GRADUATE CERTIFICATE IN BUSINESS APPLICATION DEVELOPMENT

The Graduate Certificate in Business Application Development provides students with the knowledge and skills needed to meet business and societal demands for software applications. Students learn how to determine the information needs of an organization and specify the systems that support its processes and functions. Students learn how to plan, design, develop, test, and debug business application systems, using modeling and programming languages, tools, and technologies. They gain practical, hands-on problem-solving skills and build applications using object-oriented programming languages and other development technologies. Students use an Interactive Development Environment (IDE) for software development, implement modularization and documentation, and learn best practices in software development.

Students interested in graduate work should refer to the Graduate and Professional Bulletin (http://catalog.colostate.edu/general-catalog/graduate-bulletin/).

Learning Objectives

Students will:

1. Gain the skills to design, develop, test, and de-bug applications using an object-oriented programming language.
2. Understand and use an Interactive Development Environment to develop software, implement good programming practices, and adhere to programming standards.
3. Develop application programs to parse data for matching, validating, and extracting information.
4. Design and implement networking programs.
5. Understand how to load a relational database driver, connect to a database server, send and execute queries, and process query result sets using predefined classes.
6. Study and practice business requirements gathering and Business Process Modeling (BPM).
7. Study and practice methodology applying to software requirements (UML), quality assurance processes, and structured testing.
8. Design and build functional web applications that are easy to use, interactive, and dynamic, using multiple technologies.