

UCIRVINE | EXTENSION

**Business Intelligence and
Data Warehousing
Specialized Studies Program**



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OVERVIEW

Companies that build data warehouses and use business intelligence for decision-making are more likely to save money and increase profit. In addition, initiatives ranging from supply chain integration to compliance with government-mandated reporting requirements (such as Sarbanes-Oxley and HIPAA) depend on well-designed data warehouse architecture. This specialized studies program introduces you to the main components of a data warehouse for business intelligence applications. You'll learn how a data warehouse fits into the overall strategy of a complex enterprise, how to develop data models useful for business intelligence, and how to combine data from disparate sources into a single database that comprises the core of your data warehouse. You'll also explore how to define and specify useful management reports from warehouse data.

WHO SHOULD ENROLL

Data systems modelers, database administrators, data architects, IT managers, business analysts, CIOs, and others who need to take data from different databases or data sources and combine them into a single repository that can be used to produce executive dashboards, generate summary reports, and glean "hidden" information from business databases and those who provide the requests for data in order to analyze trends and for systems.

SPECIALIZED STUDIES AWARD REQUIREMENTS

Students must complete all three courses required courses with a letter grade of "C" or higher in each course in order to qualify for the BIDW Specialized Studies Award. When you have completed your third course, please submit an "Application for Candidacy and Request for Specialized Studies Award." All requirements must be completed within five (5) years after the student enrolls in his/her first course.

Individual course can be taken with Pass/No Pass and Audit grade options for those not requesting the Specialized Studies Award.

PROGRAM BENEFITS

Students completing the certificate will be able to:

- Explain how a data warehouse combined with good business intelligence can increase a company's bottom line.
- Describe the components of a data warehouse.
- Describe different forms of business intelligence that can be gleaned from a data warehouse and how that intelligence can be applied toward business decision-making.
- Develop dimensional models from which key data for critical decision-making can be extracted.
- Sketch out the process for extracting data from disparate databases and data sources, and then transforming the data for effective integration into a data warehouse.
- Load extracted and transformed data into the data warehouse.

PROGRAM FEES

Individual course fees along with the cost of textbooks, parking, and other supplementary materials are subject to change without notice. For budgeting purposes, you may use the following estimates:

Course fees (3 courses)	\$2085
Candidacy fee	\$35
Textbooks	\$150
Total Estimated Cost	\$2270

FOR MORE INFORMATION

Email donna.dang@uci.edu for more information about the Specialized Studies Award in Business Intelligence and Data Warehousing.

LIST OF COURSES

Course #	Course Title	Units	WI	SP	SU	FA
I&C SCI X425.22	Business Intelligence/Data Warehouse	3.0	O	O	O	O
I&C SCI X425.24	Designing Dimensional Models	3.0	O	O	O	O
I&C SCI X425.26	Designing ETL Processes for Data Warehousing	3.0	O	O	O	O

O = online

WI=Winter, SP=Spring, SU=Summer, FA=Fall

Note: Schedule is subject to change.

For the latest schedule, please visit our Web site:

http://unex.uci.edu/certificates/it/data_warehousing/courses.asp

COURSE DESCRIPTIONS

Business Intelligence/Data Warehouse I&C SCI X425.22 (3.0 Units)

Learn how to make better business decisions, use fewer resources, and improve your company's bottom line by developing and using a data warehouse. This course provides an overview of business intelligence and data warehousing and gives you a look at all the major facets of developing and using a data warehouse to make effective business decisions. You'll work on a single project that allows you to develop a project plan and business case for a data warehouse, develop a dimensional model, develop a data staging process, and develop a data access process. You'll also learn about careers working with business intelligence and data warehousing as well as the educational requirements for this field.

Designing Dimensional Models I&C SCI X425.24 (3.0 Units)

Learn how to build a high performance dimensional data model. A good dimensional model and its physical database form the hub of a business intelligence data warehouse, serving as the target of the data integration and as the source of business intelligence data. This course provides both introductory and advanced concepts and techniques for developing effective dimensional models. Learn how to design dimensional models for extensibility, employ a proven dimensional design process, apply the process to several representative situations, and understand a variety of advanced dimensional modeling techniques.
Prerequisite: Business Intelligence-Data Warehouse course highly recommended.

Designing ETL Processes for Data Warehousing I&C SCI X425.26 (3.0 Units)

The Extract, Transform, and Load (ETL) process is typically the most time-consuming, misunderstood, and underestimated task in building a data warehouse and other data integration applications. The ETL process addresses and resolves the challenges of extracting data from disparate operational source systems, storing it in the data staging area, profiling data for errors, cleaning and transforming the data, and mass loading it into the target enterprise data warehouse, data marts, or operational systems. Source systems may include mainframe, relational, ERP/CRM, real-time, web, and desktop systems. Microsoft SQL Server Data Transformation Services (DTS) will be used as the ETL tool for workshops and homework assignments. Prior knowledge of DTS is helpful but not required.

Prerequisite: Designing Dimensional Models course highly recommended.

Online Format FAQ's

What is an online course?

An online course utilizes the Internet and a web browser as a means of creating a learning environment outside of the traditional classroom. The lectures and discussions will take place on a Distance Learning Center Web site. You will be able to access your course lectures (text based) and communicate with your classmates and instructors through the use of a discussion forum (message board). The online courses follow a classroom structure of covering a lesson a week. You can access your course Web site anytime of the day and place where you have access to the Internet.

Who can take online courses?

Anyone can take an online course as long as they have access to a computer with Internet capabilities, have an active email account and have a basic understanding of how a computer works. An online student also has to be motivated to participate in discussion forums and regularly check the Web site and keep up with the course work.

What happens if I fall behind or complete the course early?

It is okay to be a week ahead or behind. You must remember that participation is a very important aspect of your final evaluated grade for the course. Active participation requires you to post and respond to your instructor and fellow classmates' comments on the discussion forum. If you are too far behind, posting to an old topic will be revisiting something that the majority of your classmates might have discussed.

Are there specific dates that I need to log on to the Web site?

There is a set beginning and end date for your online course. It is suggested that you logon at least 3 times a week to check the discussion forums, to read over assignments and lectures. This is the "asynchronous" aspect of the course.

There might be occasion when the instructor will set a chat time ("synchronous") where he/she assigns a specific date and time for all the students to try to meet in the chat room to ask questions.

All assignments, quizzes, exams, and projects must be completed within the time frame of the course. The instructor will set individual due dates for your assignments, projects and tests.

How many hours a week do I have to devote to my online course?

Just like a classroom course, to get the most out of any type of learning you must commit a certain amount of time to complete the course. You will most likely spend approximately 10 hours a week going over class lectures, doing assignments and spending time on the discussion forum. Time required for each course will vary.

Will I be able to see my online instructor or communicate with him/her via telephone?

Unless there is an extreme instance, all communications with your instructor will be done either through email, the discussion forums or the chat sessions. Please do not expect your instructor to telephone you.

How do I communicate with my instructor?

You communicate with your instructor either by email, discussion forums, or chat sessions. Students are strongly encouraged to use these modes of communications, as faxed or mailed assignments are not accepted.

What happens if I have trouble accessing the URL with my login and password?

Contact the UCI Extension student services office at unex-services@uci.edu or 949-824-5414 and we will assess and work to fix any problems in the most expeditious manner. In order to better serve you, please note the problem as it occurred.

Will having a firewall at home or at work prevent me from working on my online course?

Although, this very seldom occurs, your firewall may prevent you from posting to the discussion forum while allowing you to read the lectures and other resources.

Do I need to have cookies enabled?

Yes, it is necessary to have your cookies enabled. To best protect your computer it is suggested that you vary your cookie options to ensure the most secure level.

Can I access my course from anywhere?

You can access the course anywhere that you have Internet access. Some companies have firewalls that prevent you from participating in the chat sessions. Please check with your company before you attempt to access the course.

When is the last day to drop the course?

The last day to drop a course follows the standard provided in the UCI Extension catalog. There will be an administrative fee assessed for any withdrawals within the allowable period. Please refer to the Extension website at <http://unex.uci.edu/services/registration/drops> for more information.

What happens if I can't finish a course?

We understand that certain situations can occur. Please refer to the UCI Extension catalog for procedures, etc.

How do I know which online courses can take the place of classroom courses?

Please visit our website at <http://unex.uci.edu> for more information about our certificate programs and course offerings.

How do online courses work?

Once you begin your course, you will find that with the use of the course tools, you will be able to navigate from the lecture to the discussion forums or to the weekly outline. You will be able to maneuver through the Web site to post/read assignments and to download/upload files from your instructor. Your instructor will primarily be contacting you by email or through the discussion forum. Once you begin your course, you will find that with your instructor's help, you will find the benefits of taking a course online.

Help files are found on the Distance Learning Center website with instructions on accessing your online course with information about tools use.

Do I need to purchase books or any additional items?

Some courses do require that you purchase books or software. Please contact the UCI Bookstore for more information about the books for your courses at (949) 824-7810.

What happens after I sign up for a course, how do I get started?

Please log in to your account at <http://unex.uci.edu> and select for your current quarters MY COURSES. You will then be directed to your online courses.

If you have faxed or telephoned your enrollment, you will receive by U.S. mail a confirmation of your course enrollment. On that confirmation you will find the information regarding access to your online course.

I signed up for this quarter's term and I can't find my online course!

Your online course will not be available until the actual course start date. The first week of the course is an orientation week, you will have this time to review the syllabus and become familiar with the course tools.

I signed in at the UCI Extension website and I have to re-enter my username and password!

This occurs when more than one account has been created by the user or if there are duplicates or changes to an email account. Please contact our offices to help solve this issue.

Will the platform for online courses be changing continually every quarter?

There will be changes periodically. Changes occur mainly as a result of student and instructor feedback to our Web site. This is done to maximize the tools.

Is my online course an instructor led course?

Like a traditional course, your online course has an instructor that will conduct the course by giving assignments, answering questions, leading discussions and assigning grades.

Can I get a degree online?

At this time, you can only receive a Master's Degree in Criminology, Law and Society.

Students intending to transfer UC Irvine Extension course credit for a degree at another college or university should verify acceptance of the course with that institution.

What kind of grade options do I have?

The grading options are exactly the same as that of classroom courses.

Who do I contact if I am having problems with the instructor?

Please contact the DLC office at (949) 824-7613 or unex-online@uci.edu. Your instructor should be very explicit on the course syllabus or welcome message as to their availability. If the instructor is going out of town or will be away from the computer for an extended period of time, he/she must notify the class.

Why do I get emails of the discussion forum postings?

If you are receiving emails from the discussion forums, you are subscribed to that particular forum. You can change this option by going to the forums sections on the left side of the course site under Activities. By selecting forum, you will be able to see all the forums created and to turn on/off the subscription function. There may be a forum that you will not be able to change. More than likely, that will be a place where the instructor will post announcements.

I like getting the forum subscribed emails, but the responses I made are not on the course Web site.

If you prefer to receive the subscribed emails from the forum, please do not reply to the email directly, but post your reply to the specific forum where the posting originated. This will ensure that others, including your instructor, will see your reply or comment.

I am confused and frustrated. I can't seem to find my way around the Web site. What can I do?

Call us at (949) 824-5414. We will be happy to walk you through the tools and show you everything you need to know.

UNIVERSITY OF CALIFORNIA, IRVINE

**UNIVERSITY EXTENSION
SPECIALIZED STUDIES
CERTIFICATE REQUEST FORM**

Date: _____

Current Quarter: _____

*The course in which I am now enrolled is the last course in the Specialized Studies program in:
SPECIALIZED STUDIES: Business Intelligence and Data Warehousing

Name: _____
(Please print your name as you would like it to appear on your certificate)

Address: _____

City: _____ State: _____ Zip: _____

Day Phone: _____ Evening Phone: _____

Email: _____

Social Security or Student ID Number: _____

*If you have not submitted the application for candidacy fee, please complete the payment method below.
Please allow 7-10 days for processing from the time the instructor submits the grades.*

Payment Method

- MY CHECK FOR \$35 IS ENCLOSED (Payable to Regents of University of California).
 CHARGE TO: VISA MASTERCARD AMERICAN EXPRESS

ACCOUNT NUMBER: _____ EXP DATE: _____

AUTHORIZED SIGNATURE: _____

Mail or Fax To:

University of California, Irvine
University Extension
PO Box 6050, Irvine, CA 92616-6050
FAX (949) 824-2090

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