



Alberta Stories of Practice

Grande Prairie and District Catholic Schools

Welding Pathways at JP II



Grande Prairie and
District
Catholic Schools



St. John Paul II Catholic School
Faculté St-Jean Paul II

Today's story of practice: **Welding Pathways**



Grande Prairie and District
Catholic Schools

inspire create believe



St. John Paul II Catholic School



Grade 9 -12 French
Immersion High
School

Home to the City's
second-largest
performing Arts
Theatre BUT today we
are talking about
Welding!



Why Welding?



Around 100,000 jobs open in Alberta – but many companies can't find those with specific skills



Worker shortage is particularly felt in industries like energy, manufacturing and construction



[Joel Dryden](#) · CBC News · Posted: Jan 06, 2023 12:07 PM MST | Last Updated: January 6



THE GLOBE AND MAIL
**Wanted:
"More skilled
labour,
and quick"**
November 7, 200





Teacher Bio

JACQUES LECERF

FABRICATION / HOME AND CAR CARE
WELDING APPRENTICESHIP





Career and Technology Studies

FAB/CON and Home and Car Care

Fabrication	Construction	Home and Car Care Courses selected from CON/MEC	
<p>Module based CTS course.</p> <p>Covers a wide variety of metal working processes such as welding, pipefitting, sheet metal, machining, and foundry work.</p>	<p>Module based CTS course.</p> <p>Covers a wide variety of construction processes and applications. Such as carpentry (framing), cabinet-maker, siding/windows/doors, and an introduction to electrical and plumbing.</p>	<p>CON1010 Construction Tools and Materials</p> <p>CON1070 Building Construction</p> <p>CON2070 Electrical Systems</p> <p>CON2080 Plumbing Systems</p> <p>CON3060 Doors and Trim</p>	<p>MEC1050 Mechanics Tools and Materials</p> <p>MEC1020 Vehicle Service and Care</p> <p>MEC1040 Engine Fundamentals</p> <p>MEC2020 Vehicle Maintenance</p> <p>MEC3010 Buying and Selling Vehicles</p>
<p>Other CTS options at JPIL</p>			
<p>Foods</p>	<p>Cosmetology</p>	<p>Open Tech Studies</p>	<p>Outdoor Education</p>



Welding Pathways Pilot Program



CTS Credentialed Pathways

Welder First Period

WDA3401: Tools & Equipment

WDA3403: Oxyfuel & Plasma Arc

WDA3406: Electricity & Metals

WDA3407: Symbols & Drawings

WDA3408: Weld Faults

WDA3411: Wire-Feed Welding

WDA3413: Gases & Maintenance

WDA3415: GMAW on Mild Steel

WDA3420: FCAW & MCAW

WDA3423: Mild Steel Welds

WDA3427: Mild Steel Pipe Welds

WDA3429: Aluminum & SAW

WDA3432: Welding Math 1

WDA3437: Welding Math 2

WDA3445: WDA Practicum A

WDA3450: WDA Practicum B

WDA3455: WDA Practicum C

WDA3460: WDA Practicum D

WDA3900: Apprenticeship Safety

All Welder Apprenticeship (WDA) courses must be delivered by a journeyperson welder.



1st Period Practical Examination

Welder

Apprenticeship Exams

1st Period

- Theory Exam (1)
- Theory Exam (2)
- Practical Exam (1)

3G - Vertical Groove Weld (GMAW)

3G – Vertical Butt Weld (GMAW)

2F - Horizontal Lap Weld (GMAW)

2G – Horizontal Butt Weld (GMAW)/(FCAW)

3F - Vertical Lap Weld (FCAW)

2F - Horizontal Lap Weld (FCAW)

Cutting (OAC)





Typical Day

- 8:40 am to 10:30 am daily
- Year-long 10-month program (331 Hours)
- After school welding sessions (2-4 hours per week)
- Classroom instruction 40%
- Welding Lab 60%





Lab Design



- 8 Welding Bays
- 2 Cutting bays
- Adjoined Classroom
- Industry Expectations
- Industry Tools and Equipment



Equipment and Tools



- Radiograph
- Guided Bend Jig
- Pipe Beveller
- Pipe Spinner



Safety and Structure



- Safety First
- Safety Culture
- Routines



Overcoming Obstacles



- Funding
- Hours
- Technology Availability



Theory Component



- In depth lessons
- Creating study habits
- Real world applications
- Self-Tests and Final Tests



Hands-on Learning



- Process Demonstrations
- Application of Theory
- Time on Tools
- Skill/Technique Development



Post Secondary Partnerships



**NORTHWESTERN
POLYTECHNIC**



**SCHOOL
OF SKILLED TRADES**

- Post Secondary Partnership
- Shadow Days



**Grande Prairie and District
Catholic Schools**



Community Connections





Welding Pathways Pilot Program



- Period 1 Complete
- Successful AIT Accreditation
- Career Exploration
- Success after high school





Questions



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**THANK
YOU
FOR
YOUR TIME
AND ATTENTION**