PATHWAYS TOA **CAREER IN** CONSTRUCTION



LIST OF OCCUPATIONS

CONSTRUCTION

Asphalt Crew Member CAD Highway Drafter **Concrete Finisher** Construction Craft Worker **Demolition Worker** Driller/Blaster Form Builder Geomatic Plan Assistant GIS Assistant Grading Assistant Highway Maintenance Worker Landscaper Pavement Line Marker Pipe Layer Assistant **Quarry Worker** Truck Driver

CONSTRUCTION EQUIPMENT

Crane Operator Earth Moving Operator Heavy Duty Equipment Mechanic

ENGINEERING

Civil Engineer Civil Engineering Technologist Civil Engineering Technician Drafter Estimator

ENVIRONMENTAL

Environmental Engineer Environmental Engineering Technologist Environmental Engineering Technician

HEALTH & SAFETY

Health and Safety Representative

PROCUREMENT

Purchasing Agent Dispatcher Scalehouse/Dispatcher Technical Sales Representative

QUALITY CONTROL

Field Material Testing Technician Laboratory Material Testing Technician Quality Control Officer

SURVEYING

Surveyor

UTILITIES

Apprentice Electrician Gas Line Installer Utility Line Locator



OYAP-ONTARIO YOUTH APPRENTICESHIP PROGRAM

The Ontario Youth Apprenticeship Program (OYAP) is a School to Work program that allows students to explore and work in apprenticeship occupations starting in Grade 11 or Grade 12 through the Cooperative Education program. Students have an opportunity to become registered apprentices and work towards becoming certified journeypersons in a skilled trade while completing their secondary school diplomas.

EXPERIENTIAL LEARNING

Experiential learning refers to hands-on experience you obtain by applying knowledge in a real-world setting. A student may have the chance to experience a particular job, employment sector, or community organization to see if it is a good fit with their skills and interests.



WORK EXPERIENCE

Students earn a total of 6 out-of-school workplace Cooperative Education credits. After graduation, students go directly to work full time and to college at night or as day release to complete the theoretical component of their training. It is extremely important that course selections are guided during the Grade 9 and Grade 10 option periods.

COOPERATIVE EDUCATION

Cooperative education is a credit course during which students learn through workplace and classroom experiences. In co-op, students use what they have learned in a school subject by applying it in the workplace Co-op students develop work habits, attitudes and job skills necessary for a successful transition from secondary school to post-secondary education or the workplace.

EXPANDED CO-OP CREDITS

The expansion of co-op means that students can now apply two co-op credits towards their 18 compulsory high school graduation requirements, with no limit on earning optional co-op credits. Further, co-op allows students to explore and "test drive" career options, experience "hands-on" learning and see the relevance of their classroom learning. It can help to develop the essential skills and habits required in the workplace along with gaining valuable work experience to help build a resumé for postsecondary programs and future employment.

CONSTRUCTION



ASPHALT CREW MEMBER

Ontario Secondary

		School Diplo Recommende TDJ3M or TD OYAP	ed 🔨 Numeracy	iking		
РАТН	A ullium		Labour Union Hall	Fund		
01	College Pre-Apprenticeship Programs		Construction Craft Worker Apprenticeship of 2400 Hrs.		oyment: eral Contractor	
РАТН						
02	Labour Union Hall Construction Worker Apprenticeship of 2400 Hrs.		Employment: General Contractor			
РАТН						
03	Non-Union		Employment: General Contractor		You Could Become: Lead Hand Foreman Site Superintendent Estimator	

Essential Skills:



CAD HIGHWAY DRAFTER

Ontario Secondary School Diploma (OSSD) Recommended: TDJ3M or TDJ4M

Essential Skills: Decision Making Document Use Preferred Standard: OACETT

ратн 01

College Civil Engineering Technician ENG4C MCT4C or MCF3M Recommended SPH3C

Employment: Consultant Municipalities Ministry of Transportation

ратн 02

College Civil Engineering Technologist ENG4C MCT4C or MCF3M or MCV4U Recommended SPH3C

Employment: Consultant Municipalities Ministry of Transportation

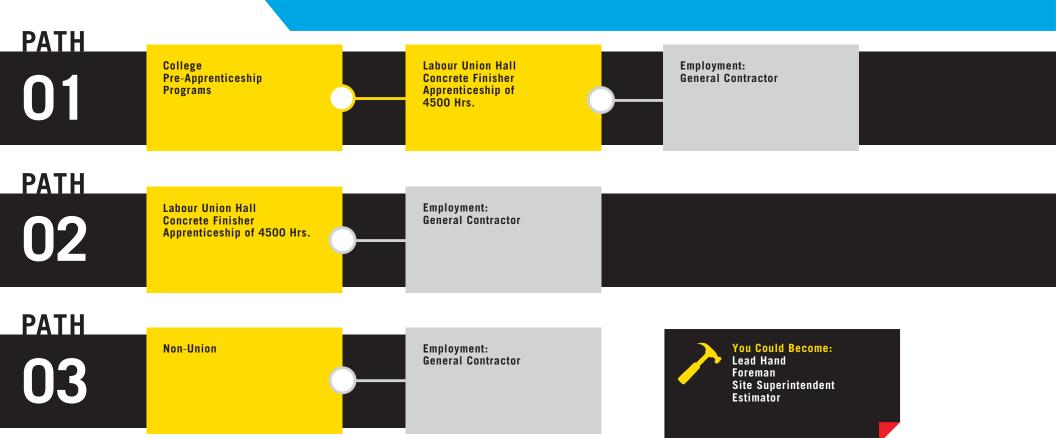




CONCRETE FINISHER

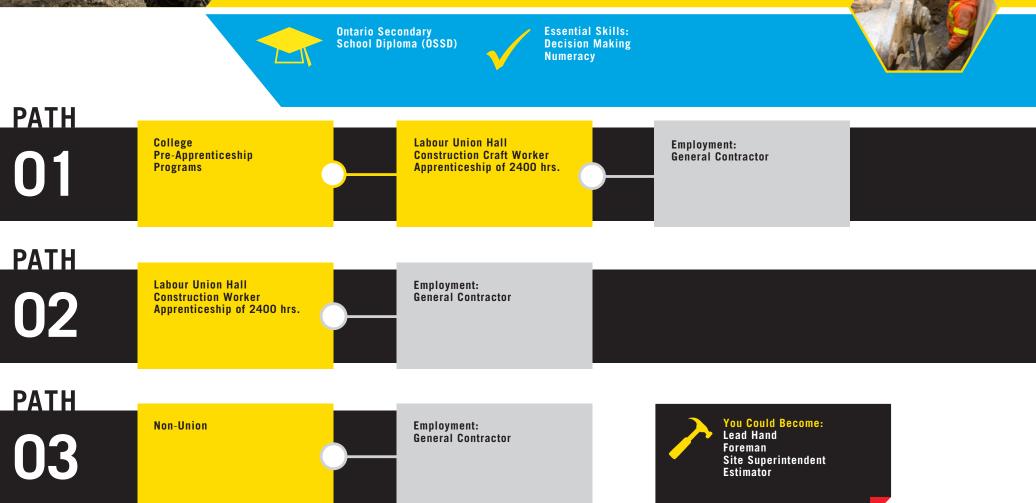
Ontario Secondary School Diploma (OSSD) Essential Skills: Decision Making Numeracy







CONSTRUCTION CRAFT WORKER





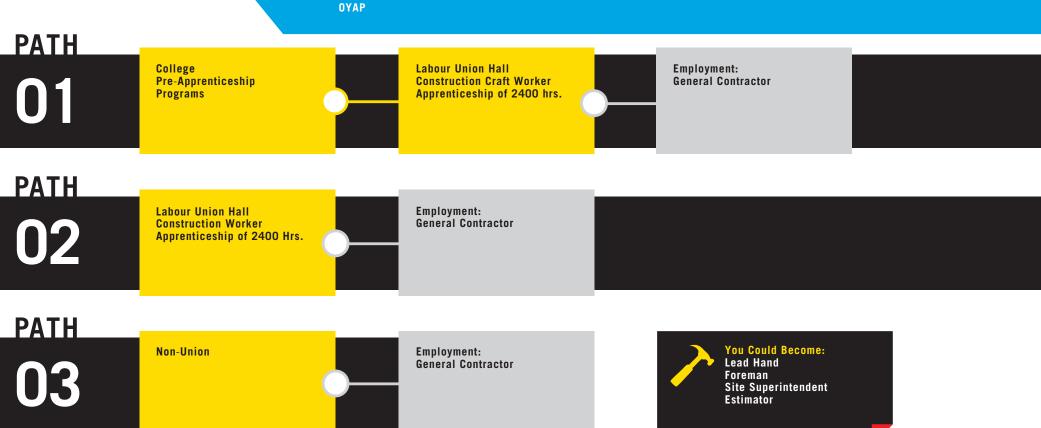
DEMOLITION WORKER

Ontario Secondary School Diploma (OSSD) Recommended

TDJ3M or TDJ4M

Essential Skills: Decision Making Numeracy







DRILLER BLASTER

Ontario Secondary School Diploma (OSSD) Recommended TDJ3M or TDJ4M Essential Skills: Decision Making Numeracy Oral Communication

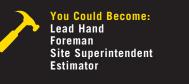
path 01

Blasting Techniques Ontario Secondary School Diploma (OSSSD)

Employment: Blasting Contractors Quarries

ратн 02

College Resource Drilling Blasting ENG4C MCT4C MOF3M Employment: Blasting Contractors Quarries



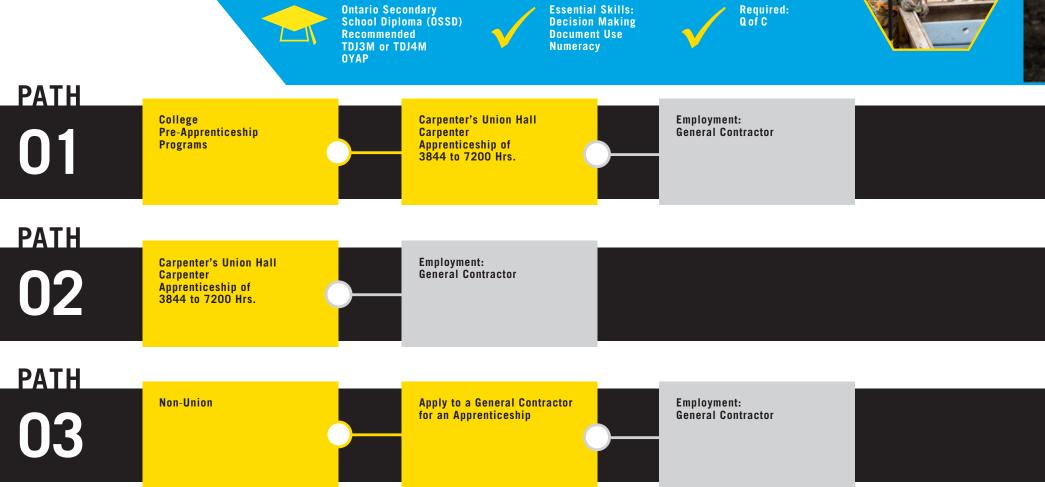






FORM BUILDER

Essential Skills: Decision Making Document Use Numeracy Required: Q of C







GEOMATIC PLAN ASSISTANT

-

Ontario Secondary School Diploma (OSSD) Recommended TDJ3M or TDJ4M **Essential Skills: Decision Making** Numeracy **Document Use** PATH College Employment: Consultants 01 **Geomatic Technician** ENG4C MTC4C MCF3M PATH College Civil Engineering Technologist ENG4C MCT4C You Could Become: Geomatic Specialist Employment: Consultants 02 Drafter Project Manager Recommended MCV4U TDJ3M or TDJ4M



GIS ASSISTANT

Ontario Secondary School Diploma (OSSD) Recommended TDJ3M or TDJ4M Essential Skills: Decision Making Numeracy Oral Communication

ратн 01

Geomatic Technician College 2 ENG 11 or 12 2 MATH 11 or 12

Employment: General Contractor Consultant City/Municipalities

ратн 02

GIS Application Specialist Work Experience College Diploma in Related Field

Employment: General Contractor Consultant City/Municipalities

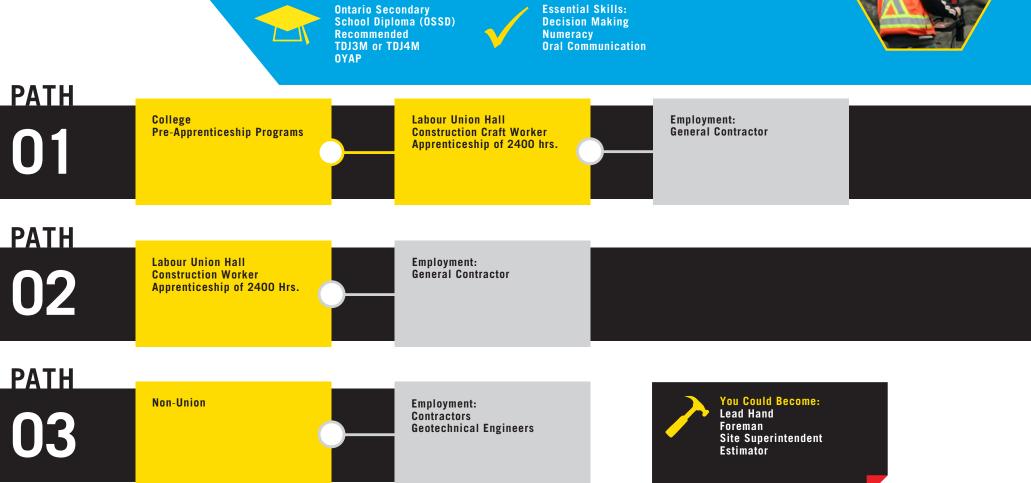




GRADING ASSISTANT

Essential Skills: Decision Making Numeracy Oral Communication







HIGHWAY MAINTENANCE WORKER

		Ontario Seco School Diplo Recommende TDJ3M or TD OYAP	ma (OSSD) Decision l ed Numeracy	Making		
ратн 01	College Pre-Apprenticeship Programs		Labour Union Hall Construction Craft Worker Apprenticeship of 2400 Hrs.		Employment: General Contractor	
ратн 02	Labour Union Hall Construction Worker Apprenticeship of 2400 Hrs.		Employment: General Contractor			
ратн 03	Non-Union		Employment: General Contractor		You Could Become: Lead Hand Foreman Site Superintendent Estimator	

SINW



LANDSCAPER

Ontario Secondary School Diploma (OSSD) Recommended SHSM Green Industries TDJ3M or TDJ4M Essential Skills: Oral Communication Critical Thinking

ратн **01**

College Horticulture Technician ENG4C MAT4C Recommended Environmental Science

Employment: Landscape Contractor Nursery Greenhouse

PATH

02

College Landscape Technician ENG4C MCT4C, MAP4C, MDM4U Employment: Landscape Contractor Nursery Greenhouse

path 03

Horticulture Technician Apprenticeship 5400 hrs. Employment: Landscape Contractor Nursery Greenhouse You Could Become: Lead Hand Foreman Site Superintendent Estimator



PAVEMENT LINE MARKER

Ontario Secondary

		School Diplo Recommend TDJ3M or TD OYAP	ed 🔨 Numeracy	Making Y		
	College Pre-Apprenticeship Programs		Labour Union Hall Construction Craft Worker Apprenticeship of		Employment: General Contractor	
01			2400 Hrs.			
ратн 02	Labour Union Hall Construction Worker Apprenticeship of 2400 Hrs.		Employment: General Contractor			
ратн 03	Non-Union		Employment: General Contractor		You Could Become: Lead Hand Foreman Site Superintendent Estimator	

Essential Skills:



College

Programs

Non-Union

Pre-Apprenticeship

PIPE LAYER ASSISTANT

OYAP

Ontario Secondary School Diploma (OSSD) Recommended

Essential Skills: Decision Making Numeracy

> Employment: **General Contractor**

PATH

PATH

01

Labour Union Hall **Construction Worker** Apprenticeship of 2400 hrs.

Employment:

Labour Union Hall

Construction Craft Worker Apprenticeship of 2400 hrs.

PATH 03

02

General Contractor

Employment: Contractors

Geotechnical Engineers

Estimator

You Could Become: Lead Hand Foreman Site Superintendent



QUARRY WORKER

Ontario Secondary School Diploma (OSSD)

Essential Skills: Decision Making

		Recommend OYAP	ed 💙 Numerad	cy		
PATH				_		
01	College Pre-Apprenticeship Programs	-	Labour Union Hall Construction Craft Worker Apprenticeship of 2400 Hrs.	Emp Gen	loyment: eral Contractor	
PATH						
02	Labour Union Hall Construction Worker Apprenticeship of 2400 Hrs.	•	Employment: General Contractor			
PATH				_		_
03	Non-Union	<u> </u>	Employment: Contractors Geotechnical Engineers		You Could Become: Lead Hand Foreman Site Superintendent Estimator	



TRUCK DRIVER

Essential Skills: Decision Making Numeracy Oral Communication

Required: Driver's Licence Abstract



CONSTRUCTION EQUIPMENT

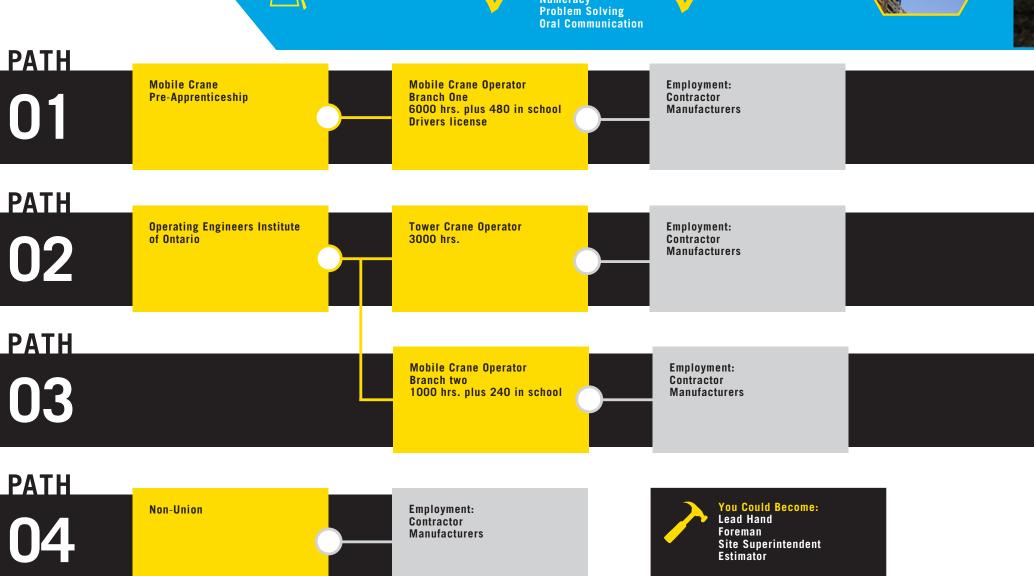


CRANE OPERATOR

Ontario Secondary School Diploma (OSSD)

Essential Skills: Decision Making Numeracy Problem Solving

Required: Red Seal Q of C





EARTH MOVING OPERATOR



		Ontario Secon School Diplon		Essential Skills: Decision Making Numeracy Problem Solving Oral Communication	Required Driver's I Abstract	: .icence	
PATH							
01	Non-Union		Apply to Contractors as a general labourer. After years of experienc you can be trained on equipment	•	Employment: Contractor		
РАТН							
02	Private Training Institute		Employment: Contractor				
РАТН							
03	College Heavy Equipment Training ENG4C MTC3C or MCF3C or MBF3C		Apply to Contractor as a general Labourer	•	Employment: Contractor		
РАТН							
04			Operating Engineers Uni ENG4C MTC3C or MCF3C or MB 2000 to 2500 hr.		You Could Lead Hand Foreman Site Superi Estimator		



HEAVY DUTY EQUIPMENT MECHANIC



		Ontario Secondary School Diploma (OSSD) Recommended TDJ3M or TDJ4M MCT4C and SPH3C OYAP	Required: Q of C	
PATH				
01	College Motive Power Technician - Heavy Duty Equipment Mechanic MTC4C ENG4C	Apply to Contractor/Manfacturer for an Apprenticeship of 7000 hrs.	Employment: General Contractor Dealership Manufacturer	
DATU				
PATH	Union Hall	Employment:		
02	Power Worker's Apprenticeship of 8000 hrs.	General Contractor Dealership Manufacturer		
PATH				
03	Non-Union Motive Power Technician - Heavy Duty Equipment Mechanic MTC4C ENG4C	Apply to Employer Apply to College	Employment: General Contractor Dealership Manufacturer	



ENGINEERING



University MHF4U MCV4U SCH4U SPH4U

ENG4U

CIVIL ENGINEER

Ontario Secondary School Diploma (OSSD) Recommended TDJ3M or TDJ4M Essential Skills: Document Use Decision Making Numeracy Oral Communication

Preferred Standard: CSCE PEO

path 01

Employment: Consultants Municipalities Contractors Manufacturers You Could Become: Designer Project Manager Technical Sales Rep



CIVIL ENGINEERING TECHNOLOGIST

Ontario Secondary School Diploma (OSSD) Recommended TDJ3M or TDJ4M

Essential Skills: Document Use Decision Making Numeracy

ратн 01

College ENG4C MCT4C or MHF4U or MCV4U Recommended SPH3C Employment: Consultants Municipalities Contractors Suppliers You Could Become: Quality Control Technician Laboratory Testing Technician Technical Sales Rep Drafter Project Manager Estimator Site Superintendent

Preferred Standard:

OACETT



CIVIL ENGINEERING TECHNICIAN

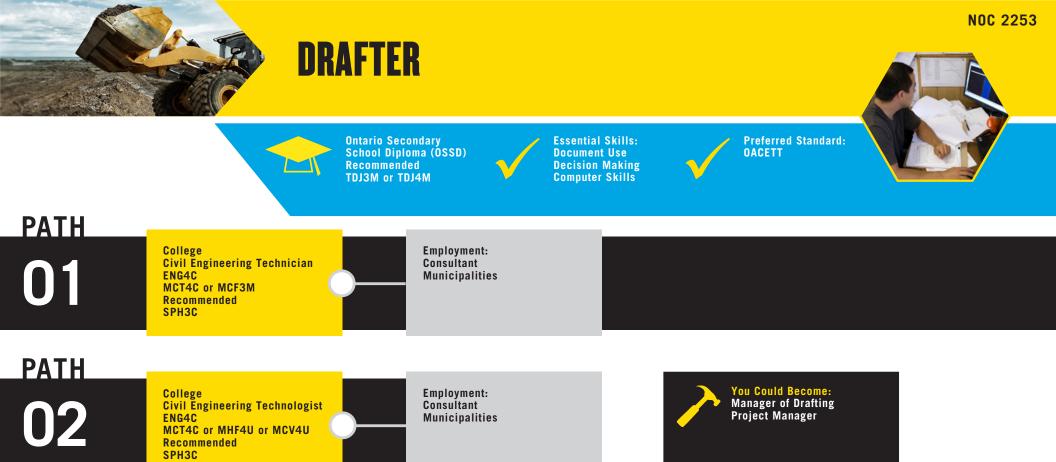


Ontario Secondary School Diploma (OSSD) Recommended TDJ3M or TDJ4M

Essential Skills: Document Use Decision Making Numeracy Oral Communic<u>ation</u> Preferred Standard: OACETT

path 01

College ENG4C MCT4C or MCF3M Recommended SPH3C Employment: Consultants Municipalities Contractors You Could Become: Quality Control Technician Laboratory Testing Technician Technical Sales Rep Drafter Project Manager Estimator Site Superintendent





ESTIMATOR

Ontario Secondary School Diploma (OSSD)

Essential Skills: Document Use

Reading Text Written Communication



		Recommended TDJ3M or TDJ4M	Decision Making Numeracy Oral Communication	
РАТН				
01	Civil Engineering Technologist College ENG4C MCT4C or MHF4U or MCV4U Recommended SPH3C	Employment: Contractors Manufacturer		
РАТН				
02	Civil Engineering Technician College ENG4C MCT4C	Employment: Contractors Manufacturer		
РАТН				
03	General labourer Apply as an Estimator after several years of experience	Employment: Contractors Manufacturer	You Could Become: Senior Estimator Manager	

ENVIRONMENTAL



University MHF4U

MCV4U SCH4U

SPH4U

ENG4U

ENVIRONMENTAL ENGINEER



Ontario Secondary School Diploma (OSSD) Recommended TDJ3M or TDJ4M Essential Skills: Document Use Decision Making Numeracy Oral Communication Preferred Standard: PEO

DATH 01

Employment: Consultants Municipalities Contractors Manufacturers You Could Become: Designer Project Manager Technical Sales Rep



ENVIRONMENTAL ENGINEERING TECHNOLOGIST

Ontario Secondary School Diploma (OSSD) Recommended TDJ3M or TDJ4M Essential Skills: Document Use Decision Making Numeracy Oral Communication Preferred Standard: OACETT

ратн 01

College ENG4C MCT4C or MCF3M Recommended SPH3C Employment: Consultants Municipalities Contractors Suppliers You Could Become: Quality Control Technician Laboratory Testing Technician Technical Sales Rep Drafter Project Manager Estimator Site Superintendent



ENVIRONMENTAL ENGINEERING TECHNICIAN



Ontario Secondary School Diploma (OSSD) Recommended TDJ3M or TDJ4M Essential Skills: Document Use Decision Making Numeracy Oral Communication Preferred Standard: OACETT

path 01

College ENG4C MCT4C or MCF3M Recommended SPH3C Employment: Consultants Municipalities Contractors Suppliers You Could Become: Quality Control Technician Laboratory Testing Technician Technical Sales Rep Drafter Project Manager Estimator Site Superintendent

HEALTH & SAFETY



HEALTH & SAFETY REPRESENTATIVE

Ontario Secondary School Diploma (OSSD) Essential Skills: Critical Thinking Document Use Oral Communication

path 01

University Occupational Health and Safety Completion of 6 C or U level courses ENG4U Employment: Contractors Municipalities Suppliers

ратн 02

College Ontario Secondary School Diploma (OSSD) ENG4C Recommended MTC3C Employment: Contractors Municipalities Suppliers



PROCUREMENT



PURCHASING AGENT

Ontario Secondary School Diploma (OSSD) Essential Skills: Decision Making Numeracy Oral Communication Written Skills

path 01

University Bachelor Degree in Business Administration ENG4U MDM4U MCF3M

Employment: Contractors Municipalities Manufacturers

ратн 02

College Business Administration ENG4C MTC4C, MDM4U, MCB4U Employment: Contractors Municipalities Manufacturers





DISPATCHER

Ontario Secondary School Diploma (OSSD) Recommended Essential Skills: Decision Making Numeracy Oral Communication Written Skills

path 01

Experiential Learning

Employment: Quarries Suppliers Manufacturers







SCALEHOUSE/DISPATCHER

Ontario Secondary School Diploma (OSSD) Recommended Essential Skills: Decision Making Numeracy Oral Communication Written Skills

path 01

Experiential Learning

Employment: Quarries Contractors Manufacturers





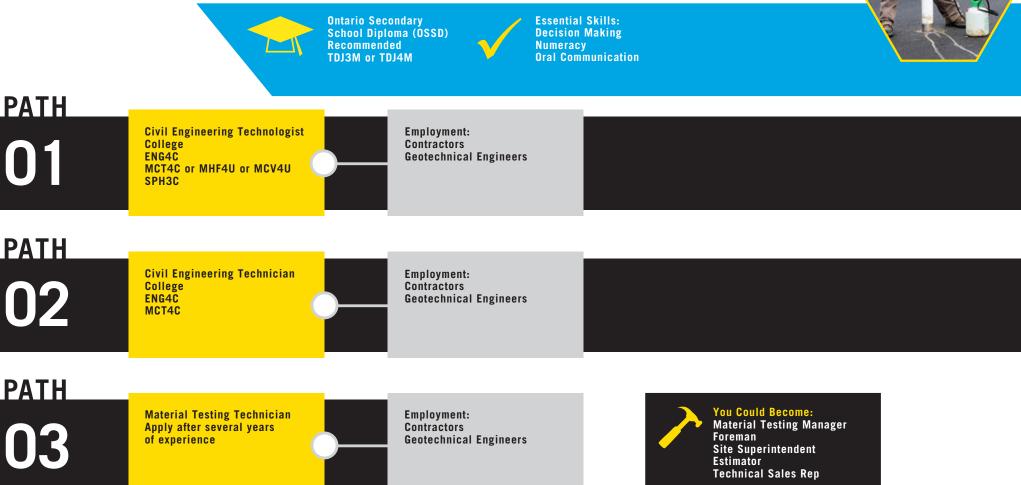
TECHNICAL SALES REPRESENTATIVE

		High School Diploma Recommended TDJ3M or TDJ4M	Essential Skills: Decision Making Numeracy Oral Communication	
ратн 01	Civil Engineering Technologist College ENG4 (C or U) English MCT4 (C or U) or MHF4U or MCV4U SPH4U Physics	Employment: Suppliers Manufacturers		
ратн 02	Civil Engineering Technician College ENG4 (C or U) MCT4 (C or U) or MAPAC> 80% Recommended TDJ4M Design Technology	Employment: Suppliers Manufacturers		
ратн 03	General labourer	Apply after several year of experience: Suppliers Manufacturers	S You Could Becon Sales Manager	ne:

QUALITY CONTROL

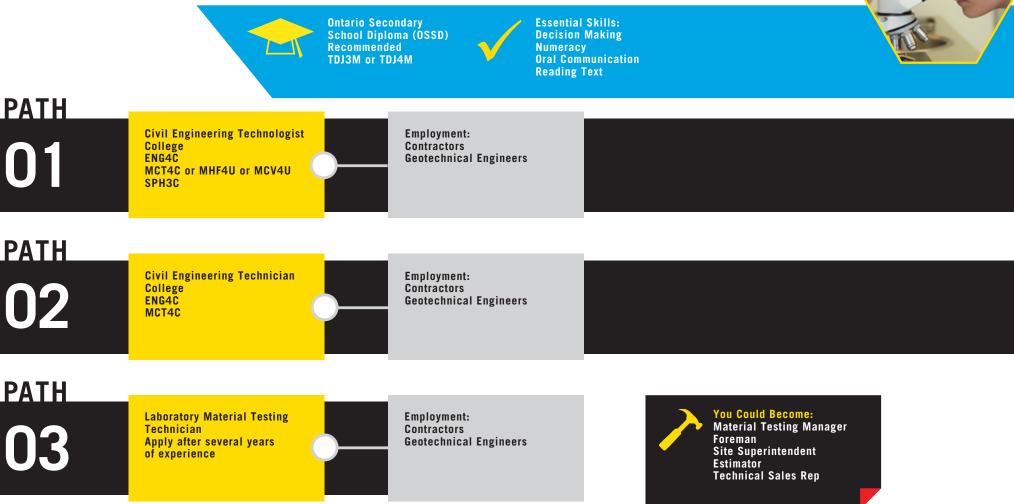


FIELD MATERIAL TESTING TECHNICIAN





LABORATORY MATERIAL TESTING TECHNICIAN





QUALITY CONTROL OFFICER

Ontario Secondary School Diploma (OSSD) Recommended TDJ3M or TDJ4M

Essential Skills: Decision Making Numeracy Oral Communication Numeracy

ратн 01

College ENG4C MCT4C or MCF3M Recommended SPH3C Employment: Consultants Municipalities Contractors You Could Become: Quality Manager Foreman Site Superintendent Estimator Technical Sales Rep NOC 2262

SURVEYING





Ontario Secondary School Diploma (OSSD)

Essential Skills: Oral Communication



		Recommended TDJ3M or TDJ4M	Decision Numerac Documen Reading	y t Use		
PATH	Civil Engineering Technologist	Employment	t:			
01	College ENG4C MCT4C or MHF4U or MCV4U SPH3C	Consultant Government	t			
РАТН				1		
02	Civil Engineering Technician College ENG4C MCT4C	Employment Consultant Government				
РАТН						
03	Material Testing Technician	Apply after of experienc Consultant Government			You Could Become: Surveyor Manager Site Inspector Drafter Drafter Manager Project Manager	

UTILITIES



APPRENTICE ELECTRICIAN

Ontario Secondary

/ Required:

		School Diploma (OSSD) Recommended TDJ3M or TDJ4M OYAP	Decision Making Numeracy Oral Communication Measuring/Document Use Reading Text	
РАТН				
01	Electrician Apprenticeship	Construction and Mainte 9000 hrs.	enance Employment: Contractor Self Employed	
РАТН				
02	Electrician Union Hall IEBW 353	Construction and Mainte 9000 hrs.	Employment: Contractor Self Employed	
РАТН				
03	Non-Union Construction and Maintenance 9000 hrs.	Employment: Contractor Self Employed	You Could Bee Lead Hand Foreman Site Superinte Estimator	

🕜 Essential Skills:



GAS LINE INSTALLER

Ontario Secondary School Diploma (OSSD) Recommended TDJ3M or TDJ4M Essential Skills: Decision Making Numeracy Oral Communication Reading text

ратн 01

Employment: Utilities Consultant Government You Could Become: Lead Hand Foreman Site Superintendent Estimator NOC 7442





UTILITY LINE LOCATOR

Ontario Secondary School Diploma (OSSD) Recommended TDJ3M or TDJ4M Essential Skills: Decision Making Numeracy Oral Communication Reading text

path 01

Employment: Utilities Consultant Government You Could Become: Lead Hand Foreman Site Superintendent Estimator

