

2027
CNH Tech



OLDS COLLEGE
CNH TECH PROGRAM

Olds College and Case New Holland Limited have teamed up to offer this unique program as a professional development stream for Case New Holland Technicians to become certified. The program is structured over four years with ten weeks of training at Olds College each year.

During each of four years, the CNH Tech Apprentice works approximately nine to ten months at a sponsoring dealership and receives ten weeks of technical training at Olds College; the first 8 weeks are Apprenticeship Training, followed by 2 weeks of specialized CNH training.

Applicants must be employed by a sponsoring Case New Holland dealer and be indentured as an agricultural equipment technician apprentice or a heavy equipment technician apprentice, or already have Journeyman status in either trade.

The program supplements apprenticeship training with specialty training on Case New Holland equipment.

Case New Holland employed Journeymen may take the specialty training as a standalone program.

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
- Case New Holland/Olds College CNH Tech Completion Award

CNH Tech admissions are processed through the Industry Training and Continuing Education department online at CNH Tech Admissions or call 403-556-4740.

CNH Tech Program Overview

The CNH 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 CNH and Olds College. Upon completion of the program, graduates will also receive a CNH Tech Completion Award presented by CNH Limited and Olds College.

The CNH Tech program can be completed in approximately 48 months by attending two weeks of training per year in the months of March or April 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 Case and New Holland 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 Case or New Holland 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 CNH 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.

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 CNH Tech Program curriculums may undergo slight changes from year to year and/or midyear based on student or dealer requirements.

Please note: Pre-requisite opportunities are available through CNH web academy. Please ensure technicians attending have completed the required pre-requisites prior to arriving on campus for their training.

Admission Requirements

Dealer Sponsorship
Applicants must be employed and sponsored by an authorized CNH 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 (AIT) 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.**

Complete curriculum guides, including individual course outlines, are available online on the AIT website.

The Agricultural Equipment Technician Curriculum guide can be found here:
Agricultural Equipment Technician

The Heavy Equipment Technician Curriculum guide can be found here:
Heavy Equipment Technician

Available apprenticeship training dates can be found here: Tradesecrets - Class Catalogue

- 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.alberta.ca on the Internet.
- 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.
- **Please note** an apprentice should successfully complete the corresponding apprenticeship level before attending the following CNH Tech Level. Should a student not be successful with the apprenticeship period before entering the CNH Tech class, he/she **may be** permitted to attend the CNH Tech class, but will not be admissible to proceed to the next level until successful completion of the appropriate apprenticeship periods.

CONTACT INFORMATION

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

CNH Tech admissions are processed through the Continuing Education and Industry Training department online at CNH Tech Admissions or call 403-556-4740.

Additional information regarding the Olds College CNH Tech program, including admissions, is available from the following contacts:

Industry Training & Continuing Education
CNH Tech Admissions
Olds College
4500 - 50th Street
Olds, AB
Ph: 403-556-4740
Toll Free: 1-800-661-6537
itce@oldscollege.ca

Paul Blankestijn
Associate Dean
School of Trades and Skills
Olds College
4500 – 50th Street
Olds, AB T4H 1R6
Cell: 403-805-5742
Toll Free: 1-800-661-6537
pblankestijn@oldscollege.ca

2027 CNH Tech Curriculum*

CNH Tech First Year Content - March 1 - 12, 2027

CNH Round Balers (CNH for Credit)	16 hrs
Medium Utility Tractors (CNH Credit)	16 hrs
Disk Sickle Mower Conditioner (CNH Credit)	16 hrs
Detailed Report Writing	10 hrs
Information Retrieval & Monitors (ASIST, New Gen Parts, eTIM, PLM Connect, telematics)	18 hrs
Effective Communications	4 hrs

CNH Tech Second Year Content - March 15 - 25, 2027

CNH Diagnostic Engine Training (CNH for Credit)	32 hrs
CNH Engines After Treatment (CNH for Credit)	32 hrs
Engine Tune Up & Engine Timing Live	6 hrs
Effective Communications	4 hrs
Personal Finance	6 hrs

CNH Tech Third Year Content - March 1 - 12, 2027

NH & Case Combine Productivity	24 hrs
4 Wheel Drive (CNH for Credit)	32 hrs
CNH Air Carts (CNH for Credit)	16 hrs
Legacy/Heritage Air Carts	4 hrs

2027 CNH Tech Curriculum* - continued

CNH Tech Fourth Year - March 15 - 25, 2027

Precision Farming Systems (CNH for Credit)	32 hrs	
Guidance Systems Diagnostics (CNH for Credit)	32 hrs	
Application Systems		16 hrs

CNH Tech admissions are processed through the Industry Training and Continuing Education department online at CNH Tech Admissions or call 403-556-4740.

***Please note:** Dates are subject to change based on instructor availability, pre-requisite activities, schedule, and/or enrolment; class offerings may be reduced or removed based on enrolment activity.

Minimum student numbers are required prior to offerings of each level of CNH tech training. We will do our best to communicate the cancellation of training. Cancellation of training opportunities will be communicated to enrolled individuals with adequate notice.

Courses may be substituted based on instructor training/certification opportunities to ensure the best learning experiences are realized.

Please note all suggestions made at Industry Advisory Committee meetings are noted, and we strive to meet all requests; although training and instructor availability may inhibit immediate changes to this curriculum.

Finalized training itinerary, if changed from within this document, will be communicated ahead of training dates.

Prerequisite opportunities are available through CNH web academy. Please ensure technicians attending have completed the aforementioned prerequisites prior to arriving on campus for their training.

1st YEAR - CNH TECH Courses

CNH Round Balers (CNH For Credit) **16 Hours**

This course introduces participants to the New Holland Roll-Belt™/Pro-Belt™ and the Case IH RB5/RB6 HD Series Round Balers. In this course, students will analyze round baler specifications and define baler driveline requirements, and they will also identify electrical hardware components, adjust feeding components, review bale formation components and perform various EST tasks. They will also practice display and virtual terminal setup, use AEF ISOBUS tools, and use CNH Industrial tools & resources.

Utility Medium Technician (CNH For Credit) **16 Hours**

During the course, participants will identify the systems and options available on the tractor, review the location and function of the tractor's controls, identify components involved in power distribution, discuss the layout and functionality of CAN bus networks, analyze the generation and control of hydraulic pressure systems, analyze the function of service and park brakes, and compare and contrast the electro-hydraulic operation of MFD and differential locks.

Disk Sickle Mower Conditioner (CNH For Credit) **16 Hours**

This course provides an overview of the Disc Mower/Conditioner product line while going into greater depth at a component level to ensure understanding of the machine systems and how they all work together. Course objectives include an overview of hydraulic and electrical systems and where to locate additional information, components and procedure for cutter bar maintenance and repair, and review of field settings and adjustments to aid in addressing customer concerns related to crop processing. They will also review previous Technical Helpdesk Cases to better understand what makes up a good case

Detailed Report Writing **10 Hours**

Students will go through proper terminology for parts, actions and procedures, as well as go through proper layout of work order service reports and multiple parts identification exercises on current model equipment. Multiple examples of good and bad service reports, Multiple service examples/demos and opportunities to create work order service reports.

Information Retrieval & Monitors **18 Hours**
(ASIST, New Gen Parts, eTIM, PLM Connect, telematics)

This is an overview of all things Dealer Portal, Home Tab, Work Tab, E-Tim, RST, THD, Remote Display, DMC, Tech Knowledge, OEM Support. Also EST basics and how to hook up to a machine and EST – RST - and how to pull and store configurations and codes.

Effective Communications **4 Hours**

This course will apply the rules of language conventions for workplace writing, including how to apply the rules of punctuation and grammar in writing, how to edit common sentence structure and word usage errors, and how to use paragraph structure for workplace communications.

2nd YEAR - CNH TECH Courses

CNH Diagnostic Engine Training (CNH For Credit) **32 Hours**

This course consists of classroom and shop training covering the theory, diagnostic, and service procedures of the various performance impacting systems used on today's Industrial engine applications. This is a diagnostic based, hands-on class involving case study, bench, computer, and live testing on the various engine systems used on CNH Industrial powered applications. Students attending this course will learn about the various FPT engines used in today's industrial applications in order to perform proper testing, diagnosing and repair, and develop a stronger understanding of the fuel systems (Mechanical pump, unit injection, and common rail) used on FPT engines. They will learn about Bosch, Stanadyne & Delphi mechanical fuel systems used on industrial applications and how systems such as lubrication, cooling, and air induction can impact performance. Students will troubleshoot actual system faults and learn about fault codes, analysis of sensor specifications, and operating strategies of the engine management system on electronically controlled engines. They will learn about non-invasive performance testing techniques and how to interpret stored data, and evaluate potential performance complaints in order to determine whether faults are fuel, mechanical, electrical, or emissions control related.

CNH After-Treatment Systems (CNH For Credit) **32 Hours**

In this course, students will review how emissions systems have evolved through each emission tier, develop a functional understanding of the components used with the various engine emission systems found in today's industrial applications, Cooled Exhaust Gas Recirculation, Diesel Particulate Filter, Particulate Matter Catalyst, Diesel Oxidation Catalyst, Selective Catalytic Reduction, Learn about sensors and actuators of the systems with concentrate on diagnostic paths to troubleshoot actual system faults, Understand diagnostic routines, strategies and tests on ATS components and systems, Discover how the diagnostic service tool has evolved with each emission tier, Learn how to interpret stored data to reinforce diagnostic assumptions, and Learn the various levels of inducements. Students will complete various assigned diagnostic tests and interpret the results, identify and resolve a variety of simulated system faults and report the findings, and diagnose and troubleshoot with the aid of EST, schematics and eTim. This includes 16 hours of guided online training.

Engine Tune Up & Engine Timing Live **6 Hours**

Engine cylinder head valve set, camshaft timing and injection timing on a live unit (tractor or combine).

Effective Communications **4 Hours**

Students will learn how to apply the principles of effective writing to produce workplace documents, including how to identify the audience, purpose, and tone of workplace documents and how to respond to selected scenarios with appropriate email format, tone, and strategy.

Personal Finance **6 Hours**

In this course, students will study the time value of money and inflation, compound interest, assets, liabilities and net worth. They will discuss the risk and rewards and taxation of various types of investments and income. They will also discuss credit scores, consumer credit and mortgages. The student will then calculate their future retirement savings goal, and devise a budget to achieve it.

3rd Year - CNH TECH Courses

NH & Case Combine Productivity **24 Hours**

This course will introduce students to the principles of grain harvesting, the machines used, the crops that are harvested and how the machine systems are organized. The students will be able to describe what combines are, what combines do, why seed size matters, the different types of combines, and the systems used to harvest any grain. We will cover: current model offerings, types of headers, feeding, threshing, separation, cleaning, grain handling, residue handling, and thought processes for various harvesting adjustments.

AFS Connect Steiger/T9 (CNH for Credit) **32 Hours**

This is a four day Instructor led course that builds upon the AFS Connect Steiger/T9 with PLM Intelligence online course that allows students to learn the details of the electrical, hydraulic, and mechanical systems of the tractor. Emphasis is placed on using eTIM based resources to effectively resolve issues with the electrical, hydraulic, and mechanical systems. Content will include electrical power distribution, controllers, on board DIAG, sensor and circuit testing, use of the Electronic Service Tool as it applies to AFS Connect Steigers/T9s with PLM Intelligence, hydraulic power distribution and hydraulic pressure testing.

CNH Air Carts (CNH for Credit) **16 Hours**

This 2-day program is an introduction and diagnostics to current air carts. The technician who attends this course will learn to perform procedures with a higher degree of confidence through increased product knowledge and hands-on shop training. Students participating in this session will have an understanding of the different models and configurations, be able to locate and explain electrical and hydraulic components, understand the programming and operations of the monitor, learn how the Electronic Service Tool is used, and perform software download, and properly connect the implement to the tractor and adjust to achieve maximum performance.

Legacy/Heritage Air Carts **4 Hours**

Students will learn about Legacy series CIH 4 series/NH p1000 series air carts, including an overview of the electrical, hydraulic, and pneumatic systems.

4th YEAR - CNH TECH Courses

Advanced Precision Farming Technology (CNH For Credit) 32 Hours

Students will learn how to identify what the Pro 1200/IntelliView 12 Guidance kit is, how to understand what platforms are currently supported, perform display, pcm, and cgr software updating (on Factory Fit, remaining controllers as well). They will demonstrate troubleshooting based on scenarios provided covering both machine/implement set up, perform calibrations, demonstrate how to send data to the cloud and import data from the cloud, and how to set up and utilize Cart Automation (under scenarios).

Guidance Systems Diagnostics (CNH for Credit) 32 Hours

This course will acquaint the student with the new guidance products, and provide technical insight into the guidance system. Students will study guidance operations, configurations, and diagnostics. Lessons will include Guidance Swath creation and management, guidance setup and calibration, GNSS and guidance diagnostics, and boundary creation.

Introduction To Sprayer Product Control & Nozzle Control 16 Hours

In this course, students will learn about current CNH product offerings, application systems and how to trouble shoot.

RESPONSIBILITIES OF PARTICIPANTS

Apprentice/Journeyperson

- Meet specified admission and academic requirements established by Alberta Apprenticeship Industry Training and CNH Industrial
- Obtain and maintain sponsorship with a CNH dealership throughout the duration of the training.
- Maintain academic standards and adhere to academic policies consistent with Alberta Apprenticeship Industry Training and Olds College of Agriculture & Technology
- Wear uniforms, safety glasses and protective footwear while on campus in accordance with the requirements of Olds College of Agriculture & Technology and CNH Industrial.
- 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 of Agriculture & Technology
- Complete all required core courses/DLM's before attending CNH Tech training.

CNH Industrial

- Encourage dealer cooperation and support.
- Provide specialized training for CNH Tech Instructors/Coordinator.
- Provide Olds College with CNH 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/liaison officer selection procedures.
- Monitor all phases of the CNH Tech program to assure success.
- Provide on-line assistance to technical information.

RESPONSIBILITIES OF PARTICIPANTS (continued)

CNH Dealerships

- Indicate to Olds College of Agriculture & Technology 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 of Agriculture & Technology's CNH Tech Coordinator in planning, registrations, and monitoring the work experience.
- Provide appropriate work experience that reinforces the participant's most recent classroom instruction.
- Pay apprentices during periods of dealership work experience.
- Recommended to provide the CNH Tech apprentice with uniforms as used in the dealership.

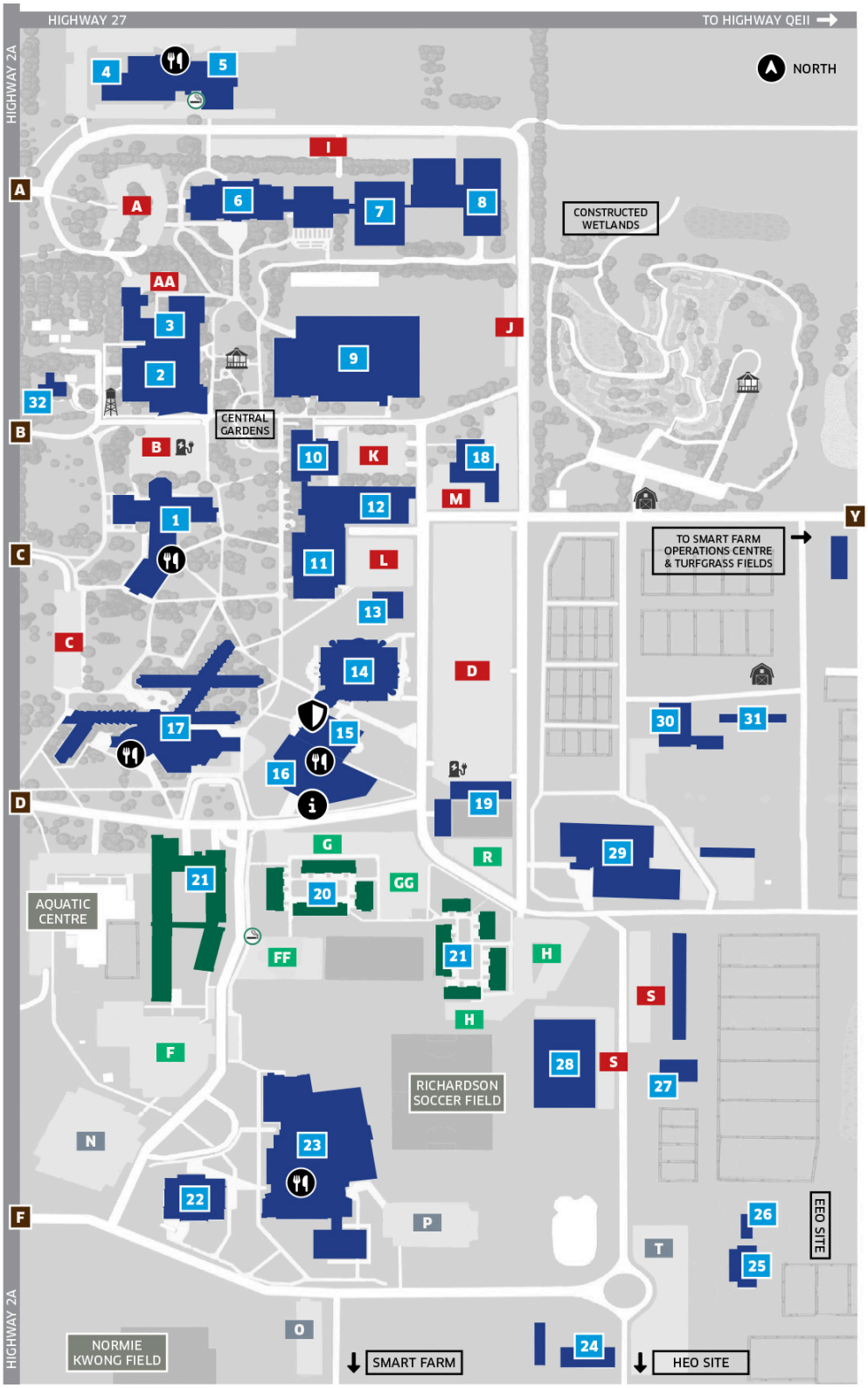
Olds College of Agriculture & Technology

- Maintain the curriculum approved by Alberta Apprenticeship and Industry Training
- Maintain the curriculum requested and approved by CNH Industrial and CNH Dealerships
- Provide classroom and laboratory facilities for educational purposes.
- Provide CNH trained instructors (one instructor will act as liaison between Olds College of Agriculture & Technology and CNH Industrial and will serve on a CNH Tech Advisory Committee).
- Provide specialty equipment and tools.
- Provide secure storage areas for training aids, special tools, parts/components and complete machines and accessories.

OLDS COLLEGE
OF AGRICULTURE & TECHNOLOGY

CNH

Olds College of Agriculture & Technology Map



Olds College of Agriculture & Technology Map Legend

1. Duncan Marshall Place (DMP)
2. Werklund Agriculture and Technology Centre (WATC)
3. Dr. Robert Turner Building (OCCI)
4. Teaching Brewery & Retail Store
5. Pomeroy Inn & Suites
6. Land Sciences Centre (LSC)
7. Greenhouse
8. Landscape Pavilion
9. W.J. Elliott Building/Trades (WJE)
10. Metals Building
11. Animal Health Education Centre (AHEC)
12. Meat Retail Store
13. Industry Training Centre (ITC)
14. Learning Resource Centre (LRC)
15. Alumni Centre
16. E-Learning Centre (ELC)
17. Frank Grisdale Hall (FGH)
18. Campus Facilities
19. Technology Access Centre for Livestock Production (TACLP)
20. College Court Townhouses
21. Centennial Village Residence
22. Fine Arts & Multi Media Centre
23. Ralph Klein Centre (RKC)
24. Chinook's Edge Bus Maintenance
25. Livestock Centre
26. Cold Barn
27. Beef Centre
28. Brawn Arena (South)
29. McClellan Arena (North)
30. Equine Centre/Farrier Lab
31. Foaling Barn
32. Smart Ag Innovation Centre (SAIC)