

# APPLIED HEALTH ECONOMICS & OUTCOMES RESEARCH (MS)

## Contacts

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## Program Description

Applied Health Economics & Outcomes Research (AHEOR)

- is an academic discipline that establishes the efficacy of a product, service, or treatment
- compares its effectiveness to other interventions
- considers its incremental cost efficiency to determine optimal clinical application and overall economic value.

## Master's Degree

The Masters of Science (MS) builds upon the foundation concepts presented in the Graduate Certificate and focuses on the advanced application of concepts necessary for the modern practice of AHEOR in research and industry settings. This option contains ten online courses and a capstone project, which is specifically designed to enhance the student's career trajectory. This option can be completed in two years.

Two track options allow students to focus their studies in AHEOR:

### Industry Track

The industry track will prepare students to manage HEOR research in the industry (e.g., Pharma, Insurance, Payers). It will provide students with information on up-to-date HEOR tools, competencies in HEOR analysis and interpretation, as well as applicability and meaningfulness of HEOR evidence. The target audience will include individuals who wish to start a career in the healthcare industry, individuals in industry who want to expand/advance/re-tool their career, individuals in payer/insurance environment who want to learn how HEOR fits in their sector, and individuals in pharmacy space who want to expand/advance/re-tool their career.

### Research Track

The research track will prepare students to conduct HEOR research. It will provide students with strong analytical and statistical competencies. The targeted audience will include individuals with a BS who want to perform HEOR research in industry/consulting firm/insurance, and individuals interested in pursuing a PhD program but still undecided.

## Program Outcomes

The AHEOR program prepares graduates to be successful in the ever-changing healthcare environment driven by data and analytics by preparing them to:

### Graduate Certificate

- Compare historical trends to current issues in U.S. healthcare organization, delivery and financing.
- Explore the impact of government policies on health insurance products.
- Examine the strengths and weaknesses of research design and statistical methods in evaluating product or service efficacy.
- Discuss the key concepts and applications of quantitative modeling in economic evaluations in health care.

### Master's Degree (Above Plus)

Apply analytic methods (e.g., burden of illness, evidence evaluation, statistics and research design, financial impact, cost-effectiveness, and decision analysis) to inform resource allocation, relative value assessments, and policy initiatives.

- Interpret and apply conceptual frameworks used in HEOR, such as economic metrics (e.g., cost-effectiveness), quality of life evaluations (e.g., utilities and patient-reported outcomes) and healthcare technology assessment evaluations from an international perspective (e.g., budget impact analysis, guidelines, formularies, and utilization incentives and disincentives).
- Communicate policy implications to various stakeholders and decision-makers that reflect AHEOR concepts and techniques.
- Conduct and manage HEOR projects in real-world healthcare settings
- Assume leadership roles in the decision process regarding the allocation of healthcare resources.

## Industry Track

### Curriculum: 2 Years

Code	Title	Credits
<b>Master of Science</b>		
<b>Graduate Certificate courses plus:</b>		
AHE 505	Statistics II	3
AHE 510	Adv Res Meth for Appl Obs Stud	3
AHE 512	Economic Modeling II	3
AHE 507	Claims-Based AHEOR	3
AHE 508	Intl Health Tech Assessment	3
AHE 652	Strat Capstone Portfolio&Pres	3
<b>Total Credits</b>		<b>18</b>

## Research Track

### Curriculum: 2 Years

Code	Title	Credits
<b>Master of Science</b>		
<b>Graduate Certificate courses plus:</b>		
AHE 505	Statistics II	3
AHE 510	Adv Res Meth for Appl Obs Stud	3
AHE 512	Economic Modeling II	3

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<b>Code</b>	<b>Title</b>	<b>Credits</b>
HDS 500	Fundamentals of Data Wrangling	3
HDS 502	Advanced Data Analysis	3
AHE 651	Capstone Research Project	3
<b>Total Credits</b>		<b>18</b>