

## BIostatISTICS AMP

All students must meet the Requirements for the Accelerated Master's Degree Pathway

### OVERVIEW

A master's degree in mathematics, statistics or biostatistics can be earned in a shortened time by careful planning during the junior and senior years at UVM. For example, the M.S. could be earned in just 1 additional year, because 6 credits of graduate level courses taken while an undergraduate can also be counted concurrently toward the M.S. degree requirements. Another 3 graduate credits can be counted towards the M.S. degree while an undergraduate but cannot count towards the B.S. degree.

### SPECIFIC REQUIREMENTS

#### Requirements for Admission to Graduate Studies for the Degree of Master of Science

Students should discuss the possibility of an Accelerated Master's Entry Pathway in biostatistics with the respective program director as soon as they think they may be interested in this program. Students must declare their wish to enter the Accelerated Master's Entry Pathway in writing to the statistics program director (it is recommended that this happen before the end of their junior year). They would apply to the Graduate College for admission, noting their interest in the Accelerated Master's Pathway. They can receive concurrent undergraduate and graduate credit for 1 or 2 graduate level courses, once admitted. No graduate credit can be counted for statistics courses earned prior to admission to the graduate program.

#### Minimum Degree Requirements for the Degree of Master of Science

Requirement Description		Credits
Option A (Thesis)		
A 30 credit program requiring 24 credits of course work, at least 6 of which must be graded and at the 6000-level. The program must include:		
STAT 5000	Biostatistics and Epidemiology	3
STAT 5210	Advanced Stat Methods & Theory	3
STAT 5230	Appld Multivariate Analysis	3
STAT 5310	Experimental Design	3
STAT 5510	Probability Theory	3
3 additional graded course credits at the 6000-level or above		3
6 credits of approved thesis research (STAT 6391)		6

Requirement Description		Credits
Option B (Non-Thesis)		
A 30 credit program requiring 27 credits of course work, at least 6 of which need to be graded and at the 6000-level. The program must include:		
STAT 5000	Biostatistics and Epidemiology	3
STAT 5210	Advanced Stat Methods & Theory	3
STAT 5230	Appld Multivariate Analysis	3
STAT 5310	Experimental Design	3
STAT 5510	Probability Theory	3
The research project requirement is met by taking 3 credits of:		
STAT 6810	Statistical Research	3
or STAT 6850	Consulting Practicum	

Requirement Description		Credits
Both Options		
Under both plans, students must attend the regular colloquium series and participate in the Statistics Student Associate Journal Club as part of their training. The comprehensive examination covers knowledge acquired in the core courses of the program. Under the non-thesis option, students will be expected to take major responsibility for a comprehensive data analysis or methodological research project, and are encouraged to present the results from the project.		

#### Comprehensive Examination

The comprehensive exam is a 3-hour exam that includes a mixture of questions spanning theoretical and applied statistics, probability, study design, and interpretation of analytical results. The questions are formatted as either numerical computation, derivation, or essay. The student can take the exam a maximum of 2 times. The exam is based on the courses STAT 5210, STAT 5230, STAT 5310, and STAT 5510. The exam is given at the end of August and should be taken at the end of the first year.

#### Requirements for Advancement to Candidacy for the Degree of Master of Science

Successful completion of any pre-requisite courses, and at least 15 graded graduate credits earned in compilation of the graduate GPA, including all core courses. A GPA of 3.00 or greater is also required.