

Construction Management

 RED RIVER COLLEGE
OF APPLIED ARTS, SCIENCE AND TECHNOLOGY

Co-operative Education Program

Bachelor of Technology in Construction Management





Free Job Bank Service

To hire a student from Construction Management, contact the Civil Engineering Technology department. Your job offer will be posted exclusively to our students in total confidence, not revealing your company name. Resumes will be collected and forwarded to you. If requested, an interview room will be reserved at the College.

Students are hired quickly, so act early to avoid disappointment. This job bank service is provided at no cost to you!

Employer Advantages in Hiring Our Students

• Our students become knowledgeable in such areas as: project coordination, contract administration, blueprint reading, quantity takeoff and cost estimating, jobsite quality control and safety management, planning and scheduling, construction surveying and layout, building systems, codes and materials, field/office communications, basic structural design and CAD drafting.

- Students are familiar with the overall construction management process and practical business skills required to deliver results in construction projects. They also possess a basic understanding of applying green building concepts and information technologies such as BIM in the construction process.
- Students may fill in for employees on vacation.
- Employers have the opportunity to assess and to train students as potential future employees. Upon the student's graduation the employer is in an excellent position, based on the student's performance during the work terms, to ascertain whether to hire the student as a permanent employee.

Student Work Terms

Each year, prior to returning to class, the students are required to work a minimum of 16 weeks during the six-month work term (May to October). This work may be completed with more than one employer. The work should complement their programs with relevant "real world" experience. Positions must be paid employment, not work shadowing or volunteer work.

To place a co-operative education job offer, please contact the Co-operative Coordinator at:

- **204.632.2585, or**
- **CivilCo-op@rrc.ca, or**
- **by completing the electronic form at JobCentral.rrc.ca**

The **Construction Management Degree Program** focuses on heavy construction, industrial/commercial construction, and residential construction. It is designed to develop managerial expertise for those with the appropriate background in the skilled trades, engineering technologies or engineering fields.

The program is founded on a curriculum in technology, science, leadership and management and is designed to produce graduates capable of functioning effectively in all construction management settings. Program outcomes comply with codes, laws and regulations while respecting sustainable environmental practices.

The program is accredited by the Canadian Institute of Quantity Surveyors (CIQS) and is Gold Seal Accredited by the Canadian Construction Association. It will also assist students wishing to take the Leadership in Energy and Environmental Design (LEED) Green Associate exam.

Program Structure

The Construction Management degree program combines 26 months of academic study with 18 months of co-op placement. Each year of the program has a specific focus. Year 1 will focus on technical foundations, Year 2 on technical expertise, Year 3 on Gold Seal and management details, and Year 4 on leadership and management.

Employment Potential

Graduates will be able to address the needs of the evolving construction industry and, with additional experience, be able to assume positions as middle and senior managers. They may be able to continue their studies in the field of Construction Management and specialized areas of the construction sector such as green buildings, energy conservation and clean technology.

Wage Incentive and Tax Credits for Manitoba Co-op Employers

Paid Work Experience Tax Credit

Manitoba employers can receive a Paid Work Experience Tax Credit when hiring our Co-op students and graduates. The benefits are as follows:

Co-op Students: 15% of wages/salaries, up to a lifetime of \$5,000/student

New Graduates: 15% of wages/salaries, up to a maximum of \$2,500/student for each of the first two years of employment

For more information please contact us at **204.632.2585** or **CivilCo-op@rrc.ca**, or contact the Manitoba Tax Office at **204.948.2115** or toll free at **1.800.782.0771**

Canada Summer Jobs

This program is an initiative of the Summer Work Experience program. It provides funding for not-for-profit organizations, public sector employers, and small businesses with 50 or fewer employees to create summer job opportunities for students between the ages of 15 and 30. For more information contact **1.800.935.5555** or **servicecanada.gc.ca**, or visit any Service Canada Centre.



Construction Management Program Content

Revised November 2017

First Year	CREDIT HRS		EXIT CIVIL TECHNICIAN CERTIFICATE (contact Continuing Education for further details)	
TERM 1 (15 weeks) Computer and Communication Fundamentals Algebra & Trigonometry Statics Construction Industry Overview Construction Graphics Surveying 1 WHMIS Workshop General Safety Training	2 4 3 2 4 3	TERM 2 (15 weeks) Construction Safety Technical Communication Probability & Statistics Strength of Materials Materials & Methods 1 Surveying 2	2 3 4 3 3 3	EXIT CONSTRUCTION TECHNICIAN CERTIFICATE
TERM 3 FIRST CO-OP ED WORK TERM: Students are available for employment for up to 6 months, from May to October (16 weeks minimum).				
Second Year	CREDIT HRS		EXIT CONSTRUCTION TECHNICIAN CERTIFICATE	
TERM 4 (12 weeks) Materials & Methods 2 Structural Analysis 1 Environmental Management Infrastructure Design 1 Report Writing Project Management 1	3 3 3 3 3 3	TERM 5 (12 weeks) Building Systems & Codes Structural Design 1 Materials Science & Testing Infrastructure Design 2 Values and Ethics in Technology Structural Analysis 2	3 3 3 3 3 3	EXIT CONSTRUCTION TECHNOLOGY DIPLOMA Gold Seal accredited program (25 credits)
TERM 6 SECOND CO-OP ED WORK TERM: Students are available for employment for up to 6 months, from May to October (16 weeks minimum).				
Third Year	CREDIT HRS		EXIT CONSTRUCTION TECHNOLOGY DIPLOMA	
TERM 7 (12 weeks) Structural Design 2 Construction Law & Documents Quantity Surveying Human Behavior - Construction Organization Construction Planning & Scheduling Elective	3 3 3 3 3 3	TERM 8 (12 weeks) Project Management 2 Principles of Management & Leadership Project Costing Control & Accounting Estimating - Heavy or Building Construction Energy Efficient Systems in Construction Elective	3 3 3 3 3 3	EXIT BACHELOR OF TECHNOLOGY IN CONSTRUCTION MANAGEMENT Gold Seal accredited program (30 credits)
TERM 9 THIRD CO-OP ED WORK TERM: Students are available for employment for up to 6 months, from May to October (16 weeks minimum).				
Fourth Year	CREDIT HRS		EXIT BACHELOR OF TECHNOLOGY IN CONSTRUCTION MANAGEMENT	
TERM 10 (12 weeks) Managerial Communication Inspection - Heavy or Building Construction Quality Control Engineering Economics Elective Applied Research Methods (Capstone 1)	3 3 3 3 3 3	TERM 11 (12 weeks) Construction & Environment Issues Human Resource Management Risk Management Water & Wastewater Elective Applied Research Project (Capstone 2)	3 3 3 3 3 3	EXIT BACHELOR OF TECHNOLOGY IN CONSTRUCTION MANAGEMENT Gold Seal accredited program (30 credits)
ELECTIVES*				
Construction Labour Relations Diversity & Workplace Culture Manitoba Energy Codes For Buildings	3 3 3	Design-Build Projects Sustainable Infrastructure Building Green with LEED	3 3 3	Building Information Modeling (BIM) Construction Job Site Management International Construction Projects

* Recognized Canadian Construction Association Gold Seal course credits may be transferable from RRC Continuing and Distance Education as electives.

* List of electives subject to change.