

# Bachelor of Construction Management

# **PLAR Candidate Guide**

Prior Learning Assessment and Recognition (PLAR)

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#### Prior learning credit options at Saskatchewan Polytechnic

See Get Credit for What you Know for important information about all options to get credit for prior learning at Sask Polytech, including PLAR, transfer credit, Canadian Armed Forces credit, and equivalency credit.

#### How to navigate this document

This document contains links to other document sections or webpages. To return to where you were from another section in this document, press the *ALT* key and *left arrow* key at the same time. To return to this webpage from another webpage, close the other webpage or click back on the browser tab for this document.

# Contents of this guide

This guide contains the following specific PLAR information and tools for this program

- A. PLAR fees
- B. PLAR eligibility and options
- C. Dates when PLAR assessment is available
- D. Special directions for this program
- E. PLAR contact person
- F. Self-rating course outlines

#### A. PLAR fees

Fees for PLAR challenges are set to cover our costs for consultation, assessment, and related administrative tasks. PLAR fees are non-refundable and non-transferrable.

The PLAR fees policy is subject to change for each new academic year. Please see the **Cost** section on the PLAR webpage for current fee information.

#### B. PLAR eligibility and options

To be eligible for PLAR for courses in this program, you must first apply for admission and be accepted into the program. You must also consult with the <u>PLAR contact person</u> and be approved for PLAR assessment.

#### **Course prerequisites and corequisites**

Some courses have one or more other courses that must be completed first (prerequisite) or at the same time (corequisite). See course outlines in this guide to identify any pre- or co-requisites for each course. Discuss with your PLAR contact person how to deal with courses with corequisites.

#### **Block assessment**

Some programs may assess a cluster of courses together in one block, which may save you time and effort. Ask the PLAR contact person whether there are any block assessment options in this program.

#### C. Dates when PLAR assessment is available

PLAR assessment for this program is available from Sept 1 to June 15 in each academic year.

#### All PLAR assessments must be completed by June 15 of each academic year.

#### D. Special directions for this program

- 1. **Review** the PLAR process and FAQs and the information in this guide.
- 2. Self-rate your learning for each course using the Course Outlines in this guide.
- 3. **Consult** with the PLAR contact person for PLAR approval. Be prepared to provide your resume, course selfratings (see section F), and a partially completed PLAR application. If you are approved for PLAR, the contact person will sign your PLAR application and explain next steps.
- 4. Apply for admission to the program. See <u>directions</u> for applying.
- 5. **Register** for PLAR at <u>Registration/Enrolment Services</u> once you have signed approval on your PLAR Application Form. The PLAR fee will be added to your student account.
- 6. Finalize an assessment plan with your assigned assessor.
- 7. **Complete** assessment before your PLAR registration expires.

#### E. PLAR contact person

Contact one of the Program Heads below to arrange a consultation **after** you have read this guide and general PLAR information **and** rated yourself for each course (see next section). Consultation may be by phone, online, or in person. Be prepared to provide your resume, course self-ratings, and a partially completed PLAR application. If agreement is reached to go ahead with PLAR, the contact person will sign approval on your PLAR application and explain the next steps. Admission to the program is required before you can register for PLAR.

Ahmed Hosni, PhD, PEng, Program Head Joseph A. Remai School of Construction Saskatchewan Polytechnic, Regina Campus Phone: 306- 775 - 7753 Email: <u>hosnia@saskpolytech.ca</u>

# F. Self-rating course outlines

Clicking on a course code below opens a page where you can rate yourself on the knowledge and skills assessed for PLAR credit. For Arts & Sciences courses, clicking on the course code opens another PLAR guide. The PLAR contact person for this program will refer you to another person to discuss PLAR for courses delivered by Arts & Sciences or another program/department.

COURSE CODE	COURSE NAME	Delivered by another department/program					
	Year 3 – Semester 5						
ADMN 303	ADMN 303 Organizational Behaviour						
LAW 300	Construction Law						
ENGL 100	critical Reading and Writing	Arts & Sciences					
	Electives (Select 1 of 2)						
<u>ANLT 300</u>	Applied Critical Thinking and Logic						
<u>STAT 300</u>	Statistics and Risk Analysis	Arts & Sciences					
	Electives (Select 1 of 2)						
<u>COMM 301</u>	COMM 301         Managerial Communications         Arts & Sciences						
BCOM 300	Professional Writing and Presentations						
Year 3 – Semester 6							

COURSE CODE	COURSE NAME	Delivered by another department/program
ADMN 302	Construction Accounting and Finance	
BLDG 300	Building Fundamentals in construction Management	
ETHC 300	Leadership Fundamentals	
LEAD 302	Leadership Fundamentals	
<u>SOCI 300</u>	Culture and Diversity in Canadian Society	Arts & Sciences
	Must take 1 of 2 (1 of 2)	
LEAD 302	Leadership Fundamentals	
<u>CDNS 300</u>	Canadian Government	
<u>WORK 302</u>	Work-Integrated Learning	
	Year 4 – Semester 7	
ECON 400	Micro and Macro Economics	
<u>ESTM 400</u>	Construction Cost Estimating and Procurement	
<u>HR 300</u>	Human Resources Management	
<u>MGMT 400</u>	Construction Contacts and Documents	
<u>PLAN 400</u>	Construction Planning and Scheduling	
	Year 4 – Semester 8	
<u>BUS 400</u>	Construction Business Strategies: Trends and Issues	
<u>MGMT 403</u>	Construction Project Management	
<u>PROJ 400</u>	Capstone Project	
<u>SFTY 405</u>	Construction Safety and Site Management	

#### ADMN 303 – Organizational Behaviour

You will study human behaviour in organizations and develop the skills needed to lead people in the workplace. This course emphasizes the application of basic organizational behavior concepts and processes. The course content includes individual behaviour, values, interpersonal relationships, performance management, leadership, power, team dynamics, organizational culture, and change. Your studies of human organizational behaviour will focus on improving organizational commitment, job performance and leading through change.

Credit unit(s):	3.0
Prerequisites:	none
Corequisites:	none
Equivalent course(s):	none

Use a checkma	Use a checkmark ( $\checkmark$ ) to rate yourself as follows for each learning outcome			
Competent: Learning: None:	I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	None
1. Discuss or	1. Discuss organizational behavior.			
2. Use perfor	mance management.			
3. Examine the effectiveness of ways to create organizational commitment.				
4. Apply cultural values.				
5. Classify motivational strategies to be used in a variety of contexts.				
6. Analyze the improvement of the functioning of teams.				
7. Interpret t	7. Interpret the leadership implications of leading with power.			
8. Employ ap	8. Employ appropriate leadership styles to be used in organizations.			
9. Use appro	priate measures to support successful organizational change.			

# ANLT 300 - Applied Critical Thinking and Logic

You will learn basic concepts and methods of critical thinking and logic. You will apply these concepts and methods to analyze and evaluate arguments regarding projects or problems from mathematics, science, and construction science management.

Credit unit(s):	3.0
Prerequisites:	none
Corequisites:	none
Equivalent course(s):	none

Use	e a checkmark ( $\checkmark$ ) to	o rate yourself as follows for each learning outcome	Ţ	Learning	
	rning: I am s	apply this outcome without direction or supervision. still learning skills and knowledge to apply this outcome. e no knowledge or experience related to this outcome.	Competent		None
1.	Examine the princi	ples of critical thinking and essential characteristics of an argument.			
2.	Analyze the structure of an argument.				
3.	. Evaluate an argument using concepts of categorical and propositional logic.				
4.	Examine principles of critical thinking and logic applied to projects or problems in construction science management.				
5.	Apply elements of critical thinking and logic to projects or problems in construction science management.				
6.	Evaluate projects o critical thinking and	or problems in construction science management using elements of d logic.			

### **COMM 301 - Managerial Communications**

You will analyze organizational communication structures and practices. You will practice your writing skills by composing various types of correspondence, including email, social media, and reports. Your public speaking skills will be strengthened by conducting interviews, facilitating group discussions, and delivering a formal presentation.

Credit unit(s):	3.0
Prerequisites:	none
Corequisites:	none
Equivalent course(s):	none

Use	a checkma	rk ( $\checkmark$ ) to rate yourself as follows for each learning outcome	y The second sec		
Competent: Learning: None:		I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	None
1.	Analyze th	e role and process of organizational communications.			
2.	2. Distinguish the characteristics of effective organizational communications.				
3. Examine the influence of workplace diversity on organizational communications.					
4.	4. Compose internal and external business correspondence.				
5. Organize and facilitate group discussions and meetings.					
6.	6. Plan and conduct interviews.				
7.	Create and	deliver a formal proposal.			

#### **BCOM 300 - Professional Writing and Presentations**

You will study research techniques and develop writing and presentation skills for business applications. You will practice collaborative writing and research skills using the tools of electronic communication.

Credit unit(s):	3.0
Prerequisites:	none
Corequisites:	none
Equivalent course(s):	none

Us	e a checkma	rk ( $\checkmark$ ) to rate yourself as follows for each learning outcome	ţ		
Lea	mpetent: arning: one:	I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	None
1.	Compile a list of print and visual sources for critical analysis of a business.				
2.	Summarize	and evaluate texts gathered in secondary research.			
3.	3. Write a proposal.				
4.	Write business correspondence to generate sources for primary research.				
5.	Design a questionnaire for research purposes.				
6.	Conduct interviews for primary research.				
7.	Use the tools of electronic communication to produce collaborative documents.				
8.	Write a for	Write a formal analytical report.			
9.	Use the too Presentatio	ols of electronic communication to deliver an effective oral or multi-media on.			

# LAW 300 - Construction Law

You will analyze the legal basis of construction management including Tort (liability) and Contracts.

Credit unit(s):	3.0
Prerequisites:	none
Corequisites:	none
Equivalent course(s):	none

Use	e a checkma	rk ( $\checkmark$ ) to rate yourself as follows for each learning outcome	۲.		
	npetent: rning: ne:	I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	None
1.		te between laws, codes, standards, and regulation in the context of the egal system.			
2.	Analyze the	e essentials of a legal contract and issues arising from contracts.			
3.	Examine th	e bidding process and different construction contract forms.			
4.	Examine br	reach of contract and its consequences.			
5.	Apply the c	lifferent components of Tort.			
6.		te between the different professional liability categories for different parties ng in a construction contract.			
7.	Differentia	te between different means to resolve disputes in the construction industry.			
8.	Contrast di industry.	fferent components and functions of insurance and bonds in the construction			
9.	Investigate contracts.	the importance of builder's lien statues in facilitation of construction			
10.	Investigate	delay consequences in the execution of construction contracts.			
11.	Examine ho enforceme	ow labour and employment legislation affects construction contract nt.			
12.	Analyze ho industry.	w workplace safety legislation regulates workplace relation in the construction			

### ENGL 100 - Critical Reading and Writing

You will develop basic skills in critical analysis, effective reading, and composition by analyzing and evaluating materials from various disciplines. You will also refine your understanding and practice of the structures of composition by writing a report on a topic of your choice using APA-style format.

Credit unit(s):	3.0
Prerequisites:	none
Corequisites:	none
Equivalent course(s):	none

Use	e a checkma	rk ( $\checkmark$ ) to rate yourself as follows for each learning outcome	ц.		
Lea	mpetent: arning: ne:	I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	None
1.	Practice cri	itical writing skills.			
2.	Practice cri	itical reading skills.			
3.	Create a re	port on a chosen topic by applying critical reading, writing, and research skills.			

# ADMN 302 - Construction Accounting and Finance

You will apply typical business knowledge and skills to the financial management of a construction project.

Credit unit(s):	3.0
Prerequisites:	none
Corequisites:	none
Equivalent course(s):	none

Use	a checkmark ( $\checkmark$ ) to rate yourself as follows for each learning outcome	it		
	<b>npetent:</b> I can apply this outcome without direction or supervision. <b>rning:</b> I am still learning skills and knowledge to apply this outcome. <b>ne:</b> I have no knowledge or experience related to this outcome.	Competent	Learning	None
1.	Explain the role of accounting in cost control during a construction project.			
2.	Demonstrate double-entry bookkeeping to account for routine construction transactions.			
3.	Interpret documents used for construction accounting, including inventory control.			
4.	Calculate overhead costs for bidding.			
5.	Set profit margins for bidding.			
6.	Examine systems for supply chain management.			
7.	Project cash flows for a construction project.			
8.	Manage cash flows for a construction project.			
9.	Manage progress reporting for a construction project.			
10.	Calculate the time value of money used in life-cycle costing.			
11.	Explain how construction projects may be financed.			
12.	Apply cost projections/forecasts (e.g., risk management and cost-benefit ratio) to make financial decisions.			

#### **BLDG 300 - Building Fundamentals in Construction Management**

Your studies will focus on the integration of the building engineering systems within a building design. You will be introduced to structural, lighting, mechanical, electrical, and plumbing components, and their integration from the perspective of coordinating construction activities.

Credit unit(s):	2.0
Prerequisites:	none
Corequisites:	none
Equivalent course(s):	none

Use a cł	neckmark ( $\checkmark$ ) to rate yourself as follows for each learning outcome	Ŀ		
Compet Learnin None:		Competent	Learning	None
1. Exa	mine the basic properties of structural wood, steel, and concrete.			
2. Ana	alyze load pathways within structural frame buildings.			
3. Exp	lain lighting systems integration within a building design.			
4. Exp	lain mechanical systems integration within a building design.			
5. Explain electrical systems integration within a building design.				
6. Exp	lain plumbing systems integration within a building design.			
7. Ske	tch schematic MEP layouts from the perspective of construction coordination.			

#### ETHC 300 - Professional Ethics and Sustainable Development

You will learn the appropriate approach to sensitive ethical and environmental issues pertaining to construction. You will examine sustainable development practices that minimize the impact of construction projects on the environment and maximize energy efficiency.

Credit unit(s):	3.0
Prerequisites:	none
Corequisites:	none
Equivalent course(s):	none

Us	e a checkmar	·k (✓) to rate yourself as follows for each learning outcome	Ţ		
Lea	mpetent: arning: ne:	I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	None
1.	Describe th	e importance of professional ethics in construction management.			
2.	Explain the	terms of a professional code of ethics.			
3.	Explain the	importance of protecting the environment during construction.			
4.	Identify cul	turally sensitive environments.			
5.	Prepare a p	lan to accommodate construction on culturally sensitive sites.			
6.	Identify bio	logically sensitive environments.			
7.	Examine su	stainable building materials and energy efficiency options in construction.			
8.	Summarize constructio	lean and green building techniques used for sustainable development in the nindustry.			
9.		reliminary study, an environmental impact report and a management plan for construction site.			

#### LEAD 302 - Leadership Fundamentals

You will develop the knowledge, skills, and competencies to work with and manage people in the workplace, community, and volunteer experiences. You will learn strategies for building and maintaining trust, developing successful interpersonal interactions, and addressing difficult situations. You will develop useful techniques for creating learning conversations used in coaching situations.

Credit unit(s):	3.0
Prerequisites:	none
Corequisites:	none
Equivalent course(s):	none

Us	e a checkmai	$r$ k ( $\checkmark$ ) to rate yourself as follows for each learning outcome			
Lea	mpetent: arning: ne:	I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	None
1.	-	ing as a strategy to develop self-awareness related to values, interpersonal our impact on others.			
2.	Discuss the	concept and process of becoming an authentic leader.			
3.	Discuss stra	ategies to inspire trust and build collaboration.			
4.	Demonstra broken trus	te strategies to build trust in a culturally diverse workplace and to restore st.			
5.	Utilize com	munication strategies and skills to build relationships.			
6.	Identify the	types of situations which create conflict for you.			
7.	Employ app	propriate strategies to manage conflict.			
8.	Discuss coa	ching and its contribution to the workplace.			
9.		te skills to conduct a coaching conversation, offer praise and recognition, and nstructive feedback.			

### STAT 300 - Statistics and Risk Analysis

Your studies will focus on descriptive statistics and presentation techniques; probability theory and inferential statistics including applications based on simple random sampling, confidence intervals, hypotheses testing and regression-correlation analysis. You will also examine statistical methods related to risk management in the construction industry.

Credit unit(s):	3.0
Prerequisites:	none
Corequisites:	none
Equivalent course(s):	none

Use a checkma	rk ( $\checkmark$ ) to rate yourself as follows for each learning outcome	ıt		
Competent:	I can apply this outcome without direction or supervision.	Competent	ing	
Learning:	I am still learning skills and knowledge to apply this outcome.	E E	Learning	None
None:	I have no knowledge or experience related to this outcome.	S	Le	ŝ
10. Apply fund	amental elements for describing and displaying data.			
11. Analyze av	erages for central and dispersion tendencies.			
12. Apply basic	c probability laws.			
13. Calculate c	liscrete probability of binomial data.			
14. Calculate c	ontinuous probability of normal data.			
15. Apply the	Central Limit Theorem.			
16. Construct	probability sampling distributions.			
17. Construct	estimation intervals for mean and proportion.			
18. Construct	hypothesis of testing for single mean and proportion.			
19. Construct	hypothesis of testing for difference of means and proportions.			
20. Analyze pa	ired data using linear regression and correlation analysis.			
21. Explore ele	ments of risk management in the construction industry.			
22. Examine st	atistical methods used for risk assessments in the construction industry.			

# SOCI 300 - Culture and Diversity in Canadian Society

You will explore culture and diversity in Canada. You will assess the impacts of oppression, multiculturalism, immigration, social inequalities, sex and gender, race, religion, and ability. You will explain the social, cultural, and historical contexts of Indigenous peoples. You will also evaluate tools to foster social change and diversity competencies.

Credit unit(s):	3.0
Prerequisites:	none
Corequisites:	none
Equivalent course(s):	none

e a checkma	rk ( $\checkmark$ ) to rate yourself as follows for each learning outcome	ţ	Learning	
mpetent: arning: ne:	I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competen		None
Explore the society.	e concepts of diversity, oppression, and privilege in the context of Canadian			
Analyze so	cial inequalities in Canada.			
Assess the	roles of religion, sex, and gender in Canadian society.			
Explain the	e historical and contemporary experiences of Indigenous populations.			
Analyze im	migration and multiculturalism in Canada.			
Evaluate w	rays of practicing diversity competency on personal and professional levels.			
	mpetent: iming: ne: Explore the society. Analyze so Assess the Explain the Analyze im	I am still learning skills and knowledge to apply this outcome.I have no knowledge or experience related to this outcome.Explore the concepts of diversity, oppression, and privilege in the context of Canadian	mpetent:I can apply this outcome without direction or supervision.Iming:I am still learning skills and knowledge to apply this outcome.ne:I have no knowledge or experience related to this outcome.Explore the concepts of diversity, oppression, and privilege in the context of Canadian society.Analyze social inequalities in Canada.Assess the roles of religion, sex, and gender in Canadian society.Explain the historical and contemporary experiences of Indigenous populations.Analyze immigration and multiculturalism in Canada.	mpetent:I can apply this outcome without direction or supervision.tigirning:I am still learning skills and knowledge to apply this outcome.Ine:I have no knowledge or experience related to this outcome.IExplore the concepts of diversity, oppression, and privilege in the context of Canadian society.IAnalyze social inequalities in Canada.IAssess the roles of religion, sex, and gender in Canadian society.IExplain the historical and contemporary experiences of Indigenous populations.IAnalyze immigration and multiculturalism in Canada.I

#### LEAD 302 - Leadership Fundamentals

You will develop the knowledge, skills and competencies to work with and manage people in the workplace, community, and volunteer experiences. You will learn strategies for building and maintaining trust, developing successful interpersonal interactions, and addressing difficult situations. You will develop useful techniques for creating learning conversations used in coaching situations.

Credit unit(s):	3.0
Prerequisites:	none
Corequisites:	none
Equivalent course(s):	LEAD 300

Use	e a checkmai	k (✓) to rate yourself as follows for each learning outcome	t		
Competent: Learning: None:		I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	None
1.	-	ing as a strategy to develop self-awareness related to values, interpersonal our impact on others.			
2.	Discuss the	concept and process of becoming an authentic leader.			
3.	Discuss stra	tegies to inspire trust and build collaboration.			
4.	Demonstra broken trus	te strategies to build trust in a culturally diverse workplace and to restore st.			
5.	Utilize com	munication strategies and skills to build relationships.			
6.	Identify the	types of situations which create conflict for you.			
7.	Employ app	propriate strategies to manage conflict.			
8.	Discuss coa	ching and its contribution to the workplace.			
9.		te skills to conduct a coaching conversation, offer praise and recognition, and nstructive feedback.			

#### **CDNS 300 - Canadian Government**

You will examine the structure and function of the various arms of Canada's federal government. You will compare Canada's government to those of the United States and Great Britain and examine governmental change in Canada from colony to independent nation. Through classroom lecture, small group discussion, assigned reading and independent study and research, you will examine the Canadian Constitution and the Charter of Rights and Freedoms, and analyze the issues, processes, and dynamics of the relationship between Canadian citizens and their government.

Credit unit(s):	3.0
Prerequisites:	none
Corequisites:	none
Equivalent course(s):	none

Use a checkn	nark ( $\checkmark$ ) to rate yourself as follows for each learning outcome	t		
Competent: Learning: None:	I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	None
1. Examine	the identifying characteristics of Canada's system of parliamentary government.			
-	the effect of regionalism, social class, gender, ethnic and indigenous issues on party support in Canada.			
	the developments which have led to the current relationship between Quebec Canadian government.			
-	political socialization, and the role of pressure groups and lobbyists, the media iion polls.			
5. Examine	our political parties, the electoral process and the electoral system.			
6. Analyze	the Canadian Constitution and the Charter of Rights and Freedoms.			
7. Examine	the structure and functioning of the Executive, Parliament and Judiciary.			
8. Explain t	he relationship between the bureaucracy and 'the government'.			

# WORK 302 - Work-Integrated Learning

Your work-integrated learning experience will provide you with the opportunity to consolidate theoretical and practical concepts from the Construction Management program. You will gain valuable experience about the Canadian construction industry.

Credit unit(s):	0.0
Prerequisites:	none
Corequisites:	none
Equivalent course(s):	none

Use	e a checkmar	k (✓) to rate yourself as follows for each learning outcome	ţ		
Competent: Learning: None:		I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	None
1.	Develop eff	ective job search skills.			
2.	Communica	ate effectively in the workplace.			
3.	3. Work as a member of the team.				
4.	4. Demonstrate effective work habits.				
5.	5. Demonstrate safe work practices.				
6.	6. Develop personal management skills.				
7.	7. Identify roles and responsibilities of personnel in the workplace.				
8.	Apply learn	ed theories and concepts in a workplace setting.			
9.	Demonstra	te essential skills.			

### ECON 400 - Micro and Macro Economics

You will study the basics of microeconomics and macroeconomics. Your studies will include economic theory, problems, and solutions. You will gain an understanding in scarcity, opportunity costs, demand, and supply; as well as how various market structures determine output and price. From a macro perspective you will learn about the role of the government's spending and taxation, the Canadian banking system, foreign trade, and other key macroeconomic variables.

Credit unit(s):	3.0
Prerequisites:	none
Corequisites:	none
Equivalent course(s):	none

Use	$\mathbf{z}$ a checkmark ( $\mathbf{\checkmark}$ ) to rate yourself as follows for each learning outcome	ţ		
	npetent:I can apply this outcome without direction or supervision.rning:I am still learning skills and knowledge to apply this outcome.ne:I have no knowledge or experience related to this outcome.	Competent	Learning	None
1.	Describe the nature and methods of microeconomics and macroeconomics.			
2.	Demonstrate price equilibrium changes using the laws of supply and demand.			
3.	Explain the concept of elasticity of demand and supply.			
4.	Determine price and output levels under a perfectly competitive market and monomarket.	poly		
5.	Explain the business cycle, unemployment, and inflation, as well as long-term grow with a view to the impact each has in the Canadian economy.	/th		
6.	Illustrate the impact changes in aggregate demand and supply have on the price le and real gross domestic product.	vel		
7.	Demonstrate the operations and limitations of fiscal policy in the decision-making process of government including deficits and debts.			
8.	Identify the main functions of the Bank of Canada, the goals and tools of monetary policy, and the impact of these policies on the Canadian economy.	,		
9.	Discuss the importance of international trade to the Canadian economy and the ef international transactions have on Canadian currency.	fect		

# ESTM 400 - Construction Cost Estimating and Procurement

You will learn how to estimate costs for a construction project and prepare a bid based on that estimate.

Credit unit(s):	3.0
Prerequisites:	none
Corequisites:	none
Equivalent course(s):	none

Use	Use a checkmark ( $\checkmark$ ) to rate yourself as follows for each learning outcome				
Competent: Learning: None:		I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	None
1.	Describe v	various methods used for estimating construction costs.			
2.	Perform a	quantity take-off using working drawings.			
3.	Calculate o	costs of site work and concrete, including labour, materials, and equipment.			
4.	4. Calculate costs of a simple building, including labour, materials, and equipment.				
5.	<ol> <li>Calculate costs of mechanical and electrical equipment, including labour, materials, and equipment.</li> </ol>				
6.	Determine	general expenses, including overhead, subcontractor bids and profit.			
7.	Allocate ge	eneral expenses, including overhead, subcontractor bids and profit.			
8.	Determine	sources and processes for procurement and materials and equipment.			
9.	Describe e	xternal factors that may affect the bid price.			
10.	Prepare a	bid document.			

#### HR 300 - Human Resource Management

Your studies will focus on an overview of human resource management and practices. You will learn the impact of job analysis on planning, recruiting, and selection processes; training, developing and compensation considerations; and management performance and labour relations. Employee and organizational ethics are discussed throughout the course with an emphasis on using human resource management to achieve high organizational performance.

Credit unit(s):	3.0
Prerequisites:	none
Corequisites:	none
Equivalent course(s):	none

Use	e a checkmar	k ( $\checkmark$ ) to rate yourself as follows for each learning outcome	t		
Lea	mpetent: arning: ne:	I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	None
1.	-	w an organization links various Human Resource systems with the nt of Human Resources to achieve its objectives.			
2.	Summarize	the legal and ethical responsibilities of an organization.			
3.	Apply the c	oncept of job analysis and job design.			
4.	Relate Hum	nan Resource Planning with recruiting, selection, and onboarding processes.			
5.	Analyze the effectivene	e benefits and costs of employee training and its impact on organizational ss.			
6.		ow performance management and awarding compensation contributes to nal efficiency and effectiveness.			
7.	Analyze be	nefits and services as part of employees' compensation.			
8.	Assess the	impact of a collective agreement in human resource management.			
9.	-	contributions and effectiveness of human resource management strategies of a high performance organization.			

#### MGMT 400 - Construction Contracts and Documents

You will learn to prepare, interpret, and apply the documents used for construction management.

Credit unit(s):	3.0
Prerequisites:	LAW 300
Corequisites:	none
Equivalent course(s):	none

Use	Use a checkmark ( $\checkmark$ ) to rate yourself as follows for each learning outcome		t t		
	npetent: rning: ne:	I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	None
1.	Describe t	ne sequence of activities in a construction contract.			
2.	Prepare bi	dding and contract documents for a construction contract.			
3.	Explain the	e purpose of each of the General conditions a contract.			
4.	Interpret D	Division One of the contract documents.			
5.	Prepare a	technical specification for a contract.			
6.	Prepare do	ocuments for inspections, submittals, and changes in a contract.			
7.	Explore dis	pute settlement mechanisms common in the construction industry.			
8.	Explain the	e procedures for early termination of a contract.			
9.	Prepare do	ocuments for close-out and commissioning.			

# PLAN 400 - Construction Planning and Scheduling

You will learn how to schedule work crews, materials, equipment, and cash flow for a construction project.

Credit unit(s):	3.0
Prerequisites:	none
Corequisites:	none
Equivalent course(s):	none

Use a checkmark ( $\checkmark$ ) to rate yourself as follows for each learning outcome		t l			
	npetent: rning: ne:	I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	None
1.	Explain the	e variety of network models used to plan construction projects.			
2.	Develop a	network model for a particular construction process.			
3.	Determine	e activity precedence, sequencing, and duration.			
4.	Assign buc	geted costs and sub-contracts to the diagram.			
5.	Plan a con	struction schedule using this diagram.			
6.	Describe c	ommon mechanisms for project monitoring and change control.			
7.	Identify ris	sk and management of unforeseen circumstances.			
8.	Suggest w	ays to increase productivity and or reduce construction time.			
9.	Record pro	ocess to implement "value engineering" and quality control.			

#### **BUS 400 - Construction Business Strategies: Trends and Issues**

You will study the process of starting and operating a business as well as strategic and lean management practices. You will practice your skills by developing a business and marketing plan.

Credit unit(s):	3.0
Prerequisites:	none
Corequisites:	none
Equivalent course(s):	none

Use a	checkmark ( $\checkmark$ ) to rate yourself as follows for each learning outcome	ţ		
Comp Learn None		Competent	Learning	None
1. /	Analyze a business opportunity to determine its feasibility.			
2. I	dentify the scope of a Business Plan.			
3. I	Determine the goals and structures for a business.			
4. I	Prepare a financial and marketing plan for a business.			
5. /	Analyze human resource requirements for a business.			
6. I	Describe management procedures for business operations.			
7. 1	Develop client relations methods.			
8. (	Develop ongoing strategic and lean business practices.			
9. I	Present a Business Plan.			

#### MGMT 403 - Construction Project Management

You will learn the knowledge and skills necessary to manage a construction project. You will learn the role of the construction manager, from the bidding phase to project completion, including the preparation of documents and reports used to manage a construction project.

Credit unit(s):	3.0
Prerequisites:	ESTM 400, MGMT 400, PLAN 400
Corequisites:	none
Equivalent course(s):	none

Use	a checkmar	k (✓) to rate yourself as follows for each learning outcome	nt		
	npetent: rning: ne:	I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	None
1.		te the roles, responsibilities and relationships among contractors and key construction project.			
2.	Describe co	ontractual methods for project delivery.			
3.	Explain the	purpose of various contract documents.			
4.	Compare tl	ne advantages of various contract types and project delivery systems.			
5.	Describe th	e role of the consultant in preparing bidding documents.			
6.	Prepare an	agenda for a preconstruction conference.			
7.	Plan the ar	rangement of activities on a construction site.			
8.	Prepare do	cuments to manage shop drawings and other submittals.			
9.	Prepare sit	e inspection reports, change orders, notices, and certificates.			
10.	Supervise t	he commissioning procedure including turn-over documentation.			

### PROJ 400 - Capstone Project

You will build on the project management, construction science, and human resource skills developed in previous courses and complete a capstone project. You will select a construction project and prepare project plans, schedules, budgets and project monitoring documents. Your project will include quality control mechanisms, safety considerations and close-out procedures. The course culminates with the presentation of your capstone project.

Credit unit(s):	6.0
Prerequisites:	none
Corequisites:	none
Equivalent course(s):	none

Use a checkma	rk ( $\checkmark$ ) to rate yourself as follows for each learning outcome	Ŧ		
Competent: Learning: None:	I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	None
1. Select con	struction project appropriate to diploma major or work experience.			
2. Design pro	pject plan and schedules.			
3. Prepare p	roject budget and cost management documents.			
4. Incorpora	te quality control mechanisms.			
5. Incorpora	te safety considerations.			
6. Create pro	oject monitoring documents.			
7. Evaluate p	progress and make appropriate adjustments.			
8. Synthesize	e close-out and commissioning procedures.			
9. Document	all aspects of the capstone project.			
10. Present al	l aspects of the capstone project.			

# SFTY 405 - Construction Safety and Site Management

You will learn the rights and responsibilities of each participant and how to manage the activities on a construction site in a safe and effective manner.

Credit unit(s):	3.0
Prerequisites:	none
Corequisites:	none
Equivalent course(s):	none

Use	a checkma	rk ( $\checkmark$ ) to rate yourself as follows for each learning outcome	t.		
Competent: Learning: None:		I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	None
1.	Describe t	he construction manager's contractual obligations for site management.			
2.	Conduct a	pre-construction job-site meeting.			
3.	Establish o	on-site responsibilities and communications channels.			
4.	Lay-out a	construction site prior to construction.			
5.	Determine removal.	e requirements for utilities, security, temporary buildings, parking, and trash			
6.	Manage so	caffolding, hoists, and access for equipment.			
7.	List appro constructi	priate Occupational Health and Safety and Code requirements for on.			
8.	Describe a	ppropriate attitudes/procedures and safety culture to prevent injuries.			
9.	Identify ha	azards on a construction site.			
10.	Prepare a	safety plan for a construction site.			

#### **CDNS 300 - Canadian Government**

You will examine the structure and function of the various arms of Canada's federal government. You will compare Canada's government to those of the United States and Great Britain, and examine governmental change in Canada from colony to independent nation. Through classroom lecture, small group discussion, assigned reading and independent study and research, you will examine the Canadian Constitution and the Charter of Rights and Freedoms, and analyze the issues, processes, and dynamics of the relationship between Canadian citizens and their government.

Credit unit(s):	3.0
Prerequisites:	none
Corequisites:	none
Equivalent course(s):	none

Use a checkmark ( $\checkmark$ ) to rate yourself as follows for each learning outcome		t		
Competent: Learning: None:	I can apply this outcome without direction or supervision. I am still learning skills and knowledge to apply this outcome. I have no knowledge or experience related to this outcome.	Competent	Learning	None
1. Examine t	he identifying characteristics of Canada's system of parliamentary government.			
-	ne effect of regionalism, social class, gender, ethnic and indigenous issues on arty support in Canada.			
	he developments which have led to the current relationship between Quebec anadian government.			
4. Analyze p and opinio	olitical socialization, and the role of pressure groups and lobbyists, the media on polls.			
5. Examine o	our political parties, the electoral process, and the electoral system.			
6. Analyze th	ne Canadian Constitution and the Charter of Rights and Freedoms.			
7. Examine t	he structure and functioning of the Executive, Parliament, and Judiciary.			
8. Explain th	e relationship between the bureaucracy and 'the government'.			
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