

Unit 4: Pilot Operated Hydraulic System

Lesson 1 – Pilot Operated Implement Hydraulic System

Machine Hydraulic Systems

Unit 1: Pilot Operated Hydraulic Systems

Lesson 1 – 950G Pilot Operated Implement Hydraulic System

Unit 2: Load Sensing, Pressure Compensated Hydraulic Systems

Lesson 1 – Basic LS/PC Hydraulic Systems

Lesson 2 – LS/PC Hydraulic Pumps and NFC Hydraulic Systems

Machine Hydraulic Systems *continued* . . .

Unit 3: Proportional, Priority, Pressure Compensated Hydraulic Systems

Lesson 1 – PPC Hydraulic System

Unit 4: Hydrostatic Systems

Lesson 1 – Basic Hydrostatic Systems

Lesson 2 – Hydrostatic System Controls

Lesson 4 – C Series Skid Steer Loader Hydrostatic Drive System.

**Alberta Apprenticeship and Industry Training Individual Learning Modules
Heavy Equipment Technician (HET)**

- 190301a – Hydraulic Principles
- 190301b – Hydraulic Pump Fundamentals
- 190301c – Hydraulic Pump Service
- 190301d – Hydraulic Actuator Fundamentals
- 190301e – Hydraulic Actuator Service
- 190301fA – Hydraulic Valve II – Part A
- 190301fB – Hydraulic Valve II – Part B
- 190301g – Hydraulic System Types
- 190301h – Hydraulic System Testing and Service
- 190301i – Electrohydraulic
- 650401a – Alberta's Industry Network.
- 650401b – Workplace Coaching Skills.
- 650401c – Interprovincial Standards Red Seal Program.

DELIVERY MODE(S): In person delivery.

Note: NWP reserves the right to change the course delivery.

COURSE OBJECTIVES:

LEARNING OUTCOMES:

TRANSFERABILITY: None.

EVALUATIONS:

GRADING CRITERIA:

Students must complete all required courses with a grade point average of no less than 2.7 and no failing (F) grades. A passing grade in this course is a **minimum of 70%**.

Machine Hydraulic Systems 96 / 240 hours = 40 %
of Semester 4 mark

Exams Average = _____ x 45%

Class Assignments/Quizzes/DPC = _____ x 30%

Shop Total _____ x 25%

HES410 VA42 FINAL MARK = _____ %

Alpha Grade	4-point Equivalent	Percentage Guidelines		Alpha Grade	4-point Equivalent	Percentage Guidelines
A+	4.0	90-100		C+	2.3	67-69
A	4.0	85-89		C	2.0	63-66
A-	3.7	80-84		C-	1.7	60-62
B+	3.3	77-79		D+	1.3	55-59
B	3.0	73-76		D	1.0	50-54
B-	2.7	70-72		F	0.0	00-49

COURSE SCHEDULE/TENTATIVE TIMELINE:

STUDENT RESPONSIBILITIES: This is an adult education environment. Enrolment at Northwestern Polytechnic assumes that the student will become a responsible citizen of the College. As such, each student will display a positive work ethic, take pride in and assist in the maintenance and preservation of Institute property, and assume responsibility for his/her education by researching academic requirements and policies, demonstrating courtesy and respect toward others; and respecting instructor expectations concerning attendance, classroom and shop rules, safety, assignments, deadlines and appointments. Students are learning skills to prepare them for the work environment.

Following the guidelines in “Student Rights and Responsibilities” in the NWP College calendar assist us all in maintaining an adult learning environment. Please refer to the Student Rights and Responsibilities policy in the Northwestern Polytechnic Calendar or at www.nwpolytech.ca/downloads/documents/StudentRightsandResponsibilities.pdf.

STATEMENT ON PLAGIARISM AND CHEATING:

Cheating and plagiarism will not be tolerated and there will be penalties. For a more precise definition of plagiarism and its consequences, refer to the Student Conduct section of the Northwestern Polytechnic Calendar at <https://www.nwpolytech.ca/programs/calendar/> or the Student Rights and Responsibilities policy which can be found at <https://www.nwpolytech.ca/about/administration/policies/index.html>.

**Note: all Academic and Administrative policies are available on the same page.

Additional Information (Optional):