



Production Line Welding Applied Certificate

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

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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 [PLAR contact person](#) 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 self-ratings (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 [directions](#) for applying.
5. **Register** for PLAR at [Registration/Enrolment Services](#) 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.

Douglas Boos, Program Head
Saskatchewan Polytechnic, Regina Campus
Phone: 306 – 775 - 7736
Email: boos@saskpolytech.ca

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
INDG 100	Introduction to Indigenous Studies	Arts & Sciences
METL 100	Metallurgy Heat Treatment of Metals	
PRNT 114	Blueprint Interpretation	
SFTY 103	Welding Safety	
WLDR 146	Oxy Fuel and Thermal Cutting	
WLDR 147	Wire Feed Welding Process Theory	
WLDR 164	Wire Feed Welding Processes Shop 1	
WLDR 165	Wire Feeding Processes Shop 2	

INDG 100 – Introduction to Indigenous Studies

You will receive an introduction to the Indigenous cultural groups within Saskatchewan. You will learn about the colonization of Indigenous peoples by the Canadian state. Your studies will help you discuss current issues and explore possible solutions.

Credit unit(s): 1.0
Prerequisites: none
Corequisites: none
Equivalent course(s): none

<p>Use a checkmark (✓) to rate yourself as follows for each learning outcome</p> <p>Competent: I can apply this outcome without direction or supervision. Learning: I am still learning skills and knowledge to apply this outcome. None: I have no knowledge or experience related to this outcome.</p>	Competent	Learning	None
1. Describe Indigenous nations of Saskatchewan.			
2. Explain how colonization has impacted Indigenous peoples.			
3. Discuss current issues and possible solutions.			

METL 100 – Metallurgy Heat Treatment of Metals

You will study the physical, chemical and mechanical properties of commonly used metals in the welding trade. You will study the processes of steel making. You will apply the techniques involved in heat treating metals. You will examine the classification systems used for metal identification.

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

<p>Use a checkmark (✓) to rate yourself as follows for each learning outcome</p> <p>Competent: I can apply this outcome without direction or supervision. Learning: I am still learning skills and knowledge to apply this outcome. None: I have no knowledge or experience related to this outcome.</p>	Competent	Learning	None
1. Identify the processes used in the production of metals.			
2. Identify ferrous and non-ferrous metals.			
3. Identify structural metals.			
4. Describe the physical, chemical, and mechanical properties of metals.			
5. Describe metal heat treatment processes.			
6. Describe the techniques to control and correct heat distortion.			

PRNT 114 - Blueprint Interpretation

You will develop your ability to read and interpret basic welding and fabricating drawings. The course covers the basic elements of a blueprint, weld symbols, joint types, structural shapes, developing a bill of material and using the Imperial and metric systems of measurement.

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

<p>Use a checkmark (✓) to rate yourself as follows for each learning outcome</p> <p>Competent: I can apply this outcome without direction or supervision. Learning: I am still learning skills and knowledge to apply this outcome. None: I have no knowledge or experience related to this outcome.</p>	Competent	Learning	None
1. Develop blueprints.			
2. Develop working drawings.			
3. Interpret welding symbols.			
4. Set up weld joints.			
5. Calculate material required.			

SFTY 103 – Welding Safety

Your studies will focus on general safety as it applies to the welding trade. You will learn about firefighting equipment, organize a shop for safe welding operation and safely transport and store welding supplies. You will also learn basic rigging techniques. You will study the Workplace Hazardous Materials Information System (WHMIS) and be introduced to Occupational Health and Safety Act and regulations.

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

<p>Use a checkmark (✓) to rate yourself as follows for each learning outcome</p> <p>Competent: I can apply this outcome without direction or supervision. Learning: I am still learning skills and knowledge to apply this outcome. None: I have no knowledge or experience related to this outcome.</p>	Competent	Learning	None
1. Describe the Workplace Hazardous Materials Information System (WHMIS) and Occupational Health and Safety.			
2. Identify hazards in the workplace.			
3. Describe firefighting equipment and procedures.			
4. Describe proper methods of transportation and storage welding supplies.			
5. Apply rigging techniques.			

WLDR 146 – Oxy Fuel and Thermal Cutting

You will use freehand and guided methods for cutting mild steel. You will perform straight cuts, bevel cuts and pierce holes in the plate. You will use a guide to do straight cuts, bevel cuts and cut circles from plate. You will perform plasma arc cutting and gouging. Air carbon arc gouging will be performed.

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

<p>Use a checkmark (✓) to rate yourself as follows for each learning outcome</p> <p>Competent: I can apply this outcome without direction or supervision. Learning: I am still learning skills and knowledge to apply this outcome. None: I have no knowledge or experience related to this outcome.</p>	Competent	Learning	None
1. Describe the oxy-fuel cutting process.			
2. Describe oxy-fuel cutting (OFC), plasma arc cutting, gouging and carbon arc air gouging equipment.			
3. Describe safety concerns related to OFC plasma arc cutting and gouging and carbon arc air gouging.			
4. Complete 90 degree and bevel cuts using manual oxy-fuel equipment.			
5. Cut structural shapes using oxy-fuel process.			
6. Cut plate using the machine track torch.			
7. Cut plate using plasma arc cutting.			
8. Observe CNC plasma arc cutting equipment and process.			
9. Perform air carbon arc gouging.			

WLDR 147 – Wire Feed Welding Process Theory

You will develop the knowledge required to safely select, setup and maintain power supply components, electrodes, flux, and shielding gases.

Credit unit(s): 1.0
Prerequisites: none
Corequisites: none
Equivalent course(s): none

<p>Use a checkmark (✓) to rate yourself as follows for each learning outcome</p> <p>Competent: I can apply this outcome without direction or supervision. Learning: I am still learning skills and knowledge to apply this outcome. None: I have no knowledge or experience related to this outcome.</p>	Competent	Learning	None
1. Describe the components and operation of a gas metal arc welding (GMAW) welding station.			
2. Describe GMAW safety concerns.			
3. Describe the equipment and consumables of metal-cored arc welding (MCAW) and flux-cored arc (FCAW) welding.			

WLDR 164 – Wire Feed Welding Processes Shop 1

In this course you will be introduced to solid wire welding procedures such as weld sequencing, metal transfer types, weld positions and advanced waveforms on lite gauge materials. You will perform multiple pass welds using pulsed wave forms.

Credit unit(s): 4.0
Prerequisites: none
Corequisites: none
Equivalent course(s): none

<p>Use a checkmark (✓) to rate yourself as follows for each learning outcome</p> <p>Competent: I can apply this outcome without direction or supervision. Learning: I am still learning skills and knowledge to apply this outcome. None: I have no knowledge or experience related to this outcome.</p>	Competent	Learning	None
1. Demonstrate safe Gas Metal Arc Welding (GMAW) work procedures.			
2. Setup a GMAW weld station.			
3. Perform surface build up in flat position.			
4. Weld 14-gauge, T-joint, vertical down.			
5. Weld 12-gauge, circular lap joint, flat, vertical down and overhead.			
6. Weld 14-gauge, butt joint, vertical down.			
7. Weld vertical up t-joint ¼" 3 pass using pulse wave forms.			

WLDR 165 - Wire Feeding Processes Shop 2

You will develop your abilities with solid wire GMAW in the horizontal and overhead positions. You will be introduced to flux cored, metal cored and aluminum wire feed welding processes. You will perform open root welds with solid wire in the flat and vertical positions.

Credit unit(s): 4.0
Prerequisites: none
Corequisites: none
Equivalent course(s): none

<p>Use a checkmark (✓) to rate yourself as follows for each learning outcome</p> <p>Competent: I can apply this outcome without direction or supervision. Learning: I am still learning skills and knowledge to apply this outcome. None: I have no knowledge or experience related to this outcome.</p>	Competent	Learning	None
1. Weld 3/8" mild steel, horizontal, T-joint, 3 pass fillet, spray transfer.			
2. Weld 3/16" mild steel, T-joint, overhead, 3 pass fillet.			
3. Weld structural shapes, horizontal fillet, using metal-cored arc welding (MCAW).			
4. Weld 1/4" mild steel, T-joint, vertical, 3 pass fillet, using flux-cored arc welding (FCAW).			
5. Weld aluminum horizontal T-joint.			
6. Weld 3/8" mild steel, V-groove butt joint in flat position.			
7. Weld 3/8" mild steel, V-groove butt joint in vertical position.			