



## MASTER OF SCIENCE IN EPIDEMIOLOGY

The Master of Science in Epidemiology (MSEPI) program trains students in the conceptual foundations and the methodological skills that are foundational in epidemiology. The program is designed to meet the needs of candidates who seek careers in government, academia, and industry - which all require advanced knowledge in conducting research and analyzing health data.

The MSEPI degree is also appropriate academic preparation for students who plan to continue their education for a PhD degree in epidemiology or a related discipline. Students will benefit from experiential learning opportunities and formal training in epidemiology, applied biostatistics, and data analysis programming as preparation for the scientific skills needed for undertaking applied research.

## **PROGRAM REQUIREMENTS**

Students will complete a minimum of 39 credit hours of coursework), including 27 hours of required program inclusive of a research thesis (CPH699), and a minimum of 12 hours of electives. CPH 663 (Introduction to Public Health 1 - credit) or equivalent is needed for students without a prior public health degree.

The core curriculum can be found to the right:

#### SCAN OR CODE



### SAMPLE SCHEDULE

Year 1 Fall	Year 1 Spring	Year 2 Fall	Year 2 Spring
CPH 605	CPH 612, CPH 615, CPH711	CPH 712	EPI 714
BST 600	BST 635	BST 681	EPI 715
CPH 663 ( if needed)[1 credit]	Guided Elective	Guided Elective	CPH 699 Thesis
<b>Guided Elective</b>		<b>Guided Elective</b>	
Total = 9-10 credits	9 credits	12 credits	9 credits

# **ADMISSIONS REQUIREMENTS**



Bachelor's degree (BS/BA) in science, math/statistics, health or a related field. Prior course work in calculus (at least one semester) and a strong introductory biostatistics course is preferred. Prior experience in programming in a statistical language like SAS, R or other is recommended but not required.



**Grade Point Average**: Per the Graduate School at the University of Kentucky, the minimum acceptable graduate GPA is 3.00. However, we anticipate that the majority of successful applicants will have GPAs between 3.25 and 4.00.



**GRE scores**: GRE scores will no longer be required but can be submitted as part of the application.



**TOEFL scores** (for those who are not native English speakers):

Per the Graduate School, the minimum acceptable TOEFL score is 550 (paper-based), 213 (computer-based), or 79 (internet-based).



**Three letters of recommendation**: At least one letter should explicitly address the applicant's quantitative skills. All three letters should be dated.



**Statement of purpose**: Describe career and dissertation research interests, along with qualifications for study in this program.





The thesis research will need to be an original scientific project using either primary or secondary data with a population (epidemiologic) or clinical trials focus. The thesis must be developed under the direction of a Full or an Associate member of the Graduate Faculty.

The completion of the thesis will require the formation of a master's thesis committee. No fewer than 3 persons shall constitute the thesis committee. One of the members must be a Full member of the Graduate School, and at least 2 of the 3 members must be faculty from the Department of Epidemiology in the College of Public Health.

The scope of the thesis shall demonstrate independence, mastery of research skills, and thoughtful reflection of the results in accordance with guidelines given in the CPH student handbook and the rules of the graduate school.

A successful thesis must be approved by the thesis director, the Director of Graduate Studies, the Examination Committee, and the Graduate School, and must conform with instructions prepared by the Graduate School entitled "Instructions for the Preparation of Theses and Dissertations." (Copies of this document are available from the Graduate School.)

# **CAREER OPPORTUNITIES**



## **CAREER PATHS**

- Program Analyst
- State Epidemiologist
- HAI (Healthcare Acquired Infection)

Section Manager

- Nurse Epidemiologist
- Regional Epidemiologist
- Surveillance Officer
- Public Health Advisor
- Field Epidemiologist
- Infection Control Epidemiologist
- Applied Data Analyst
- Survey Researcher
- Epidemiology Program Manager

## **LOCATIONS**

- Hospitals
- Local Government
- Scientific Research Foundations
- State Government
- Universities

2022 MEDIAN PAY **\$78,520** 

JOB OUTLOOK

27% GROWTH

**2,700 JOBS** 

2022 MEDIAN SALARY

Epidemiology in Scientific Research

\$99,020







# Central Appalachian Regional Education & Research Center (CARERC)

The CARERC combines the academic resources of six colleges on the University of Kentucky campus, as well as two colleges from Easter Kentucky University (EKU), to create a cohesive resource for occupational safety and health research and training.

#### **NIOSH**

NIOSH Trainees are provided with in-state tuition, health insurance, research support for their thesis, capstone, or dissertation, and funding for travel to professional conferences. In addition, trainees take a series of core classes focused on occupational health and epidemiology, and participate in an interdisciplinary seminar and field studies course, with travel to interesting field sites in the state.

In order to be eligible to become a NIOSH trainee in the CARERC, you must:

- Be fully admitted into the MPH or MS program in Epidemiology at UK
- Be a U.S. citizen, national, or permanent resident
- Have as a career objective the field of occupational or environmental epidemiology
- Be enrolled as a full-time student
- Have a minimum GPA of 3.2