

FUNDAMENTALS OF HEAVY CONSTRUCTION RATIONALE

PROGRAM DESCRIPTION

This SIC meets both the needs of the students and the community, as it provides awareness of the Heavy Construction industry in Manitoba. It differs more than 50% from the standard provincial curriculum, as the course is taught by industry professionals with expertise in heavy construction in Manitoba.

The justification for this course is as follows:

The course is designed to guide the students' exploration and understanding of heavy construction in the following topics:

- Introduction to the industry
- Careers
- Work readiness
- Holistic nutrition and fitness
- Safety (12 separate courses)
- Working in the industry
- Industry site visits

Developed by **Manitoba Heavy Construction Association** in cooperation with **Manitoba Construction Sector Council** and **Southeast Collegiate**.

PARTNERS



STUDENT LEARNING OUTCOMES

General Learning outcomes:

- Increased awareness of the heavy construction industry in Manitoba
- Gain knowledge of work readiness expectations and skills
- Increased understanding of holistic nutrition and fitness practices
- Be aware of safe work practices in heavy construction
- Identify hazards in the workplace and how to deal with them
- Demonstrate proper use of Personal Protective Equipment (PPE)
- Demonstrate knowledge of emergency preparedness
- Gain knowledge of winter road construction and road safety
- Complete Flag person practical applications
- Increased understanding of equipment theory
- Complete simulator training tasks

Specific learning outcomes

This course consists of 18 modules. Specific learning outcomes are included in each module. See **Appendix A**

Content Outline and Time Allotments

- The time allotment for the course is 110 hours, or 1 credit
- This course consists of 18 modules. Each module is specific to one topic, and includes clear outcomes, activities and expectations
- Modules vary in length from 3 hours to 22 hours
- Classes are scheduled once a week for 3 hours each (Tuesday afternoons)

Classroom activities will consist of:

- Lectures
- Individual and group assignments
- Videos
- Discussions
- Internet research
- Practical applications
- Site visits
- Simulators

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PROGRAM OVERVIEW

The 18 modules and time allotments are as follows:

Introduction	
Introduction to Industry/MHCA	• 3 hours
Careers in Industry	• 3 hours
Work Readiness	• 3 hours
Workplace Wellness	• 3 hours
	• 12 hours
Safety	
MSI Prevention	• 3 hours
Worker Orientation	• 3 hours
Job Hazard Assessment and Control	• 3 hours
Safety Talks	• 6 hours
Personal Protective Equipment (PPE)	• 3 hours
WHMIS	• 3 hours
Excavation/Trenching	• 6 hours
Confined Space Awareness	• 3 hours
Emergency Preparedness	• 3 hours
Winter Roads	• 3 hours
Flagperson /practical certificate	• 6 hours
Road Builder Safety Training System (RSTS)	• 3 hours
	• 45 hours
Working in the industry	
Introduction to Equipment Theory	• 22 hours
Simulators	• 22 hours
	• 44 hours
Site visits	
	• 9 hours
Total	• 110 hours

