# CLINICAL RESEARCH METHODS AND EPIDEMIOLOGY (MS)

Design and implement your own health care clinical studies to improve patient care.

Loyola University Chicago's Master of Science (MS) in Clinical Research Methods and Epidemiology (CRME) degree is a 2.5 year part-time program for clinicians and other health care professionals, based in the Chicago-land area, wanting to pursue clinical and patient-orientated research. With the guidance of a research mentor, you will create your own research proposal and project. The flexible learning environment in this clinical research master's program combines in-person classroom instruction with one-on-one mentoring to give you the skills to design and implement clinical studies and obtain independent funding.

## **Related Programs**

#### Master's

 Clinical and Applied Proteomics (MS) (https://catalog.luc.edu/ graduate-professional/graduate-school/health-sciences/biomedicalsciences/clinical-applied-proteomics-ms/)

#### Certificate

- Clinical Certificate in Hematology (https://catalog.luc.edu/graduateprofessional/health-sciences/clinical-certificate-hematology/)
- Clinical Certificate in Microbiology (https://catalog.luc.edu/graduateprofessional/health-sciences/clinical-certificate-microbiology/)

#### Curriculum

A total of 30 credit hours are required to complete the degree. Students must complete six core courses (18 credit hours) and three elective courses (9 credit hours). All students must also complete a research project (3 credit hours) as part of their degree. Courses are offered both on campus and online.

Code	Title	Hours
Core Courses		
BEHL 405	Research Ethics (online)	3
MPBH 403	Introduction to Epidemiology (classroom and online)	3
MPBH 404	Biostatistics for Health and Biological Science	3
MPBH 421	Biostatistics II (classroom)	3
MPBH 423	Intermediate Epidemiology (classroom)	3
MPBH 431	Grant Writing (classroom)	3
Electives		
Select three of the	e following:	9
HIDS 401	Foundations of Health Informatics	
HIDS 411	Clinical Data Science	
HIDS 421	Security and Privacy in Healthcare	
HIDS 422	Ontologies in Healthcare	
MPBH 400	Determinants of Population Health	
MPBH 401	Environmental Health (online)	
MPBH 402	Public Health Practice and Management	

MPBH 433 MPBH 434 MPBH 495 search Project	Clinical Trials (classroom) Systematic Review and Meta-Analysis (classroom) Special Topics (upon approval) MPH Capstone	3
MPBH 433 MPBH 434 MPBH 495	Clinical Trials (classroom) Systematic Review and Meta-Analysis (classroom)	
MPBH 433 MPBH 434	Clinical Trials (classroom) Systematic Review and Meta-Analysis (classroom)	
MPBH 433	Clinical Trials (classroom)	
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MPRH 432	Health Impact Assessment	
MPBH 425	Policy Analysis	
MPBH 424	Health Economics and Healthcare Financing	
MPBH 422	Population Health Planning & Management	
MPBH 420	Public Health Law: Theories and Cases	
MPBH 416	Health Services Research Methods (online)	
MPBH 414	Introduction to Global Health	
MPBH 413	The Epidemiology of Obesity: An Energy Balance Perspective (online)	
	MPBH 414 MPBH 416 MPBH 420 MPBH 422 MPBH 424	Perspective (online)  MPBH 414 Introduction to Global Health  MPBH 416 Health Services Research Methods (online)  MPBH 420 Public Health Law: Theories and Cases  MPBH 422 Population Health Planning & Management  MPBH 424 Health Economics and Healthcare Financing  MPBH 425 Policy Analysis

#### **Research Project**

All students must demonstrate integration of knowledge gained through the program by presenting a research project (either a completed research project or research proposal) to the Master of Science in Clinical Research Methods Program Curriculum Committee. This research project or proposal will incorporate the skills and concepts obtained from the coursework. Students will have up to three years after enrolling in the program to complete the research project and obtain the degree.

# **Graduate & Professional Standards and Regulations**

Students in graduate and professional programs can find their Academic Policies in Graduate and Professional Academic Standards and Regulations (https://catalog.luc.edu/academic-standards-regulations/graduate-professional/) under their school. Any additional University Policies supersede school policies.

### **Learning Outcomes**

- Apply components of research design and analysis for the purpose of critically reviewing research and programs in medicine
- · Analyze various methods to evaluate topics in healthcare
- Identify the uses to which data management can be put in practical statistical analysis, including the establishment of standards for documentation, archiving, auditing, and confidentiality; guidelines for accessibility; security; structural issues; and data cleaning