# Healthcare Analytics Certificate Program

Our online Healthcare Analytics Certificate Program is a career-oriented program designed for working clinicians, data and IT professionals. Providing a strong foundation in the structure of healthcare data, it dives into hands-on coding and exposes you to leading industry applications. You'll learn to select, prepare, analyze, interpret, evaluate and present data related to health system performance and clinical effectiveness.

## What to Expect from this Program

- **World-Class Education–**Our curriculum was developed by experts across several health systems, including UC Davis

- **Experienced Instructors—**Learn from industry-leading instructors who have significant experience in healthcare analytics

- **Immediate ROI–**Gain practical, career-based skills you can use immediately

- **Networking Opportunities–**Engage with professional peers and faculty for a dynamic learning experience

- **Demonstrated Proficiency–**A certificate indicates serious dedication to a particular field and provides a competitive edge in hiring and promotion situations
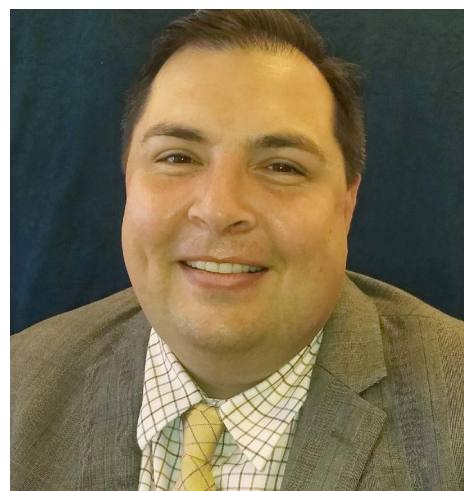
**For more information or to enroll**

## cpe.ucdavis.edu/healthanalytics

### Program at a Glance

- 5 online classes
- Complete in 15 months or less
- Each course: $1,200
- Entire program: $6,125

"The certificate program has a strong focus both on tools and techniques to help with this challenge, and I can see a clear improvement in the materials that I produce for my organization on a daily basis."

**—David Wood, assistant director of quality management, Community Hospital of the Monterey Peninsula**

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## Your Academic Path

Take courses individually or complete all of them to earn your certificate.

## Introduction to Healthcare Analytics

*3.0 quarter academic credits, X426.5* *Typically offered: Fall, Spring*

Explore the value proposition for clinical intelligence and the role of analytics in supporting a data-driven learning healthcare system. Consider the attributes of high-performing health systems, how quality and performance are measured (NQF, HEDIS, AHRQ), and infrastructure requirements to effectively leverage data for health improvement.

## Healthcare Data Acquisition and Management

*3.0 quarter academic credits, X423.2* *Typically offered: Winter, Summer*

Learn to navigate complex data structures and efficiently retrieve the data needed to answer a question or solve a problem. Explore the types and sources of healthcare data; common representations of data (ICD, CPT); healthcare data models; data harmonization; strategies for optimizing data quality; ethics, data ownership and privacy; and new models of data organization and analytics.

## Applied Healthcare Statistics

*3.0 quarter academic credits, X423.3* *Typically offered: Fall, Spring*

Examine epidemiological concepts in health outcomes research and their use in evaluating the patterns, causes and effects of health in patient populations. Topics include study design; generalized linear models; internal and external validity; and methods to minimize bias, adjusting for confounding and measuring effect modification. Participants will learn to develop a testable hypothesis, build and refine analytic models and interpret results relevant to health outcomes.

## Data Mining for Healthcare Analytics

*3.0 quarter academic credits, X423.5* *Typically offered: Winter, Summer*

The proliferation of data in the post-EHR era creates opportunities for large-scale data analysis to discover meaningful patterns and trends. Explore the application of data mining techniques for purposes of big data analytics using administrative and clinical systems data. Topics include an overview of the data mining process, data mining standards and output protocols, and common techniques used in mining healthcare data.

## Quantitative Methods and Decision Analysis

*3.0 quarter academic credits, X423.4* *Typically offered: Spring*

Examine an array of quantitative methods used by health analytics practitioners to evaluate questions of efficiency and effectiveness in health care. This advanced course integrates and builds on prior coursework in statistics and data mining and provides additional exposure to advanced methodologies, such as event sequencing, analytical groupers, simulation and predictive modeling.

### Earn a Badge

Earn a digital badge for your LinkedIn profile that demonstrates your mastery of this subject area.

**Learn more**

## INDUSTRY FACTS

- $80,236 average salary for clinical analyst (Glassdoor)
- 9% projected growth in all computer analyst jobs from 2018-2028* (Bureau of Labor Statistics)
- $94,500 average salary for medical and health services managers (Bureau of Labor Statistics)
- 18% projected growth for medical and health services managers jobs from 2018-2028 (Bureau of Labor Statistics)

### information

**CALL** (800) 752-0881

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