# BIOSTATISTICS, POST-BACCALAUREATE CERTIFICATE

If you want to build skills in collecting and analyzing health information, forecasting scenarios and making important health, economic or policy recommendations, Saint Louis University's post-baccalaureate certificate in biostatistics may be ideal.

Biostatisticians apply statistical theory and mathematical principles to research in public health, medicine, pharmacology, biology, environmental science, and other related fields to determine the causes of disease and injuries and identify critical trends within communities.

# **Program Highlights**

If you complete your post-baccalaureate certificate in biostatistics at SLU, you will be able to:

- · Articulate the principles of biostatistics
- Compute descriptive and multivariate statistical tests and measures of association using statistical software
- · Interpret results of statistical analyses
- · Communicate results of statistical analyses
- Follow ethical norms and rules for acquiring, managing, sharing, securing and analyzing data

#### **Curriculum Overview**

The biostatistics certificate is designed for three distinct audiences:

- Students actively pursuing their M.P.H. at Saint Louis University in a concentration other than biostatistics.
- Graduate students at Saint Louis University in other programs who want skills in health data analysis and interpretation.
- 3. Professionals who wish to gain additional skills in biostatistics.

This 12-credit certificate can be completed over one to two years and is offered in person.

#### **Careers**

Students awarded SLU's biostatistics graduate certificate will be prepared to pursue careers in applied mathematics in fields of medicine, public health, biology, and related fields. Research and analysis opportunities may include:

- · Analyzing risk factors for different chronic and infectious diseases.
- · Analyzing the effectiveness of new drugs.
- · Communicating and explaining scientific discoveries.
- · Determining trends in drunken or distracted driving injuries.
- Planning effective health care interventions and strategies for government, health care systems and NGOs.

SLU's public health graduates work at federal, state and local health agencies; consulting firms; consumer advocacy organizations; community-based organizations; and health care centers, hospitals, research centers and universities.

## **Admission Requirements**

Applicants should have a bachelor's degree, preferably with at least a 3.00 grade point average. Experience in a health-related field is preferred, but not required. Applications are reviewed on a holistic and rolling basis. To apply, applicants will need to submit their transcripts, CV, personal statement and two letters of recommendation through SOPHAS Express (https://sophasexpress.liaisoncas.com/applicant-ux/#/deeplink/programSearch/organization/5077527303125433344), the common application system for public health schools and programs.

#### **Tuition**

Tuition	Cost Per Credit
Graduate Tuition	\$1,400

Additional charges may apply. Other resources are listed below:

Net Price Calculator (https://www.slu.edu/financial-aid/tuition-and-costs/calculator.php)

Information on Tuition and Fees (https://catalog.slu.edu/academic-policies/student-financial-services/tuition/)

Miscellaneous Fees (https://catalog.slu.edu/academic-policies/student-financial-services/fees/)

Information on Summer Tuition (https://catalog.slu.edu/academic-policies/student-financial-services/tuition-summer/)

# **Scholarships and Financial Aid**

For more information about Saint Louis University scholarships and financial aid, please visit the Office of Student Financial Services (http://www.slu.edu/financial-aid/).

## **Accreditation**

Saint Louis University's College for Public Health and Social Justice is fully accredited by the Council on Education for Public Health (CEPH). To see our most recent accreditation documentation, please visit the College for Public Health and Social Justice website (https://www.slu.edu/publichealth-social-justice/). (https://www.slu.edu/public-health-social-justice/about/accreditation.php)

## **Learning Outcomes**

- Evaluate evidence using the principles of biostatistics, such as bias, natural and sampling variability, and theories of estimation.
- 2. Analyze data with multivariable statistical models.
- Create statistical reports and presentations using appropriate graphical and numerical summaries and narrative explanations.

# Requirements

Code	Title	Credits
BST 5020	Theory of Biostatistics	3
BST 5100	Introduction to General Linear Modeling	3
BST 5450	Data Visualization	3

Total Credits		12
	Departmental Attributes	
	from MPH Electives - Biostatistics	
BST 5XXX	Biostatistics Graduate Elective chosen	3

Total orcato

#### **Continuation Standards**

Students must maintain a cumulative grade point average (GPA) of 3.00 in all graduate/professional courses.

## Roadmap

Roadmaps are recommended semester-by-semester plans of study for programs and assume full-time enrollment unless otherwise noted.

Courses and milestones designated as critical (marked with!) must be completed in the semester listed to ensure a timely graduation. Transfer credit may change the roadmap.

This roadmap should not be used in the place of regular academic advising appointments. All students are encouraged to meet with their advisor/mentor each semester. Requirements, course availability and sequencing are subject to change.

Course	Title	Credits
Year One		
Fall		
BST 5020	Theory of Biostatistics	3
BST 5450	Data Visualization	3
	Credits	6
Spring		
BST 5100	Introduction to General Linear Modeling	3
Biostatistics Attributed Graduate Elective		3
	Credits	6
	Total Credits	12

## **Contact Us**

Apply for Admission (https://sophas.liaisoncas.com/applicant-ux/#/deeplink/programSearch/organization/6425937835738032128)

For additional admission questions, please contact: Bernie Backer Director of graduate recruitment and admissions bernard.backer@slu.edu (bernard.backer@slu.edu) 314-977-8144