ASCENT COLLEGE

ACS
Big Data

Duration
2 Years / 4 Semesters

English

About Program

The goals of the program reflect the general and specific goals of technical training. The ACS Big Data Management program aims to equip students to work as Big Data technicians. It will teach them to exploit databases using tools such as SQL or NO-SQL, to explore data, to produce algorithms useful to their research, and to tell the story of their findings.

Key Courses

- Introduction to computer and data science
- Data cleansing
- Machine learning modeling and theory
- Machine learning modeling and projects
- SQL I (60)
- SQL II (60)
- Algorithms
- Python
- Hadoop I
- Hadoop II
- R
- Statistics I
- Statistics II
- Linear algebra
- Presentation of results and storytelling
- Teamwork and task management
- Internship or Project

Possible Career Opportunities

The job function covered by the program is Big Data Technician. We have copied the tasks of programmer and developer in interactive media from Emploi-Québec's Labour Market Information (NOC 2174), since the data science technician uses programming languages to apply statistical processing to data and find a model to explain its behavior:

- write, modify, integrate and test software code;
- update existing computer programs, making changes as specified;
  identify and communicate technical problems, procedures and solutions;
- prepare reports, manuals and other documentation on software status, operation and maintenance;
  assist in gathering and documenting user requirements;
- assist in the development of logical and technical specifications;
- set up and manage a team of programmers, if necessary;
- research and evaluate a large number of software products;

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- set up and manage a team of programmers, if necessary;
- research and evaluate, where appropriate, a large number of software products

Prerequisites

- Quebec Secondary V or equivalent Highschool

- English language requirements (NON SDS application route): Ielts 5.0 (nothing less than 5.0 in any individual module) or equivalent accepted test (Duolingo, Matrix, Language Canada accredited members, TOEFL etc...)

- Exemption: Students having a High School Diploma from native English speaking countries (example: Nigeria, Philippines)

- French language requirements: A0 to B2.2 French program is mandatory for those students who wish to pursue ASC in English;

- Exemptions from French program registration: Students are exempt from Matrix College's French language program, if they produce a proof of B2 level third party test / Matrix's online placement test or have a High School Diploma in French from French speaking countries or have a B2 level certificate from Languages Canada accredited members.