



# Data Science

THE UNIVERSITY OF ARIZONA

A wide-angle, aerial photograph of a university campus. In the foreground, a large, light-colored brick-paved walkway leads towards a central green lawn. Numerous students are walking along the paths and sitting on long, low stone benches. The campus is surrounded by various buildings, including a prominent modern-style building with a glass facade in the background. The overall scene is bright and sunny.

## PRESENTERS

### Computer Science:

- Adriana Picoral

### School of Information:

- Cristian Román Palacios
- Salena Torres Ashton
- Laura Werthmann Dozal

A large-scale, three-dimensional sign featuring the words "DATA SCIENCE" in bold, block letters. The letters are primarily white, with the "D", "A", and "T" accented by a thick red vertical bar. The "S", "C", and "E" are accented by a thick blue vertical bar. The "I" and "N" are accented by a thick green vertical bar. The sign is mounted on a building with a grid of horizontal windows.

# DATA SCIENCE

## What is it?

- Use of tools, methods and technology to generate meaningful insights from data
- Multidisciplinary approach (mathematics, statistics, artificial intelligence, computer engineering + any expertise field)

# Data Science at UArizona

School of Information (SBS)  
Computer Science (College of Science)  
Mathematics (College of Science)  
Management and Information Systems (Eller)  
Wildlife Conservation and Management (CALS)



# DATA SCIENCE COURSES

## WFSC 223: Dealing With Data in the Wild

In this class, we undergo a series of scenarios to teach you how to use data to design and evaluate if we are making a difference in our new society. These scenarios include case studies related to disease, food security, conservation, sustainability, and nutrition. This course teaches introductory data literacy skills such as data management, analytics, and visualization useful for decision making and your careers.

## ISTA 331: Principles and Practice of Data Science

This course surveys the techniques central to the modern practice of extracting useful patterns and models from large bodies of data and the theory behind these techniques. Students will learn the purpose, power, and limitations of models, with concrete examples from business and science.

## CSC 380: Principles of Data Science

This course teaches students the basic principles of how to properly collect and process data sources in order to derive appropriate conclusions from them. The course has three main components: data analysis, machine learning, and a project where students apply the concepts discussed in class to a substantial open-ended problem.



# UA School of Information

Harvill Floor 4

***B.A. Information Science & Arts***

***B.A. Information Science & eSociety***

***B.S. Information Science & Technology***

***B.S. Game Design & Development***

***B.A. Games & Behavior***

***Undergraduate Certificates:***

***Games and Simulation***

***Data Science and Visualization***

***Natural Language Processing***



# UA Computer Science

**Gould-Simpson Floors 7-9**

***B.A. Computer Science***  
***B.S. Computer Science***

**What programming  
languages will I learn?**

---

The first two CSC courses are taught in Python. You'll also learn Java & C.