



John Deere Tech



OLDS COLLEGE

2012

JOHN DEERE

TECH PROGRAM

PROGRAM INFORMATION

(Apprenticeship related information)

During each of four years the John Deere Tech Apprentice works approximately nine to ten months at a sponsoring dealership and receives ten weeks of technical training at Olds College. Upon successful completion of the program, apprentices will qualify for the following certification:

- Agricultural Equipment or Heavy Equipment Technician Journeyman
- Inter-Provincial Agricultural Equipment or Heavy Equipment Technician Certification
- John Deere/Olds College JD Tech Completion Award

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Program Overview

The John Deere Tech program is an educational program designed to upgrade the technical competence and professionalism of apprentice or journeyman Agricultural Equipment or Heavy Equipment Technicians. The program is sponsored and the curriculum developed by John Deere Limited and Olds College. Upon completion of the program graduates will also receive a John Deere Tech Completion Award conferred by John Deere Limited and Olds College.

The JD Tech program can be completed in approximately 48 months by attending two weeks of training per year in the month of March at Olds College. Program applicants work for a dealer and take part in classroom lectures and laboratory experiences at Olds College, related to repair and overhaul of agricultural and heavy equipment. The program consists of training on a wide variety of machinery with an emphasis on John Deere agricultural products. The curriculum is designed so that work experience at the dealership relates, as much as possible, to the specialized course work completed at Olds College. The program requires the student to have the sponsorship of a John Deere dealership. If necessary, the student can request assistance from Olds College in locating a sponsoring dealership. The main responsibility of the dealership is to provide training-related employment for the student during the work experience periods.

Although employment insurance benefits are available to apprentices while attending apprenticeship training, they are not available to JD Tech applicants for these additional two weeks of training. An additional fee for the two weeks of specialty training during each period will be charged to the applicant. Any financial arrangements between the applicant and the dealership are the responsibility of the applicant and the sponsoring dealership. Textbook costs are the responsibility of the applicant.

In addition to tuition fees and textbook costs, applicants will require a basic set of hand tools for their trade. A suggested tool list is included in this booklet.

Information contained in this booklet is correct at the time of printing. Prospective students and employers should be aware that the Agricultural Equipment and/or Heavy Equipment Technician programs and the John Deere Tech Program curriculums may undergo slight changes from year to year and this guide book will reflect those changes. Applicants and employers are invited to contact the coordinator of the JD Tech program at Olds College if they require details that are more exact.

Admission Requirements

High School Transcripts

Applicant's transcripts must read completion of grade 12 with Math 13 or Applied Math 10 or the applicant must pass an equivalency entrance examination as prescribed by the trade regulation.

Dealer Sponsorship

Applicants must be employed and sponsored by an authorized John Deere Dealership. It is the responsibility of the applicant to secure this sponsorship.

Application for Apprenticeship

Application for apprenticeship can be requested from Olds College or from an Alberta Apprenticeship and Industry Training Office. Applications should be completed and returned to an Alberta Apprenticeship and Industry Training Office. Please specify that the apprenticeship training selected is **Agricultural Equipment Technician or Heavy Equipment Technician.**

- Contact your nearest Alberta Apprenticeship and Industry Training Office or Olds College for application details.
- Obtain an application form from Alberta Advanced Education and Career Development Centre or Olds College or visit www.tradesecrets.org on the Internet.
- Complete the application form and return it to an Alberta Apprenticeship and Industry Training Office.
- With the employer, discuss the possibility of time credit for previous experience in the Agricultural Equipment and/or Heavy Equipment Technician work experience. The Employer must indicate requests for prior time credit on the application form.
- Sign a contract of apprenticeship (between the apprentice and the sponsoring dealership) within three months of the date that the apprenticeship application has been approved.
- Fill out and return to Olds College the Olds College John Deere Tech program candidate application form, and the Dealer Approval form.
- Upon completion of these requirements, applicants will be notified of their admissions status. When the program reaches capacity, additional applicants will be placed on standby status pending an opening.

OLDS COLLEGE JOHN DEERE TECH PROGRAM Candidate Application

Please print or type all information.

Surname/Family Name		First or Given Name	Second or Middle Name	
Permanent Home Address (Street/Box Number)		Town/City	Province	Postal Code
Telephone Number Home		Business	Alternate	
Preferred / Personal Email			RACF User ID Number	

Mailing address and telephone number if different from above

Date of Birth ___/___/___
YY M D

Sex Male Female

Students must have completed the necessary level of AET or HET (or equivalent) to be accepted (i.e. to apply for Level 2 John Deere Tech, the student must have completed AET or HET Level 2 or equivalent).

(Please note: The sponsorship of a John Deere dealer is required for acceptance into the JD Tech program)

If sponsorship has been agreed to, the dealer will complete the Dealer Approval Form and attach it to this application.

Career Interest: (In the space provided below write a clear definitive statement of your future goals)

Choose the level you are applying for: (please check one level)
NOTE: A NEW APPLICATION IS REQUIRED EVERY YEAR

Level 1: Session 1 **OR** Session 2 **Level 2:** Session 1 **OR** Session 2

Level 3: **Level 4:**

Release of Information

I hereby grant to Olds College permission to share the above information and other information that pertains exclusively to the Olds College JD Tech program with John Deere Limited and the sponsoring dealer.

Signature: _____

Date: _____

John Deere Ag Tech Candidates: Return this completed form and the Dealer Approval Form to:

Olds College
Attention: Student Recruitment
4500-50th Street
Olds, Alberta T4H 1R6
Fax: (403) 556-4711

DEALER APPROVAL FORM

Applicant Name: _____ Apprentice Number: _____

*Applicant: Please mail this form to Olds College along with your Candidate Application Form.

DEALER INTERVIEW: Please review the following points with the applicant before he/she makes application into the Olds College John Deere Tech program.

1. The applicant has completed the candidate application.
2. The applicant understands that apprenticeship training at Olds College comes under the jurisdiction of Alberta Apprenticeship and Industry Training and uses a curriculum approved by the Provincial Apprenticeship Committee(s).
3. The Olds College John Deere Tech portion of the training consists of two extra weeks at Olds College at the end of the regular apprenticeship training periods and is for John Deere sponsored apprentices and/or John Deere sponsored journeyman Agricultural Equipment or Heavy Equipment Technicians only.
4. The full amount of the John Deere Tech tuition is due and payable on the first day of class.
5. The applicant should express a strong desire to be a professional Agricultural or Heavy Equipment Technician. Are his/her goals consistent with the dealership's needs for the next few years?

DEALER APPROVAL: I recommend this applicant for inclusion in the Olds College John Deere Tech program and agree to provide sponsorship.

Dealer/Authorized Representative Signature

Print Name and Title

Dealership Name

Telephone

Dealership Address

City/Province

Postal Code

Date

CONTACTS

Olds College encourages applicants to secure a dealer sponsorship as early as possible.

Additional information regarding the Olds College/John Deere Tech program is available from the following contacts:

Mr. Cliff Laursen

Coordinator, John Deere Tech Program
School of Trades and Career Studies
c/o Olds College
4500 – 50th Street
Olds, AB
T4H 1R6
Telephone: (403) 507-7930
Fax: (403) 556-4712
claursen@oldscollege.ca

Mr. Dan Daley

Chair
School of Trades and Career Studies
c/o Olds College
4500 – 50th Street
Olds, AB
T4H 1R6
Telephone: (403) 556-8272
Fax: (403) 556-4712
ddaley@oldscollege.ca

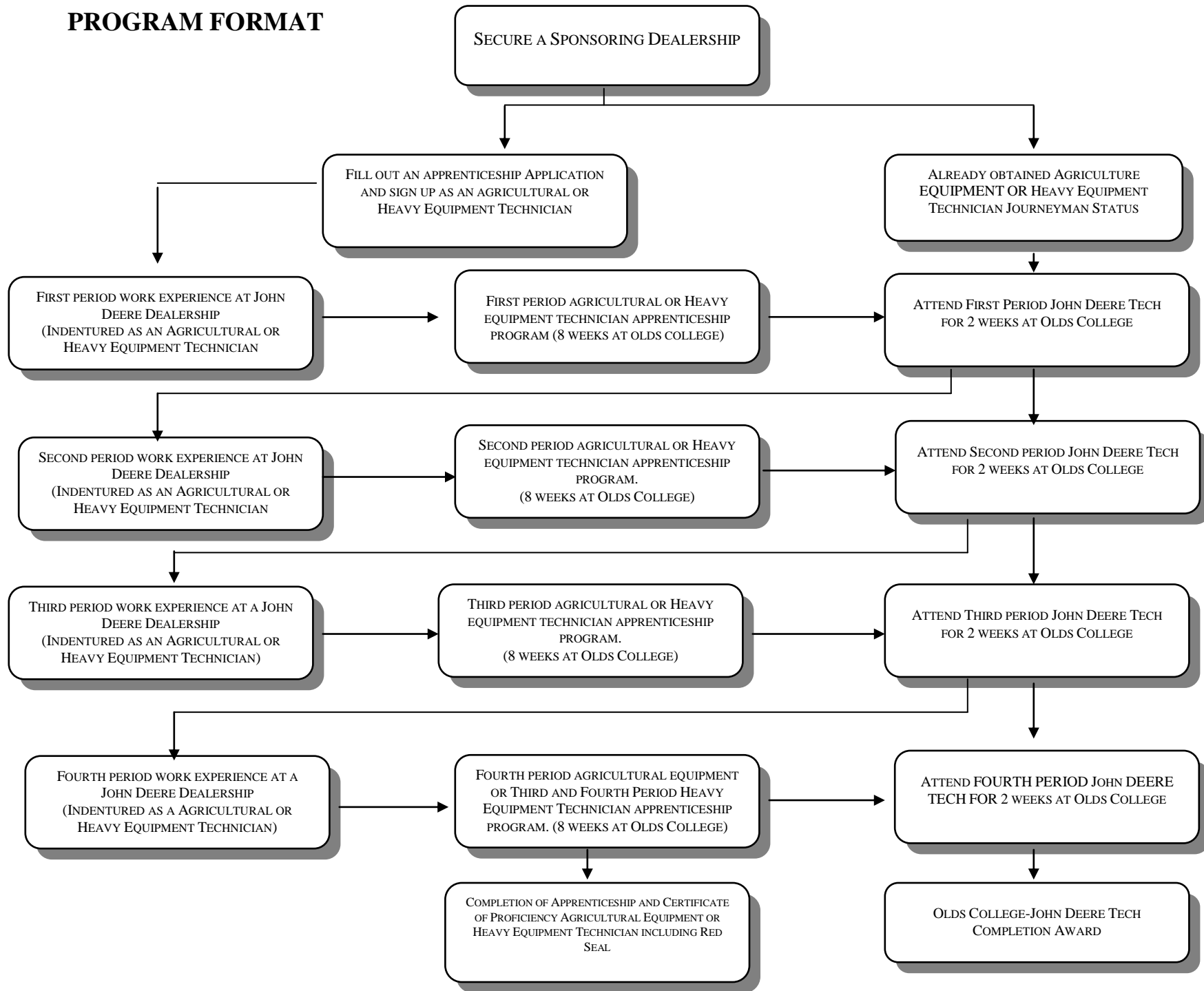
Bobby-Joe Rovensky

Admission Officer
c/o Olds College
4500 – 50th Street
Olds, AB
T4H 1R6
Telephone: (403) 556-4610
Fax: (403) 556-4711
brovensky@oldscollege.ca

Mr. Tien MacDonald

Manager, College Partnerships
John Deere Limited
455 Park St.
Regina, Sask.
S5N 5B2
Telephone: (306)791-3216
Fax: (306) 721-6166
MacDonaldTienR@JohnDeere.com

PROGRAM FORMAT



RESPONSIBILITIES OF PARTICIPANTS

Apprentice/Journeyman

- Meet specified admission and academic requirements established by Alberta Apprenticeship Industry Training and John Deere Limited.
- Obtain and maintain sponsorship with a John Deere dealership throughout the duration of the training.
- Maintain academic standards and adhere to academic policies consistent with Alberta Apprenticeship Industry Training and Olds College.
- Wear uniforms, safety glasses and protective footwear while on campus in accordance with the requirements of Olds College and John Deere Limited.
- Participate in all learning activities at the scheduled times.
- Provide the sponsoring dealership with responsible and productive employment.
- Be responsible for selected program costs: partial tuition, books, tools, and meals and accommodation.
- Act in accordance with the code of conduct of Olds College.
- Complete all required core courses/DLM's before attending John Deere Tech training.

John Deere Limited

- Encourage dealer cooperation and support.
- Provide specialized training for John Deere Tech Instructors/Coordinator.
- Furnish Olds College with John Deere training equipment (manuals, components, essential and special tools, complete machines).
- Provide Olds College with essential training materials (including technical publications and training aids).
- Oversee and participate in applicant selection procedures.
- Oversee and participate in instructor/liason officer selection procedures.
- Monitor all phases of the John Deere Tech program to assure success.
- Provide on-line assistance to technical information.
- Through the John Deere Foundation, provide two \$500.00 interim scholarships. Eligibility is based on two students, one for a student returning to second session JD TECH, and one for a student returning to fourth session JD TECH.

John Deere Dealership

- Indicate to Olds College interest in participating as a sponsoring dealership.
- Recruit apprentices for the program.
- Interview and select sponsored applicants.
- Appoint an in-dealership coordinator to assist Olds College's John Deere Tech instructor/coordinator in planning and monitoring the work experience.
- Provide appropriate work experience that reinforces the trainee's most recent classroom instruction.
- Pay apprentices during periods of dealership work experience.
- Provide the Tech apprentice with uniforms as used in the dealership. Recommend that the dealer supply five (5) shirts and two (2) coveralls for each Ag Tech apprentice.

Olds College

- Maintain the curriculum approved by Alberta Apprenticeship and Industry Training and John Deere Limited.
- Provide classroom and laboratory facilities for educational purposes.
- Provide John Deere trained instructors (one instructor will act as liaison between the College and John Deere and will serve on a John Deere Tech Advisory Committee).
- Provide specialty equipment and tools.
- Promote, advertise, and recruit qualified applicants.
- Where applicable, test applicants and assist dealerships with apprentice selection.
- Maintain a JD Tech database.
- Provide customary student services such as academic advisement, financial aid, counseling, etc.
- Encourage dealer personnel to assure attainment of work experience competencies.
- When requested, furnish program information to the public.
- Provide secure storage areas for training aids, special tools, parts/components and complete machines and accessories.

Hints on Finding a Sponsor

Note: You may at any time speak to any dealership about the John Deere Tech Program. However, you are accepted into the program only after official acceptance occurs, and only after all assessment, application and dealer sponsorship and apprenticeship forms have been approved by Olds College and Alberta Apprenticeship and Industry Training.

Key points to remember:

- John Deere dealerships are independent businesses; they are not employees of John Deere Limited.
- When looking for a sponsor, you are looking for a job.
- Olds College and John Deere Limited can provide limited assistance in giving guidance and in identifying sponsoring dealerships.
- Olds College does not assign you a sponsor.
- As a John Deere Tech apprentice you are an employee, as well as an apprentice.
- Some John Deere dealerships may not participate in the program.
- The interview - Call ahead for an appointment
- Be prepared: clean, neat, and confident

CURRICULUM

FIRST PERIOD	
Topic	Hours
Safety, Basic Materials, Tools and Skills	36
Electric Welding and Oxy Fuel Cutting	30
Basic Electrical	54
Basic Hydraulics	30
Agricultural Machinery Theory and Demonstration	66
Power Trains I	24
Apprenticeship Hrs.	240
Topic	Hours
Electrical	9
Hydraulics	9
Service Advisor I (Computerized Service & Repair Info)	20
Hay, Forage, Tillage and Seeding	20
Tech Fundamentals Computerized Resources	14
John Deere Tech Hrs.	72
Total Hours:	312

SECOND PERIOD	
Topic	Hours
Engine Fundamentals, Service and Repair	75
Engine Systems	30
Diesel Fuel Injection Systems	40
Electronic Fuel Management	45
Heavy Duty Charging and Cranking Systems	50
	50
Apprenticeship Hrs.	240
Topic	Hours
Advanced Engines	36
Tractor Performance	12
Treating Customers Right	12
Field Service	4
AMS DLM and Intro to AMS Components	8
John Deere Tech Hrs.	72
Total Hours:	312

THIRD PERIOD	
Topic	Hours
Spraying Equipment	30
Air Conditioning & Heating Systems	33
Power Trains II and Preventive Maintenance	53
Agricultural Harvesting Equipment	38
Seeding Equipment, Workplace Coaching Skills and Advisory Network	23
Braking Systems	24
Precision Farming Systems	39
Apprenticeship Hrs.	240
Topic	Hours
Combines, Forage Harvesters & Seed Carts	26
AMS Operations and Diagnostics	20
Personal Finance	8
Electrical Systems Diagnostics	16
John Deere Tech Hrs.	70
Total Hours:	310

FOURTH PERIOD	
Topic	Hours
Advanced Hydraulics	114
Suspension & Steering Systems and Accessories	34
Power Trains III	92
Apprenticeship Hrs.	240
Topic	Hours
Service Advisor II	20
Self Propelled Sprayers	20
Power Trains	20
Personal Finance	6
Graduation	4
John Deere Tech Hrs.	70
Total Hours:	310

Course Descriptions

FIRST PERIOD AGRICULTURAL EQUIPMENT TECHNICIAN

<p>Safety, Basic Materials, Tools and Skills</p> <p>This course addresses safety, housekeeping practices, lifting procedures, fire prevention, communication, materials, fasteners, sealing systems, precision measuring and hand tools.</p>	36 hours
<p>Electric Welding and Oxy Fuel Cutting</p> <p>This course covers welding safety, oxy-fuel equipment, shielded metal arc welding, and gas metal arc welding.</p>	30 hours
<p>Basic Electrical</p> <p>Basic electrical principles and the applications of Ohm's law, magnetism, and electromagnetism are covered. Diagnostic procedures of electrical circuits are demonstrated with the use of schematics. The design, construction, and safe testing of lead acid storage batteries are also covered.</p>	54 hours
<p>Basic Hydraulics</p> <p>This course covers the principles, applications and theory of fluid power as it applies to agricultural machinery. Functions and operating principles are explained for the reservoirs, filters hoses, coolers, pumps, valves, cylinders and accumulators as these pertain to the hydraulic systems.</p>	30 hours
<p>Agricultural Machinery Theory and Demonstration</p> <p>This course covers tractor performance, suspension and steering on agricultural equipment, cutting, baling tillage and other related agricultural equipment.</p>	66 hours
<p>Power Trains I</p> <p>Power Trains I is a service and diagnostic course covering clutches, drive lines, universal joints, differentials and drive axles. Basic gearing principles are also covered in this course.</p>	24 hours
<p>Apprenticeship Technical Training</p>	240 hours

Course Descriptions

FIRST PERIOD HEAVY EQUIPMENT TECHNICIAN

<p>Safety, Materials and Tools</p> <p>This course addresses safety, communication, lifting procedures, wire rope, materials, fastening devices, hand, shop, power and measuring tools. Oxy-fuel, equipment and heating and cutting will also be covered.</p>	40 hours
<p>Suspensions, Wheels and Systems</p> <p>This course covers frame and suspension fundamentals, including inspection and preventative maintenance and service of bearings, seals, wheels, tires and hubs. Identification of common trailer systems and components and service of trailer coupling systems and landing gear are also covered.</p>	53 hours
<p>Hydraulic Brake Systems</p> <p>This course covers the fundamentals of hydraulic braking systems (drum and disc) including diagnosis and service procedures for hydraulic brake booster, parking brake and electrical braking systems.</p>	33 hours
<p>Electrical I and Electronics I</p> <p>This course provides an introduction to electrical theory, circuits, and magnetism in relation to industrial equipment. Using electrical test equipment students will learn to measure, test and repair electrical circuits. Battery fundamentals and service, basic electronics and electronic control systems are also covered.</p>	48 hours
<p>Hydraulics I</p> <p>This course covers hydraulic fundamentals and system components including reservoirs, filters, hoses and coolers, pumps, valves, cylinders and accumulators.</p>	21 hours
<p>Air Brakes</p> <p>In this course, air brake system fundamentals and mechanical components including truck/tractor, trailer air brake and air antilock brake systems are covered. Air brake testing and service is also covered.</p>	45 hours
<p>Apprenticeship Technical Training</p>	240 hours

FIRST SESSION JOHN DEERE TECH

<p>Electrical</p> <p>This course builds on the core electrical course covered in regular apprenticeship as well as the pre-requisite DLM taken before attending the John Deere Tech instructor-lead course with emphasis on John Deere equipment. The student should be able to successfully write the EE exam at the end of this session to receive credit on JDU.</p>	9 hours
<p>Hydraulics</p> <p>This course builds on the core hydraulic course covered in regular apprenticeship as well as the pre-requisite two DLM's taken before attending the John Deere Tech instructor-lead course with emphasis on John Deere equipment. The student should be able to successfully write the HY exam at the end of this session to receive credit on JDU.</p>	9 hours
<p>Service Advisor I (Computerized Service & Repair Info)</p> <p>Students are introduced to the John Deere Service Advisor system; solutions to simple problems will be covered. The student should be able to successfully write the SA exam at the end of this session to receive credit on JDU.</p>	20 hours
<p>Hay, Forage, Tillage and Seeding</p> <p>This course covers the features and adjustments of John Deere hay, forage, tillage and seeding tools.</p>	20 hours
<p>Tech Fundamentals Computerized Resources</p> <p>Introduction to PM Pro parts system, Pathways website and DTAC Tech Story – create a better at work orders using Time Management/Service Department Processes – JD Service & Fundamentals</p>	14 hours
JD Tech Training	72 hours
Work Experience Required	1500 hours

SECOND PERIOD AGRICULTURAL EQUIPMENT AND HEAVY EQUIPMENT TECHNICIAN

Engine Fundamentals, Service and Repair	75 hours
This course is an introduction to the repair of multi-cylinder two and four stroke internal combustion engines. Students will be required to disassemble an engine, make all routine engine measurements and perform selected engine machining and repair operations.	
Engine Systems	30 hours
This course familiarizes the student with common induction, exhaust, turbo chargers, lubrication, crankcase, and cooling systems found on diesel engines.	
Diesel Fuel Injection Systems	40 hours
Students are instructed in the area of safe handling and storage of diesel fuel, the combustion processes, basic fuel injection systems, fuel system service, port and helix fuel systems opposed plunger inlet metered fuel systems, engine governor theory and operation, and fuel injector fundamentals and service.	
Electronic Fuel Management	45 hours
This section covers the retrieval and interpretation of diagnostic information from electronically managed engine fuel systems. Also covered in this section is the variety of common designs of electronic controlled fuel systems used in the industry and the performance analysis and tune up procedures available.	
Heavy Duty Charging and Cranking Systems	50 hours
This course covers the fundamentals and service of cranking and charging in both 12 and 24 volt systems. Non-electric cranking systems are also covered in this course.	
Apprenticeship Technical Training	240 hours

SECOND SESSION JOHN DEERE TECH

<p>Advanced Engines The student will be introduced to the latest developments in John Deere engines. Operation and diagnostics are also discussed.</p>	36 hours
<p>Tractor Performance This section builds on the students' knowledge of tractor performance as it pertains to proper ballasting and engine performance. Engine emission regulations and dynamometer procedures are also covered in this course.</p>	12 hours
<p>Treating Customers Right This course enables the student to acquire the knowledge required to deal with customer situations that may arise in a dealership setting.</p>	12 hours
<p>Field Service This course introduces the students to the procedures and expectations of operating a field service truck.</p>	4 hours
<p>Ag Management Solutions (AMS) DLM & Intro to AMS Components The students will participate in a JDU DLM on AMS essentials. This DLM will familiarize the students with systems, options and key terms when dealing with John Deere AMS systems. Students will also be exposed to the installation of components on machines.</p>	8 hours
<p>JD Tech Training</p>	72 hours
<p>Work Experience Required</p>	1500 hours

THIRD PERIOD AGRICULTURAL EQUIPMENT TECHNICIAN

<p>Spraying Equipment This course will emphasize safety, sprayer monitoring systems, sprayer suspension systems and new advances in spray technology.</p>	30 hours
<p>Air Conditioning and Heating Systems The basics of air conditioning and heating systems are covered in this section. Service, inspection, diagnosis, testing and electronic controls are covered. Time will be spent on refrigerants, oils, retrofitting and CFC/HCFC Certification.</p>	33 hours
<p>Power Train II and Preventive Maintenance This section will cover the identification, diagnoses and repair of clutches, power takeoffs, heavy duty transmissions, transfer cases, final drives, preventive maintenance and failure analysis.</p>	53 hours
<p>Agricultural Harvesting Equipment This section includes the description and adjustments found on forage harvesters and combines.</p>	38 hours
<p>Seeding Equipment, Workplace Coaching Skills and Advisory Network This section covers descriptions and adjustments on various types of seeding equipment used in western Canada. Workplace coaching skills and advisory networking prepares the students for working in a trades career, mentoring apprentices and networking with other parties of interest involved in the apprenticeship network.</p>	23 hours
<p>Braking Systems Hydraulic brake systems used in agricultural equipment will be covered in this section including system fundamentals, drum and disc brake systems, boosters, service and diagnostic procedures.</p>	24 hours
<p>Precision Farming Systems This section is a detailed study of GPS, yield monitors and variable rate systems. After successful completion of this section, students will be able to operate and interpret information gathered by these systems.</p>	39 hours
<p>Apprenticeship Technical Training</p>	240 hours

THIRD SESSION JOHN DEERE TECH

<p>Combines, Forage Harvesters and Seed Carts This course provides an in depth study of current John Deere harvesting and seeding equipment with emphasis on operation, adjustment and diagnostic procedures.</p>	26 hours
<p>Ag Management Solutions (AMS) Operations and Diagnostics This course is an advanced study of operation and diagnostic techniques of the John Deere AMS system. After completion of this course, students will be able to operate and diagnose an AMS system.</p>	20 hours
<p>Personal Finance This course is designed to assist the student in personal financial planning. Students will learn about a variety of topics from balancing a cheque book to making investments.</p>	8 hours
<p>Electrical Systems Diagnostics This course provides an in depth study of John Deere electrical systems and theories of operation. Students will use Service Advisor to trouble shoot simulated electrical faults placed in equipment by the instructor.</p>	16 hours
JD Tech Training	70 hours
Work Experience Required	1500 hours

FOURTH PERIOD AGRICULTURAL EQUIPMENT TECHNICIAN THIRD PERIOD HEAVY EQUIPMENT TECHNICIAN

Advanced Hydraulics

114 hours

This advanced hydraulics section covers hydraulic principles, pump fundamentals, pump service, actuator fundamentals and service, hydraulic system types, testing and service, and electro hydraulics.

Suspension & Steering Systems and Accessories

34 hours

This section covers the diagnosing and servicing of off road steering and suspension systems. Also covered in this section are off road protective structures, ground engaging tools, electrical accessories and their service.

Power Trains III

92 hours

Power Trains III covers gearing principles, torque converters, power shift and automatic transmissions mechanical components, power shift and automatic shifting controls. The course covers the fundamentals of hydraulic retarders tracked equipment steering, undercarriage final drives, drive axles, differentials and clutches. Servicing of power shift and automatic transmissions, tracked equipment, undercarriage, final drives, drive axles, differentials and clutches is also included in this section.

Apprenticeship Technical Training

240 hours

FOURTH PERIOD HEAVY EQUIPMENT TECHNICIAN

<p>Power Train (Specific to Truck & Transport) Students will learn to service and diagnose common clutch types, drivelines and universal joints. They will learn basic gearing principles and will be able to explain operating principles, repair procedures and design features of selected types of transmissions. Operating principles and repair procedures of transfer cases and auxiliary drive units and drive axle assembly fundamentals and service will also be covered.</p>	124 hours
<p>Steering Systems This section covers the diagnosing and servicing of truck steering systems. Identification of steering angles and their effects on vehicle handling is also covered.</p>	27 hours
<p>Air Conditioning Operating principles of basic air conditioning and HVAC systems are covered in this course. Students will diagnose and service AC systems within legislated guidelines and explain replacement procedures for defective components.</p>	36 hours
<p>Anti Lock Brake Systems (Air and Hydraulic Brakes) Operation of anti lock braking systems and automatic traction control systems are covered. Students will learn to diagnose and service ABS and will be able to explain the operation of typical hydraulic and antilock braking systems.</p>	26 hours
<p>Vehicle Electrical Diagnosis & Failure Analysis Operation of typical truck electrical and warning circuits will be covered and students will learn to diagnose and repair truck electrical circuits. Predictive maintenance procedures utilizing failure and fluid analysis and Commercial Vehicle Inspection regulations will also be covered.</p>	27 hours
<p>Apprenticeship Technical Training</p>	240 hours

FOURTH SESSION JOHN DEERE TECH

Service Advisor II	20 hours
This course is an in depth study of the John Deere Service Advisor service tool and familiarizes the students with its capabilities. Extensive hands-on exercises on live units accompanied with instructor-lead lessons expand the students' confidence.	
Self Propelled Sprayers	20 hours
This course is an in-depth study of John Deere sprayers including the auxiliary systems found on the machine. The instructor will lead the students through features, adjustments and diagnostics found on John Deere sprayers.	
Power Trains	20 hours
This course identifies the different configurations of power trains used in John Deere equipment. The students will understand the benefits, theory of operation and service procedures of each of the John Deere power train configurations.	
Personal Finance	6 hours
The student will conclude the series of financial planning courses.	
John Deere Tech Graduation	4 hours
The last Friday afternoon of John Deere Tech training is dedicated to celebrating the accomplishments of the fourth period JD Tech students on the completion of the program. Students are encouraged to invite family members and dealer principle personnel to attend this celebration.	
JD Tech Training	70 hours
Work Experience Required	1500 hours

Suggested Tool List

When entering the program the student should consider the following basic tool set:

Punches:

1/8" Pin Punch
 5/32" Pin Punch
 3/16" Pin Punch
 1/4" Pin Punch
 1/8" Starting Punch
 1/4" Starting Punch
 Brass Drift Punch 1/2" & 3/4" diameter
 Center Punch

Pliers:

4" Vice Grips with cutter
 6" Vise Grips Needle Nose
 10" Vise Grip Pliers w/Cutter
 6" Needle Nose Pliers
 7" Diagonal Pliers
 Combination Pliers
 Internal/External Snap Ring Pliers

Screwdrivers:

Standard Tip Screwdriver Set
 No. 1 Phillips Screwdriver
 No. 2 Phillips Screwdriver
 No. 3 Phillips Screwdriver
 No. 4 Phillips Screwdriver
 Torx Driver Set .195 - .520

Socket Sets:

1/2" SAE Drive Set 22pc 12pt
 1/2" Metric Drive Set 10 pc 12pt
 1/2" Metric Drive Set 11 pc 6pt
 1/2" Drive Deep Sockets 10-27mm
 1/2" Drive Deep Sockets 3/8-1 1/4"
 3/8" Metric Drive Set 14pc 12pt
 3/8" SAE Drive Set 4" & 6" extensions
 3/8" Metric Drive Set 6pt
 3/8" Drive 10-21mm deep sockets
 3/8" Deep Socket Set 3/8-1"
 1/4" SAE Drive Set 12pc 6pt
 1/4" Metric Drive Set 6pt (5-13 mm)
 Socket Set Drive Size Adapters

Hammers:

1 lb. Ball Peen Hammer
 2 lb. Ball Peen Hammer
 Compothane "Dead Blow" Hammer 2 lb.
 Engineer's Hammer 3 lbs.

Gauges:

.0015"- .030" Feeler Gauge Set
 Metric Feeler Gauge Set

Wrenches:

12pt Comb. Wrenches SAE & Metric
 12pt Comb. Wrenches Metric 19 pce
 1/2" Torque Wrench 250 lbs.
 Allen Wrench Set SAE & Metric

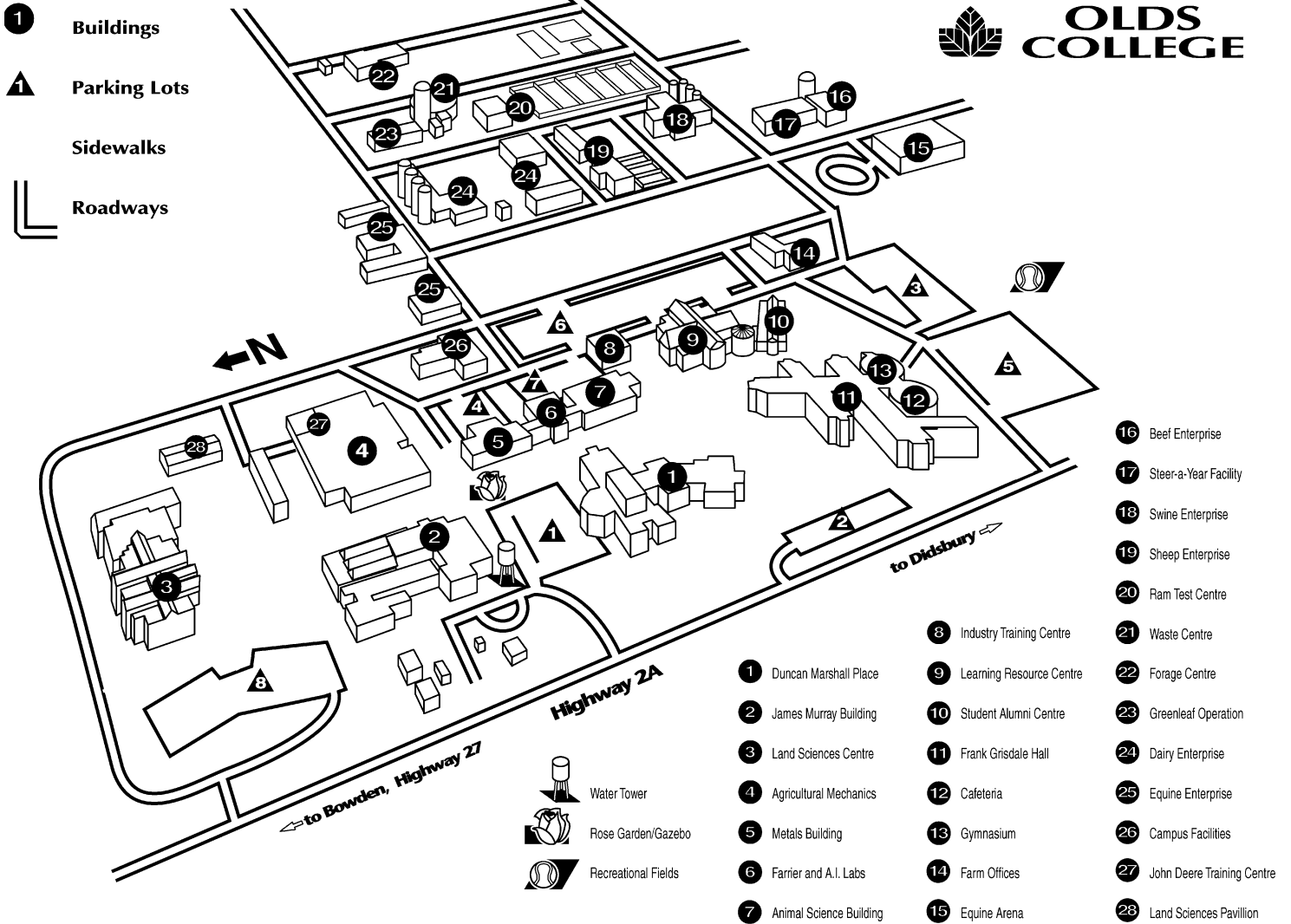
Chisels:

3/8" Cold Chisel
 1/2" Cold Chisel
 5/8" Cold Chisel
 7/8" Cold Chisel

Miscellaneous:

Safety Glasses
Ear Protectors
 16" Rolling Head Bar
 18" Pry Bar-Straight
 Gasket Scrapper
 Hacksaw with blades
 8" x 5/16" Round File w/handle
 10" Single Cut Mill File w/handle
 25 ft. Steel Tape
 Magnetic pickup tool
 Small mirror
 4-way Pick Set
 "O" Ring Tool Set
 3/8" Drive 5/8" Spark Plug Socket
 3/8" Drive 13/16" Spark Plug Socket
 Wire Brush
 Utility Knife
 12 in. Adjustable Wrench
 26 in. 10 Drawer Chest 4,358 cu. in.

Note: JD Tech students qualify to purchase John Deere tools and John Deere tool boxes at discounted prices through the "Tools for Tech Students Program". Information on the program can be found on the Careers Partnerships website through a John Deere dealers "Pathways" web access.



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