

a. Complete satisfactorily the courses listed for the particular certificate.
b. Complete at least 50% of the required units at Ohlone College.
c. Maintain a 2.0 grade point average.

Student Learning Outcomes

1. Examine cutting-edge biological concepts and computer technologies in biotechnology
2. Operate main databases, tools, and methods for the storage, searching, and analysis of biological molecules
3. Solve computational problems common to bioinformatics and apply classical computer science solutions to biotechnology.

MAJOR FIELD

BIOT 112 Introduction to Bioinformatics	2
BIOT 121 Biotechnology Careers	1
CAOT 148 Computer Applications in Biotechnology	0.5
CS 131 Computing in Biotechnology	4
CS 133 Introduction to Statistical Software Programming	3
	Total Units = 10.5

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