Washington University in St. Louis

Master of Science in Biostatistics

This four-semester, 42-credit-unit program offers excellent training in Biostatistics and Statistical Genetics for students who earned undergraduate or higher degrees with majors in Mathematics, Statistics, Computer Science, Biomedical Engineering, or other related fields. It prepares graduates for rewarding employment in academia and industry and for further graduate studies. Students choose between a traditional Biostatistics pathway or a Statistical Genetics pathway. An internship is a required component of the program, and students have the option to do a thesis project or to enroll in approved elective courses. Students also have the opportunity to enhance their research and statistical training through a paid research assistant position.

Code	Title	Units
Summer Year 1		
MSB 503	Statistical Computing with SAS	2
MSB 507	R and Python For Biomedical Sciences	2
Fall Year 1		
MSB 507	R and Python For Biomedical Sciences	2
MSB 560	Biostatistics I	3
MSB 570	Biostatistics II	3
MSB 515	Fundamentals of Genetic Epidemiology	3
MSB 5483	Human Genetic Analysis	3
BMI 5302	Introduction to Biomedical Informatics I	3
Pathway course		3
Spring Year 1		
MSB 618	Survival Analysis	3
MSB 621	Computational Statistical Genetics	3
BMI 5303	Introduction to Biomedical Informatics II	3
Pathway course		
Elective from approved list*		
Summer Year 2		
MSB 507	R and Python For Biomedical Sciences	2
MSB 630	Internship	3
or MSB 600	Mentored Research	
Fall Year 2		
MSB 507	R and Python For Biomedical Sciences	2
MSB 617	Study Design and Clinical Trials	3
MSB 630	Internship	3
or MSB 600	Mentored Research	
Elective from approved list*		

* For a list of approved electives, please visit our website.

Specific Courses for Each Pathway

Biostatistics

Code	Title	Units
PHS 501	Introduction to Epidemiology	3
MSB 618	Survival Analysis	3

Statistical Genetics

Code	Title	Units
MSB 5483	Human Genetic Analysis	3
MSB 621	Computational Statistical Genetics	3

Academic Policies

Academic policies for degree programs can be found in the Student Handbook (PDF).

Prospective Students

Those interested in applying or who would like more information may contact the program recruiter (gsertl@wustl.edu).