

Course-based MSc in Statistics

We have recently revamped our course-based MSc program in Statistics, so that the requirements can be fulfilled in eight to twelve months. Here are the relevant details; see also the [Regulations and Guidelines](#).

1. Students will pass, with a minimum grade as dictated by the Faculty of Graduate Studies and Research (FGSR), eight graduate courses in Statistics, from the Department of Mathematical and Statistical Sciences. These will include:
 - a. STAT 566: Methods of Statistical Inference
 - b. STAT 590: Statistical Consulting
 - c. STAT 901 & 902: Practicum in Statistics (see point 2 below).
 - d. Five electives chosen from:
 - i. STAT 503: Time Series Analysis
 - ii. STAT 505: Data Mining
 - iii. STAT 512: Techniques of Mathematics for Statistics
 - iv. STAT 532: Survival Analysis
 - v. STAT 553: Risk Theory
 - vi. STAT 561: Sample Survey Methodology
 - vii. STAT 562: Discrete Data Analysis
 - viii. STAT 568: Design and Analysis of Experiments
 - ix. STAT 575: Multivariate Analysis
 - x. STAT 578: Regression Analysis
 - xi. STAT 580: Stochastic Processes
 - e. Notes:
 - Students are advised to consult the requirements for accreditation, by the Statistical Society of Canada, as "Associate Statistician", when choosing their courses. This is discussed later in this page.
 - STAT 503 cannot be taken if credit has previously been obtained for STAT 479.
 - STAT 505 cannot be taken if credit has previously been obtained for STAT 441.
 - STAT 512 is required for students without training in mathematics at the level of STAT 312 or higher.
2. Students will serve for two terms, or the equivalent if this component is performed in the summer months of a 12 month program, as consultants. Each term will consist of at least 39 hours attendance, usually at the Training Consulting Centre. With the permission of the supervisor this service can instead be carried out at another approved consulting centre on campus. During the first of the two terms the student will have "observer status", and register in STAT 901 (1.5 credits). During the second of these terms he/she will be registered in STAT 902 (1.5 credits), and will undertake a project of sufficient depth to serve as the "capping project" required by FGSR. The project work will be summarized in a report, to be read and approved by the supervisor and one other faculty member.

From §204.1.3 of the University Calendar:
All students in a course-based master's degree program must complete the required course work and a final capping exercise. The intent of the capping exercise is to demonstrate the candidate's ability to synthesize the varied information accumulated through the program. ... The supervisor is responsible for maintenance of Faculty of Graduate Studies and Research and departmental standards for the project. The student is responsible for producing a report of the project or some other finished product to be deposited in the department.
3. Students are expected to complete the program within twelve months from commencement; the maximum time allowed is four years.
4. From §204.1.1(1) of the University Calendar:
Graduate students may not take for credit to satisfy the graduate program requirements any undergraduate course in their field of specialization and/or major area of study. In course-based programs, all coursework must be at the graduate level.

5. Candidates for the course-based MSc degree should have a four-year undergraduate degree or the equivalent from a recognized university, with adequate background to enable them to take the courses listed in 1. above. The Department generally does not accept students with an overall grade point average of less than 3.0 in their undergraduate years at the University of Alberta, or an equivalent qualification from another institution. The usual English proficiency requirements of the Department shall apply. Applicants whose background is deficient may be admitted as qualifying graduate students; if so the usual FGSR regulations (§203.4 of the Calendar) will apply. In particular:
Normally, a qualifying period will not exceed five full course equivalents (*30). Courses taken during a qualifying period will be specified by the department concerned. Completion of the work in a qualifying period does not automatically entitle the student to proceed toward a degree program. However, upon satisfactory completion of a qualifying period the department may recommend to the Faculty of Graduate Studies and Research that the student be reclassified as a master's or doctoral degree student. Students should note that neither the courses taken nor the fees paid during a qualifying period will be credited toward a subsequent degree program.
6. Graduates of this program should routinely be able to satisfy the educational requirements for accreditation as "Associate Statistician" by the Statistical Society of Canada. See A good career move for details.