# Data Analytics







Learn how to apply mathematical and computational techniques to make decisions in a wide range of industries and organizations.

Professors in mathematics, computer science, economics and business created this interdisciplinary major in the context of a liberal arts program. Your study begins with foundational courses in each discipline and moves to advanced classes in probability and statistics, database design, big data, machine learning, management science and game theory. A senior seminar provides a capstone experience and Christian perspective. Employers increasingly seek graduates who understand how to analyze data effectively in order to responsibly answer mission critical questions.

### SELECTED COURSES

- Design and Implementation of Solutions to Computational Problems
- Information Retrieval and Big Data
- Database Design
- Artificial Intelligence and Machine Learning
- Research and Forecasting
- Principles of Accounting
- Probability and Statistics

#### CARFFR PATHS

- Management Analyst/Consultant
- Data Scientist
- Big Data Analytics Specialist
- Research Analyst
- Manager of Services or Manufacturing Operations
- Data Analyst
- Project Manager
- Supply Chain Manager
- Market Research Analyst



## FACULTY HIGHLIGHTS



DON PATTERSON, PH.D.

Obtained a patent for a device evaluating infant movement in a NICU



ENRICO MANLAPIG, PH.D.

He has studied the economics of speed dating



DAVID HUNTER, PH.D.

Applies algebra, geometry and topology to computing and data



RUSSELL W. HOWELL, PH.D.,

Views mathematics through the eyes of faith



MARYKE VAN DER WALT, PH.D.

A mathematician and musician who applies data science to diabetes



ANNA ABOUD, PH.D.

Pursues effective and efficient processes in mathematics, data science, and mathematics education.

# OPPORTUNITIES ABROAD



- Westmont in Asia
- Westmont's Europe Semester
- Westmont in San Francisco
- Westmont Downtown