

LIBERTY UNIVERSITY

ONLINE ACADEMY

Web Development Certificate - Course Descriptions

CSIS 100 (CSB 3100) – Intro to Information Sciences & Systems

This course examines the design, selection, implementation, and management of enterprise Business solutions. The focus is on identifying critical business processes and envisioning how technology can be developed to provide solutions which generate competitive advantage. Students learn how applying frameworks and strategies around the Business Process and Organization Strategy provide a competitive advantage. Topics include MIS and IT fundamentals, Information Systems Management and Using Enterprise Business Applications for competitive advantage. The course also includes a component for Technical Writing for Information Systems. (Formerly BMIS 200)

College Credits: 3

LUOA High School Equivalency: Fine Art/Career/Technology Elective

Sub-term: B/D

Course Prerequisites: MATH 110 or Math Assessment

CSIS 212 (CSB 3213) – Object-Oriented Programming

A study of the general-purpose, secure, object-oriented, portable programs. This course prepares students to program stand-alone applications. It will cover features such as programming concepts, data types, operators, flow control statements, objects, classes, methods, arrays, and strings. The concept of object-oriented programming is emphasized. The course has an additional \$35 fee for course materials

College Credits: 3

LUOA High School Equivalency: Fine Art/Career/Technology Elective

Sub-term: B/D

Course Prerequisites: CSIS 208 or BUSI 230

CSIS 310 (CSB 3311) – Web Architecture & Development

Provides students with thorough knowledge of the foundations of web architecture, current technologies utilized in the development of a web site, and criteria for assessing the usability of web sites. (Formerly CSCI 310)

College Credits: 3

LUOA High School Equivalency: Fine Art/Career/Technology Elective

Sub-term: B/D

Course Prerequisites: CSIS 212

CSIS 312 (CSB 3312) – Advanced Object-Oriented Programming

In-depth study of the advanced features of Java, with an emphasis on the “why” as well as the “how to” of programming in the Java language. This course also prepares students for the Sun Certified Java Programmer exam. (Formerly BMIS 312)

College Credits: 3

LUOA High School Equivalency: Fine Art/Career/Technology Elective

Sub-term: B/D

Course Prerequisites: CSIS 212

CSIS 325 (CSB 3325) – Database Management Systems

The study of relational database architecture, design, access, administration and implementation in the context of various organizational environments. The course includes issues of data normalization, standard queries, and the use of popular relational and object technologies for building business-oriented applications. Assigned projects will provide hands-on experience with industry-leading SQL and RDBMS tools and ER CASE tools currently popular in business and government settings. (Formerly BMIS 325)

College Credits: 3

LUOA High School Equivalency: Fine Art/Career/Technology Elective

Sub-term: B/D

Course Prerequisites: CSIS 212 & BUSI 230

CSIS 340 (CSB 3340) – Studies in Information Security

This course introduces the basic issues and principles of information system security such as security policies, their mechanisms of implementation, means attackers use to circumvent these protections and defenses against these attackers. (Formerly BMIS 340, CSCI 340)

(Cross-listed with BUSI 417)

College Credits: 3

LUOA High School Equivalency: Fine Art/Career/Technology Elective

Sub-term: B/D

CSIS 410 (CSB 3410) – Web Enterprise Technologies

Provides students with thorough knowledge of current technologies and best practices for developing database-driven dynamic websites including database and client-side programming. (Formerly BMIS 410)

College Credits: 3

LUOA High School Equivalency: Fine Art/Career/Technology Elective

Sub-term: B/D

Course Prerequisites: CSIS 310 & CSIS 325

Additional course needed for prerequisite**BUSI 230 (CSB 3230) – Introduction to Probability and Statistics**

Introduction to descriptive statistics and probability, probability distributions, estimation, tests of hypotheses, chi-square tests, regression analysis, and correlation with applications in business and science. (Cross-listed with MATH 201)

College Credits: 3

LUOA High School Equivalency: Higher Math

Sub-term: B/C/D

Course Prerequisites: MATH 110, Math Assessment, or SAT/ACT