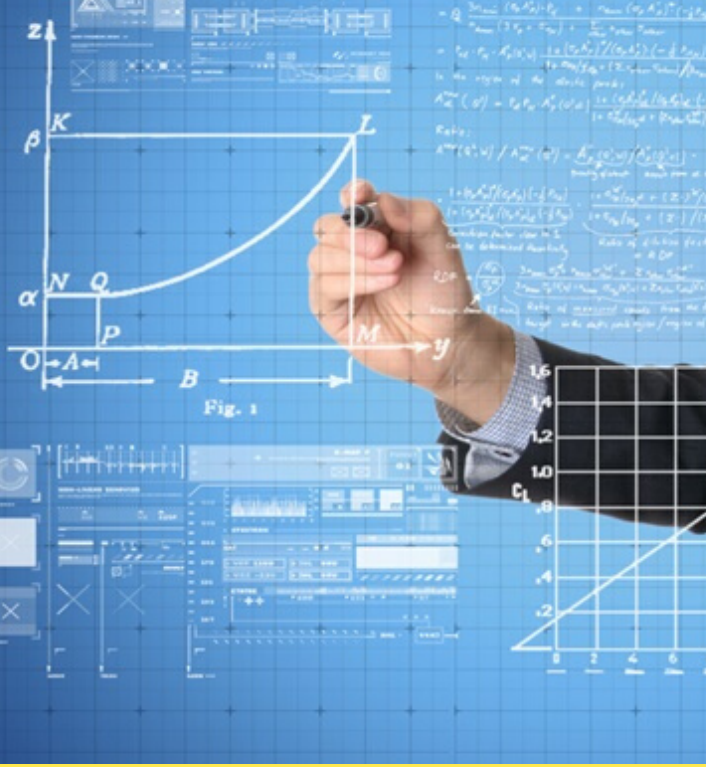

Sample Schedule

Year 1
Fall Quarter: MAT 21A
Winter Quarter: MAT 21B, ECN 1A
Spring Quarter: MAT 21C, ECN 1B
Year 2
Fall Quarter: MAT 21D, ENG 6
Winter Quarter: MAT 22A, MAT 108
Spring Quarter: MAT 22B, MAT 127A
Year 3
Fall Quarter: MAT 127B, STA 32, Enrichment B
Winter Quarter: MAT 127C, MAT 135A
Spring Quarter: MAT 135B, MAT 167, Enrichment A
Year 4
Fall Quarter: MAT 150A, MAT 128A
Winter Quarter: 168, Enrichment A, Enrichment B
Spring Quarter: MAT 160, Capstone

Interested?

Talk with the Math Undergraduate Advisor, Cydney Matteson, about switching to a Mathematical Analytics and Operations Research major. Set up your appointment at appointments.ucdavis.edu.

UC DAVIS
MATHEMATICS

Mathematical Analytics and Operations Research

WHAT IS OPERATIONS RESEARCH?

Operations Research (O.R) is the application of advanced and analytical methods to help make better decisions. O.R. addresses a critical need in business for scientifically-trained analysts who can use mathematical models to interpret big data, analyze markets and forecast trends. Similarly, Analytics is the scientific process of transforming data into insight to make better decisions.

This major is a combination of courses in mathematics, economics, computer science, and statistics, which have been specially selected to prepare student for a rewarding career in Analytics and Operations Research.

PROGRAM OVERVIEW

Coursework in mathematics and computer science form the basis for advanced study of analytical methods, with a number of required and optional courses in statistics and economics. The major requires upper-division coursework in either economics or agricultural and resource economics, and concludes with a capstone research course. For Transfer Students: all lower-division requirements (equivalent to the first two years of courses) must be completed prior to transferring.

HOW DOES THIS MAJOR DIFFER FROM OUR OTHER MATH MAJORS?

Mathematical Analytics and Operations Research has an emphasis on economics, and statistics enrichment courses. Additionally, there are two required courses unique to the major: Optimization (MAT 168) and Database Theory (MAT 160). This major is ideally suited to students with an interest in business or economics.

POSSIBLE CAREER PATHS

Postgraduate Work: Graduates may choose to continue with postgraduate work in areas such as Economics, Applied Mathematics, Finance, and Management Science, or pursue a professional degree such as an MBA.

Industry: Management and analysis of big data is at the core of decision - making processes for a wide variety of industries. Technology, finance, social media, government, relief agencies, use analytics in guiding daily and long-range decisions.