Currently, academic program and course information is described in plain English and stored in an opaque and unaccessible database system. This makes it difficult to create automated tools to help students and administrators deal with that information. This project provides a means of specifying academic programs at McGill. With this specification it will then be possible to create programs and tools to aid students and administrators in working with and understanding the information. Our solution to this problem was to develop an XML grammar for specifying program structure, course structure, and a student’s personal academic plan, which we called AcademXML. To this end we created an XML DTD and a set of well defined rules to describe AcademXML. A few basic tools were also created to demonstrate the usefulness of this solution. These tools include some basic validation, search, visualization and student tools.