



University Extension  
Professional Studies

# SHOW HOW DATA CHANGES EVERYTHING

## Specialized Study Certificate in Applied Data Science for Educators



**Data science is the new frontier for navigating and distilling the vast amount of information available.** So how do you start teaching data science skills to your middle or high school students, let alone learn them in a concise and manageable way? Start with this two-course program designed in conjunction with the UCR Physics Department and the NASA MAAA LaunchPad Program—specifically to help teachers like you, take data analysis skills directly into the classroom.

Learn the basics of data science, arranged for the high school curriculum and applying to different lessons in STEM. Refresh your understanding of the mathematical foundation that makes data analytics possible, including statistics and probability. Use the lab course on Python to gain working knowledge of preparing and organizing data, then learn how to manipulate and query it for results and insight. Enroll in both courses concurrently to qualify for a fellowship opportunity with the NASA MAAA LaunchPad Program—and have your tuition and fees covered for your data science courses. Take your solid understanding back to your classroom to get students thinking about data science at an early age and inspire them to build a skillset that could change the way the world understands itself.

### WHAT YOU'LL LEARN

An introduction to data science, as designed for high school teachers

A concise reiteration of the mathematical foundation for, and involvement in, data science

Data management and programming with Python

Methods for building different graphics and visualizations in Python



**TOTAL UNITS**  
6



**TUITION**  
\$695



**COMPLETION TIME**  
3 months



**FORMAT**  
Online



**CONNECT WITH A COACH**  
[extension.ucr.edu/coach](https://extension.ucr.edu/coach)

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## BENEFITS OF EARNING A CERTIFICATE

There are several reasons why, Bachelor's degree in hand, you might be considering continuing your studies. An upgraded education section on your resume can open the door to a new career, or, if you're already working, lead to a promotion and a higher salary. While you're working, going back to school is an excellent way to stay current in rapidly changing fields, or, if you've been away from the workforce for a while, to quickly get caught up in the latest trends, concepts, and advances.

While there are as many paths to follow, as there are reasons to follow them when approaching continuing education, there is enormous value in terms of time, financial investment, and personal flexibility while gaining practical training from working professionals in your industry that extends beyond the theory of the classroom and into the real world.

### KEY BENEFITS INCLUDE:

- UC quality curriculum
- Professional endorsements
- Schedule flexibility
- Variety of courses and programs
- Instruction from professional leaders in the industry

## PAY AS YOU GO



Pay per individual course as you register.

AVERAGE COURSE TUITION  
**\$595 PER (4 UNIT) COURSE**

\*Learn more about [tuition assistance](#).

## CAREER INFORMATION



### IN-DEMAND FIELD

Jobs are projected to grow at a rate of 12% over the next 5 years.



### STRONG EARNING POTENTIAL

Median Salary **\$81,586**



### VARIETY OF JOBS TO CHOOSE FROM

- K-12 Teacher



### SKILLS FOR SUCCESS

- Oral Expression and Comprehension
- Active Listening
- Problem Sensitivity



### REALITY CHECK. WHAT YOU WILL DO ON THE JOB.

- Establish rules or policies governing student behavior
- Apply multiple teaching methods
- Modify teaching methods to accommodate student needs
- Develop instructional objectives
- Discuss student progress with parents or guardians



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## STUDY PLAN

Our certificate programs are designed to be flexible, allowing you the option to take just a few courses or earn the complete certificate. If choosing to complete the certificate, we recommend you get the most out of your experience by following the suggested completion path below.

Required Courses		
QUARTER		UNITS
1	Introduction to Applied Data Science for High School Teachers <a href="#">PHYS X440</a>	4
	Introduction to Python, Data Preparation, and Visualization <a href="#">CS X459.30</a>	2

## ARE YOU READY FOR YOUR NEXT STEP?

Schedule an appointment with a [Student Success Coach](#) to get started. [extension.ucr.edu/coach](http://extension.ucr.edu/coach)



\*\*For a full list of policies and procedures, check our [website](#).