

Technical Skills Examples

Civil and Environmental

Design/Modelling	Water/Drainage	Transportation	Structural
<ul style="list-style-type: none"> ArcGIS AutoCAD Civil3D MATLAB MicroStation SketchUp Solidworks 	<ul style="list-style-type: none"> EPANET HEC-RAS HEC/HMS WaterCAD/ StormCAD 	<ul style="list-style-type: none"> InRoads MX Road Synchro Vissim 	<ul style="list-style-type: none"> ETabs Response2000 S-Frame SAP2000 STAAD Pro
Surveying	Project Management	Testing/Investigations	Certification
<ul style="list-style-type: none"> Levels Slope & Stake Tape & Errors Total Station Transit 	<ul style="list-style-type: none"> Bluebeam Microsoft Project Primavera Revit Microsoft Office 	<ul style="list-style-type: none"> Borehole Testing Concrete Testing Materials Testing Rock & Mineral Testing Erosion & Sediment Control Alkalinity Testing Oxygen Demand Analysis Risk Assessment Hazard Identification 	<ul style="list-style-type: none"> BC Class 5 Driver's License Confined Space Entry CSTS-09 Construction Safety First Aid (Type,Level) WHMIS

Chemical and Biological

Computer	Laboratory	Languages
<ul style="list-style-type: none"> ApE/SnapGene Aspen Plus AutoCAD CLC Genomics CommandConcrete GenAIEx PKS Predictor Python SAP SolidWorks VBA VectorNTI 	<ul style="list-style-type: none"> Aspetic Technique Bomb Calorimeter Distillation Column Gas Chromatography Hydrogen Fuel Cell ICP-MS ICP-OES Titration Refractometer Spectrophotometer TGA/DSC Viscometry 	<ul style="list-style-type: none"> C/C++ MATLAB Python R
Analysis	Hardware	Certification
<ul style="list-style-type: none"> Gas Chromatography Analysis Instrument Calibration P&ID Analysis Super Trace Analysis Tribology Analysis 	<ul style="list-style-type: none"> Hand/Power Tools Microcontrollers Soldering 	<ul style="list-style-type: none"> BC Class 5 Driver's License First Aid (Type,Level) SACHe Hazrd Recognition UBC Laboratory Safety Course WHMIS

Computer

Frameworks	Software Tools	Programming
<ul style="list-style-type: none">▪ .NET▪ Django▪ Ruby on Rails▪ Angular JS▪ React▪ Ember	<ul style="list-style-type: none">▪ Virtual Machine▪ MATLAB▪ Scribe▪ Git▪ SVN▪ Visual Studio▪ Pycharm	<ul style="list-style-type: none">▪ C▪ C++▪ Embedded programming▪ Python▪ Javascript▪ Assembly▪ Verilog

Electrical

Lap Equipment	Software Tools	Programming
<ul style="list-style-type: none">▪ Multimeter▪ Oscilloscope▪ Power supply▪ Waveform generator▪ Logic analyzer▪ Network analyzer	<ul style="list-style-type: none">▪ Autocad Electric▪ MATLAB▪ Labview▪ Git▪ SVN▪ Visual Studio	<ul style="list-style-type: none">▪ C▪ C++▪ Embedded programming▪ Python▪ Javascript▪ Assembly▪ Verilog

Geological

Computer	Tools	Field Techniques	Certification
<ul style="list-style-type: none">▪ ArcMap▪ AutoCAD▪ CATIA▪ gINT▪ Global Mapper▪ GOCAD Mining Suite▪ Leapfrog▪ MATLAB▪ Microsoft Office	<ul style="list-style-type: none">▪ Brunton Compass▪ Dip Meter▪ Hand Lens▪ Rock Hammer▪ Transit	<ul style="list-style-type: none">▪ Soil Identification▪ Rock & Mineral Testing▪ Borehole Testing▪ Materials Testing▪ Geological mapping▪ Ground Modelling▪ Groundwater Monitoring▪ Risk Assessment▪ Hazard Identification	<ul style="list-style-type: none">▪ BC Class 5 Driver's License▪ WHMIS▪ CSTS-09 Construction Safety▪ First Aid (Type, Level)

Integrated & Masters - Refer to skill sheet based on specialization

Materials

Computer	Languages	Laboratory	Tools/Techniques	Certifications
<ul style="list-style-type: none"> Microsoft Office AutoCAD SolidWorks MATLAB LaTex 	<ul style="list-style-type: none"> C/C++ VBC Python 	<ul style="list-style-type: none"> Oscilloscope Hardness Testing Titration Fatigue Failure Testing Tensile Materials Testing Metal Extraction Process 	<ul style="list-style-type: none"> Drill Press Power Drill Lathe CNC Machine Casting Welding 3D Printing Soldering Iron Multimeter 	<ul style="list-style-type: none"> Chemical Laboratory Safety WHMIS First Air/CPR

Mechanical

Mechanical	Computer	Electrical	Tools/Machines
<ul style="list-style-type: none"> Solidworks Machining Rapid prototyping SLA/FDM 3D printing Composites construction 	<ul style="list-style-type: none"> MATLAB Microsoft Office Suite AutoCAD RapidHarness 	<ul style="list-style-type: none"> Oscilloscope Multimeter Embedded Programming Microcontrollers Soldering 	<ul style="list-style-type: none"> Drill Press Power Drill Lathe CNC Machine

Mining

Computer	Expertise	Laboratory	Certification
<ul style="list-style-type: none"> Microsoft Office Vulcan DeltaV JkSimMet C/C++ Microstation RtDUET Minesight Solidworks 	<ul style="list-style-type: none"> Surface Mine Planning Mine Fleet Management Resource Modelling Process Optimization Mine-to-Mill Integration Ventillation/Excavation Drafting Beltline/Splice Maintenance Rock bolt Maintenance Underground Mining 	<ul style="list-style-type: none"> Sample Preparation Particle size distribution Bond Work Index Test Froth Flotation Stable Isotope Analysis 	<ul style="list-style-type: none"> BC Class 5 Driver's License WHMIS Lab Safety First Aid (Type, Level) Underground Mining Safety Confined Space Entry