PRECISION NUTRITION AND AI CERTIFICATE

Program Description

Precision nutrition and AI are transforming how we approach health and wellness, offering personalized solutions that consider individual biological and environmental nuances. As the demand for tailored dietary recommendations grows, so does the need for professionals equipped to lead these innovations. By engaging with this five-course Precision Nutrition and AI certificate program, you will deepen your expertise from foundational knowledge to practical application.

In this program, you will begin by exploring the fundamentals of precision nutrition, examining how genetic, microbiome, and metabolic factors, along with environmental influences, shape individual dietary responses. You'll enhance your critical analysis abilities by evaluating cutting-edge research, understanding methodologies, and crafting research questions using the PICO (population, intervention, comparison, outcome) framework.

You will then advance your knowledge as you delve into the practical applications, limitations, and ethical considerations surrounding precision nutrition. By analyzing how personalized nutrition can transform health and wellness, you'll be well equipped to navigate real-world challenges and opportunities. As you develop essential technical skills in R programming and progress from basic to advanced statistical analysis, data visualization, and modeling, you will be empowered to drive data-driven research endeavors.

Finally, you will gain hands-on experience in data analysis through the Researcher Workbench using data from the "All of Us" Research Program, one of the largest and most diverse health databases in the U.S. You'll apply your skills to explore precision medicine across varied populations. After completing this certificate, you'll be prepared to conduct research, lead initiatives, and innovate in the rapidly evolving field of precision nutrition.

Key Takeaways

- Analyze how individual biology and environmental factors influence dietary responses
- Critically assess key precision nutrition studies, evaluate research methodologies, and develop a PICO-based research question
- Evaluate precision nutrition's impact on health outcomes, critically analyze consumer applications, and examine ethical implications of personal data management
- Analyze scientific data using R by performing data manipulation, creating visualizations with ggplot, and conducting basic regression analyses
- Navigate the "All of Us" Researcher Workbench user interface to create cohorts, concept sets, and datasets

What You'll Earn

- Precision Nutrition and AI Certificate from Cornell College of Human Ecology
- 80 Professional Development Hours (8.0 CEUs)
- Clock Hours: 84

Who Should Enroll

- Health and nutrition professionals
- Data scientists
- Biopharma professionals
- Healthtech entrepreneurs and consultants
- Medical scientists
- Food scientists
- Agriculture and food systems experts
- Graduate students, postdocs, and academic researchers

Total Investment

- 3 months to complete all the courses

How to Enroll

For more information on how to enroll, please visit Precision Nutrition and AI Certificate (https://ecornell.cornell.edu/certificates/nutrition/precision-nutrition-and-ai/).

Program Requirements

Code	Title	Hours
Required Courses		
eCornell CHE12	Foundations of Precision Nutrition	
eCornell CHE12	Evaluating Methods in Precision Nutrition	
eCornell CHE12	Precision Nutrition in Research, Policy, and Practice	
eCornell CHE12	R Primer in Data Analysis	
eCornell CHE12	Analysis Methods in Precision Nutrition	