



Bulletin 50590

Learning Center Course Catalog
Revision 41
10/23

WEIGHING TECHNOLOGY
LEARNING CENTER

COURSE CATALOG
for the
Year 2024

Disclaimer

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Section 1: Introduction

It all began in 1830 when Thaddeus Fairbanks invented the platform scale. That invention not only revolutionized the industry but served as its hallmark. To this day, the Fairbanks scale is still recognized as a standard of excellence in the weighing industry.

We at Fairbanks are proud of our heritage as well as our people, our products, and our service to customers. Throughout the years we have constantly strived to maintain that hard-earned reputation by insisting on the highest quality in our products and customer service.

To assist in this endeavor, a technical training center was instituted over thirty years ago. Initially at the factory in St. Johnsbury, VT, it is now located at the Corporate Office in Overland Park, Kansas. Today, the Fairbanks Technical Training program continues this commitment by providing the best field service training program in the scale industry. This is accomplished through classes taught by experienced Technical Support Representatives with an unmatched amount of real-world experience. They are supported by administrative personnel as well as the knowledge and expertise of engineers, product specialists, and numerous other resources available at the Industrial scale factory in St. Johnsbury, Vermont, and the heavy capacity scale factory in Meridian, Mississippi.

The training program itself emphasizes hands-on experience supported by classroom lectures, laboratory exercises, quizzes, examinations, and take-home materials. Instructors and equipment can be made available after-hours upon request for individuals requiring additional assistance or further practical experience. Class enrollments are limited to eight (8) people, unless specified otherwise, to ensure optimum time for individualized instruction and training.

Special training sessions are also offered at in-field locations upon request and the availability of Technical Support personnel.

Section 2: General Information

A. Required Equipment and Supplies

1. A list of required equipment will be included with the pre-course materials sent to each attendee. Fairbanks technicians failing to bring the required equipment will have it ordered at the expense of their Customer Support Center.

The general required equipment list includes:

- Windows Laptop
 - Bring the laptop power supply and **all** cable accessories.
 - Laptop must have an RS232 serial port (DB9) or a working USB to serial dongle.
 - Laptop should have **FB1200 Viewer** installed and tested.
 - Laptop should have **PC225x Utility** installed and tested.
 - Laptop should have **HyperTerminal** installed and tested.
 - Laptop should have **ComDebug** (Windmill) installed and tested.
- Mobile phone
- Screwdrivers (standard & Phillips)
- Small screwdrivers (tweakers)
- Side cutters
- Wire strippers
- Load Cell Simulator with cable
- Tech-Lynk cable (for FB1200)
- DVM (Fluke) with alligator clips.
 - NOTE: The TSA typically will not allow you to bring screw drivers and similar hand tools on the plane as carry-on items. Please place these in your checked luggage to avoid hassles with the TSA folks.

All students are expected to wear an appropriate work uniform. Safety shoes and safety glasses are required PPE for training classes held in Meridian, MS.

B. Rules and Regulations

1. During the training session, students will be subject to rules and regulations concerning the following: (Additional information will be given the first day of class.)
 - a. Conduct in Class.
 - b. Completion of classwork.

2. Student Dress
 - a. All students are expected to maintain a neat, clean appearance during the training session.
 - b. Acceptable attire is a Fairbanks or company uniform. **Safety shoes and safety glasses are required PPE for training classes held in Meridian, MS.**

C. Performance

1. High performance standards are the norm.
2. At the completion of each technical training course, each student will be assigned a grade based on his or her ability to perform the tasks assigned.
3. Grades will be based on the following:
 - a. The average of any quizzes and/or any laboratory exercises given throughout the week will be combined with the written and, if applicable, hands-on final examination score(s) to create a percentage score based on 100%.
 - b. Grades will be assigned according to the score received. A further explanation of class objectives will be given by the instructor the first day of class.
 - c. Students' ability to follow written and verbal instructions.

Section 3: Enrollment Procedures

PROCEDURES BELOW APPLY TO ALL FAIRBANKS PERSONNEL AND DISTRIBUTOR TECHNICIANS.

A. General Enrollment Information

1. Classes are held at the corporate office in Overland Park, KS (Kansas City airport code = MCI) and the Meridian MS, manufacturing plant (Jackson, MS airport code = JAN)
2. For Fairbanks technicians, **ALL** airline and hotel reservations are managed by the Training department.
3. Due to the lead time required to secure cost-effective airline reservations and meal advances, all technicians must be enrolled four weeks prior to the start of the course to be attended. Late enrollments will be accepted at the discretion of the Technical Training Manager.
4. Cancellations, though inconvenient and regrettable for all concerned, are sometimes necessary due to changes in business demand or other unforeseen occurrences. A two-week notice of cancellation is appreciated, when possible.
 - a. Cancellations must be received via e-mail. Send to: training@fairbanks.com
 - b. Any training instructions and materials issued to any Fairbanks technician prior to the cancellation, including airline tickets must be returned to the Technical Training Department within ten (10) days of the cancellation or the department reserves the right to charge for these items.
 - c. A Fairbanks technician cancelling after an airline ticket has been purchased must be rescheduled into the same or another class (providing prerequisites are met) within one (1) year or the Training Department reserves the right to charge the Customer Support Center for the cost of the unused ticket.
 - d. Should a Fairbanks technician leave Fairbanks employment after airline tickets have been purchased, the Training Department reserves the right to charge the Customer Support Center for this cost.
 - e. Since distributor personnel purchase their own airline tickets, 4.b., 4.c. and 4.d. do not apply.

5. Fairbanks Web Based Training (WBT) is the **only** method for enrolling Fairbanks technicians or distributor technicians in Technical Training classes located in Overland Park, KS or Meridian, MS. Logon to Nexus (nexus.fairbanks.com) and click on the Training icon.

B. Enrollment Process

1. **All** enrollment is done through WBT.
2. Prerequisites must be complete before WBT will allow a student to enroll in a course.
3. Technicians enrolled on a "*first-come-first-served*" basis. Enrollment limits have been set for each class based on complexity and equipment constraints to maximize individualized attention. Once a class has been filled, WBT will allow students to enroll in a waitlist position. Should an opening occur, waitlisted students will move to an enrolled status in the order they were waitlisted.

C. Travel and Lodging

1. **Distributor technicians are responsible for the cost of and securing their own airline or other travel reservations** and should do so in accordance with the conditions set forth in the items listed below or the exceptions noted within the "Course Descriptions" section that follows.
 - a. Upon securing reservations, distributor technicians are requested to email a copy of their itinerary to the Technical Training Department as soon as possible. Send to: training@fairbanks.com.
 - b. The Technical Training Department will arrange transportation for the distributor technician from the airport to the appropriate hotel, as well as from the hotel to the training facility. Further instructions and directions will be given in the pre-course Welcome Letter sent to each attendee and their Manager.
 - c. Provided the distributor stays at the hotel contracted by Fairbanks, Fairbanks will manage reservations and cover the cost of the hotel room. Cost will be billed directly to Fairbanks.
 - i. Charges for movies, games, mini-bar or other similar charges are **not** covered.
 - ii. If a cancelation occurs, Fairbanks must be notified at least 24 hours in advance or distributor may be billed for room charges. (Reference section A.4.)

2. Travel schedules:
 - a. Travel **to** the airport is on Monday, between the hours of 8 am to 5 pm when possible. Departure **from** the airport on Friday morning, late afternoon, or early evening, depending on course schedule and flight availability. **Travel on a Saturday or Sunday requires prior written approval by the Technical Training Manager** (Derrick Mashaney – dmashaney@fairbanks.com)
 - b. Classes start on Tuesday morning at 8 am sharp.
 - c. Consult the specific instructions for each class as outlined in the "Course Description" section for any exceptions.
 - d. Travel arrangements and schedules may be subject to change.
3. Meals
 - a. Breakfast is provided at the hotel.
 - b. Lunch is provided at the training facilities.
 - c. Dinner is generally open for students to make their own dinner plans. Dinner is reimbursable up to \$30 per student.
 - i. Receipts are to be attached to distributor expense report.
4. Lodging
 - a. **All** hotel Reservations for all out-of-town attendees, both Fairbanks and distributor personnel, will be handled by the Technical Training Department. Early checkout must be pre-approved by Training Department.
 - b. Accommodation information will be detailed in the pre-course Welcome Letter sent to each attendee approximately 2 weeks before the class start date.
5. Ground Transportation
 - a. Vehicles for students will be provided by the Training Department for the students. Details will be provided to the selected drivers as part of the Welcome Letter.
 - b. Due to insurance restrictions, distributor personnel are prohibited from driving a Fairbanks vehicle or any vehicle rented by Fairbanks.
 - c. Based on arrival times into the airport, arrangements will be made and communicated to all attendees in the Welcome Letter for travel

arrangements from the airport to the appropriate hotel in a timely manner.

- d. Company policy prohibits consumption or use of alcoholic beverages, tobacco products, or any illegal substances in any vehicle owned or rented by the Fairbanks Technical Training Department.
- e. Driving
 - For Fairbanks employees, driving is **limited to a range of 250 miles**. Anything outside this range is not allowed.
 - In all cases, Fairbanks technicians driving Fairbanks vehicle requires prior approval by the Technical Training Manager (Derrick Mashaney – dmashaney@fairbanks.com).
- f. Specific transportation instructions are given to attendees via the pre-course Welcome Letter each will receive prior to travel.

6. Expense reimbursement

- a. All **Fairbanks technicians** are required to complete a Chrome River expense report. Fairbanks expense policy must be followed for reimbursement. Expense Reports for **Fairbanks Technicians** are to be completed in Chrome River and submitted within 5 business days of the class attended.
- b. **Distributor technicians** will receive a blank copy of the Expense Report and will be reimbursed provided a properly completed expense report is received within 30 days of the class attended. Distributor Expense reports are to be completed and mailed **including receipts** within 30 days of the class attended to:
Fairbanks Scales
Attn: Derrick Mashaney
6800 West 64th Street
Overland Park, KS 66202

Section 4: Instructor Lead Course List

Note: All prerequisite courses must be completed prior to the beginning of the course being attempted.

Course Title:

IND-101 ANALOG INSTRUMENTATION

Description:

This course covers:

- Basic load cell theory
- DVM usage
- Load cell simulator usage
- Print formatting
- Standard instrument features
- General interfacing
- Serial Interfacing
- Calibration
- Configuration and installation for the following instruments, printers and accessories:
 - FB1200
 - FB2255
 - NexWeigh
 - Remote Displays
 - 4-20 mA
 - FB1200 Viewer
 - PC255x Utility
 - TM-U590 Printer
 - TM-U295 Printer
 - Tape Printers

Instruction will include hands on Laboratory exercises. There will be a final assessment test.

Objectives:

At the completion of this course you will be able to do and understand the following:

FB2255

- Understand the capabilities of the FB2255 instruments.
- Understand and use the PC225x utility to set up and configure the FB2255 instrument.
- Demonstrate the ability to assemble, setup, program, & calibrate a FB2255 to meet given requirements in a timely manner.
- Understand the available accessories for the FB2255 series.
- Demonstrate the ability to install the available accessories for the FB2255 to meet given requirements in a timely manner.
- Demonstrate the ability to test and troubleshoot a FB2255 system with its available accessories in a timely manner.

FB5050 “NexWeigh”

- Understand the capabilities of the FB5050 “NEXWEIGH” instrument.
- Demonstrate the ability to assemble, setup, program, & calibrate a NexWeigh to meet given requirements in a timely manner.
- Understand the 4-20mA accessory for the NexWeigh
- Demonstrate the ability to install the 4-20mA for the NexWeigh to meet given requirements in a timely manner.
- Demonstrate the ability to test and troubleshoot the NexWeigh with its available accessories in a timely manner.

FB1200

- Understand the capabilities of the FB1200 instrument.
- Demonstrate the ability to assemble, setup, program, & calibrate a FB1200 to meet given requirements in a timely manner.
- Understand the functions of the FB1200.
- Demonstrate the ability to test and troubleshoot the FB1200 in a timely manner.

IND-101 Analog Instrumentation Prerequisites:

		Training	
Electrical/ Electronics	Course Name	WBT	Class-room
Grounding Principles	Grounding Principles	✓	
	Grounding Safety	✓	
	Grounding, Lighting and Static Protection	✓	
	GFCI Awareness	✓	
Basic Electronics	Ohm's Law	✓	
	Load cell Theory	✓	
Troubleshooting	Troubleshooting Basics	✓	
Digital Multimeter (DMM)	FB DMM Meter Functions	✓	
	FB DMM Voltage Measuring	✓	
	FB DMM Resistance	✓	
Data Communications	BCD	✓	
	ASCII (Parts 1 & 2)	✓	
	RS232 (Parts 1, 2 & 3)	✓	
	20mA (Parts 1 & 2)	✓	
	Network Principles (Parts 1 & 2)	✓	

Course Title:**IND-103 INTRINSICALLY SAFE
INSTRUMENTATION****Description:**

This course covers the principals of intrinsic safety, 2800 instrumentation and related accessories, QuickSilver Intrinsicly Safe Bench Scale (QIS), H90-3052 intrinsically safe instruments and related peripherals, Factory Mutual regulations for Hazardous and Safe Area installations.

Instruction will include hands on Laboratory exercises. There will be a final assessment test.

Objectives:

At the completion of this course, you will be able to do and understand the following:

- Understand the concepts, terms, and classification of Hazardous Area's.
- Understand the concept, terms, and rules of INTRINSIC SAFETY.
- Understand the Quicksilver IS.
- Demonstrate the ability to assemble, setup, program, & calibrate a Quicksilver IS bench scale to meet given requirements in a timely manner.
- Understand the H90-3052.
- Demonstrate the ability to setup, program, & calibrate a H90-3052 to meet given requirements in a timely manner.
- Understand the 2800 Digital Weight instrument and features.
- Demonstrate the ability to setup, program, & calibrate a 2800 to meet given requirements in a timely manner with a variety of different interfaces and scales.
- Understand the available accessories for the 2800.
- Demonstrate the ability to install the available accessories for the 2800 to meet given requirements in a timely manner.
- Demonstrate the ability to test and troubleshoot a 2800 system with its available accessories in a timely manner.

**IND-103
Intrinsically Safe
Instrumentation
Prerequisites:**

Course Name	Training	
	WBT	Class-room
IND-101 Analog Instrumentation (NexWeigh, FB1200, FB2255)		✓
Intrinsically Safe Overview	✓	

Course Title:

IND-401 FB7100 SERIES INSTRUMENTATION

Description:

This course covers the following items:

Basic scales review, Intalogix technology, standard features, product comparison, product specifications, security, navigation short cuts, grounding, load cell wiring, accessories, audit trail, adding a prompt, remote display, outputs, backup and restore, programming ticket syntax and formatting.

GTN mode, Basic mode, Inbound/Outbound mode, GTN formatting, inverted GTN formatting, inverted basic in formatting, Inbound ticket formatting, Outbound ticket formatting, inverted ticket formatting.

Instruction will include hands on Laboratory exercises. There will be a final assessment test.

Objectives:

At the completion of this course, you will be able to do and understand the following:

- Understand the capabilities of the FB7100 series instruments.
- Understand and successfully demonstrate how to format a ticket using the front panel controls.
- Understand and successfully demonstrate how to use the WEB utility to set up and configure the FB7100 series.
- Demonstrate the ability to assemble, setup, program, & calibrate an FB7111 to meet given requirements in a timely manner.
- Understand the available accessories for the FB7100 series.
- Demonstrate the ability to install the available accessories for the FB7111 to meet given requirements in a timely manner.

- Demonstrate the ability to test and troubleshoot a FB7111 system with its available accessories in a timely manner.

**IND-401
FB7100
Instrumentation
Prerequisites:**

Course Name	Training	
	WBT	Classroom
IND-101 Analog Instrumentation (NexWeigh, FB1200, FB2255)		✓
ALL WBT FB7100 lessons	✓	
Troubleshooting Basics	✓	

Course Title:

IND-409 ADVANCED FB6000 SERIES INSTRUMENTATION

Description:

This course covers the following items:

Standard features, product comparison, product specifications, Setpoint Terms, Setpoint configuration, Setpoint Operation Modes, Use of Interlocks, Web interface, Remote Switches, On Scale Filling, load cell wiring, installation and use of accessories, remote display, ACC 777 traffic light and L540 label formatting.

Instruction will include hands on Laboratory exercises. There will be a final assessment test.

Objectives:

At the completion of this course, you will be able to do and understand the following:

- Understand the capabilities of the FB6015 series instruments.
- Demonstrate the ability to assemble, setup, program, & calibrate an FB6005 and a FB6015 to meet given requirements in a timely manner.
- Understand and successfully demonstrate how to use the WEB utility to set up and configure the FB6015 series.
- Understand and successfully demonstrate how to format a label using the WEB interface.
- Understand the available accessories for the FB6015 series.
- Demonstrate the ability to install the available accessories for the FB6015 to meet given requirements in a timely manner.

- Demonstrate the ability to install the available accessories for the FB6015 to meet given requirements in a timely manner.
- Understand the terms and application of the Setpoint features of the FB6015.
- Demonstrate the ability to configure the different modes of Setpoint Operation as per given requirements, in a timely manner.
- Demonstrate the ability to test and troubleshoot a FB6015 system with its available accessories in a timely manner.

**IND-409
Advanced FB6000
Instrumentation
Prerequisites:**

Course Name	Training	
	WBT	Classroom
All WBT FB6005 / FB6015 Lessons	✓	
IND-406 FB6000 Instrumentation OR IND-401 FB7100 Instrumentation		✓

Course Title:

IND-404 FB2560 SERIES INSTRUMENTATION

Description:

This class covers the standard features, FB2560 components, passwords, navigation guide to calibration, levertronic installation, web browser programming, direct connect to PC, network connection, print formatting, form printers, reports. Each topic will be accompanied by hands on laboratory exercise.

Instruction will include hands on Laboratory exercises. There will be a final assessment test.

Objectives:

At the completion of this course, you will be able to:

- Understand the standard features of the Instrument.
- Understand the variety of load cell interfaces available.
- Understand Intalogix Technology.
- Understand the different expansion modules available.
- Understand the different fieldbus accessories.
- Understand communications, BCD, RS232, 20 mA current loop, RS422, RS485.
- Demonstrate the ability to correctly wire the FB2560, pit power supply, and smart sectional controllers.
- Demonstrate the ability to setup, program, & calibrate the FB2560 in a variety of different ways.

- Demonstrate the ability to install and configure the 1600 remote display.
- Demonstrate the ability to install ACC 777 LED traffic light.
- Demonstrate the ability to communicate with the web browser.
- Demonstrate the ability to format and print tickets with a variety of different printers.
- Demonstrate the ability to print reports.
- Demonstrate the ability to network multiple FB2560 instruments.
- Demonstrate the ability to troubleshoot, repair, and restore a FB2560 weighing system.

IND-404 FB2560 Instrumentation Prerequisites:

Course Name	Training	
	WBT	Classroom
IND-101 Analog Instrumentation (NexWeigh, FB1200, FB2255)		✓
IND-406 FB6000 Instrumentation OR IND-401 FB7100 Instrumentation		✓
<u>ALL</u> WBT FB2550/58/FB2560 lessons	✓	

Course Title:

IND-407 ADVANCED FB2560 INSTRUMENTATION

Description:

This course covers the following topics:

- Full and Short platform Axlematic
- FB2560 DAT Instrument
- Camera configuration
- Print redirection
- Advanced networking
- Networked Traffic controls
- Networking the DAT instrument to a Desktop FB2560 instrument.

Instruction will include hands on Laboratory exercises. There will be a final assessment test.

Objectives:

- Understand and configure the Short Platform Axlematic application.
- Understand and configure the Full Length Axlematic application.
- Demonstrate the ability to install, configure, and operate the Prox card reader and barcode card reader.
- Demonstrate the ability to install, configure, and operate the DAT printers.
- Demonstrate the ability to install, configure, and operate the relay ACC 703.
- Demonstrate the ability to install, configure, and operate a FB2560 DAT.
- Demonstrate the ability to configure networked FB2560s.
- Demonstrate the ability to configure networked FB2560s for print redirection functions.
- Demonstrate the ability to configure the FB2560 to automatically email reports.
- Demonstrate the ability to configure the FB2560 to connect to IP cameras.
- Demonstrate the ability to troubleshoot, repair, and restore a FB2560 weighing system.

**IND-407
Advanced
FB2560
Instrumentation
Prerequisites:**

Course Name	Training	
	WBT	Classroom
IND-404 FB2560 Series Instrumentation		✓
Troubleshooting Basics	✓	

Course Title:

IND-408 FB4000 LABELBANK/DATABANK

Description:

- This course focuses on Labelbank/Databank, **not** the FB4000 hardware.
- Overview of the instrument features and its specifications.
- Installation, configuration, programming, and ticket formatting.
- Backup and Restore utility function and operation.
- Instrument operation.
- Troubleshooting.

- Overview of LabelBank/DataBank software, features, basic configurations, and label layout and design.
- Instruction will include hands on Laboratory exercises. There will be a final assessment test.

Objectives:

At the completion of this course, you will be able to:

- Calibrate the FB4000 with analog load cell interface.
- Understand the features of the LabelBank.
- Understand the features of the DataBank.
- Understand the difference between stand-alone and network configurations.
- Understand function buttons and the relation to the database.
- Understand label templates.
- Understand the available tools for troubleshooting and support.
- Understand Ledger, the WEB reporting add-on.
- Demonstrate the ability to correctly configure LabelBank, DataBank, and Ledger.
- Demonstrate the ability to install and configure DataBank on a PC.
- Demonstrate the ability to setup and program a network configuration in a variety of configurations.
- Demonstrate the ability to install and configure Ledger and associated prerequisites on a PC.
- Demonstrate the ability to add information to a LabelBank/DataBank system.
- Demonstrate the ability to add / configure function buttons.
- Demonstrate the ability to format a label template for a variety of different printers.
- Demonstrate the ability to print reports.
- Demonstrate the ability to back-up the DataBank Database.
- Demonstrate the ability to troubleshoot, repair, and restore a LabelBank/DataBank system.

Additional Requirements:

- It is recommended that technicians attending this course be knowledgeable and familiar with the operation of a computer (PC).
- Technicians must be able to perform specific tasks on a computer (PC) with a current Windows operating system before enrollment acceptance.
- These skills include the use of Windows Explorer to copy and paste files to and from different locations, rename files and directories (folders), create files and directories (folders) and a general knowledge and understanding of PCs.

- The proficient use of a mouse utilizing drag and drop methods are also required.

**IND-408 FB4000
Databank /
Labelbank
Prerequisites:**

Course Name	Training	
	WBT	Classroom
IND-101 Analog Instrumentation (NexWeigh, FB1200, FB2255)		✓

**IND-408 FB4000
Databank /
Labelbank
RECOMMENDED
courses:**

Course Name	Training	
	WBT	Classroom
IND-406 FB6000 Instrumentation OR IND-401 FB7100 Instrumentation		✓
IND-404 FB2560 Instrumentation		✓
IND-407 FB2560 Advanced Instrumentation		✓

Course Title:

IND-410 FB4000 INSTRUMENTATION

Description:

- Overview of the instrument features and its specifications.
- Installation, configuration, programming, printer installation and ticket formatting.
- Backup and Restore utility function and operation.
- Instrument operation.
- Troubleshooting.
- Overview of the software applications, features, basic configurations, and ticket layout and design.
- Instruction will include hands on Laboratory exercises. There will be a final assessment test.

Objectives:

At the completion of this course, you will be able to do and understand the following:

- Understand the capabilities of the FB4000 Series instrument hardware.

- Understand the capabilities of the FB4000 Inbound/Outbound application.
- Understand the capabilities of the FB4000 Highway System application.
- Understand and successfully demonstrate how to format a ticket using the front panel controls.
- Understand and successfully demonstrate how to use VNC to access the FB4000 remotely.
- Demonstrate the ability to assemble, setup, program, & calibrate an FB4000 to meet given Inbound/Outbound requirements in a timely manner.
- Demonstrate the ability to assemble, setup, program, & calibrate an FB4000 to meet given Highway System requirements in a timely manner.
- Understand the available accessories for the FB4000 series.
- Demonstrate the ability to install the available accessories for the FB4000 to meet given requirements in a timely manner.
- Demonstrate the ability to test and troubleshoot an FB4000 system with its available accessories in a timely manner.

Additional Requirements:

- It is recommended that technicians attending this course be knowledgeable and familiar with the operation of a computer (PC).
- Technicians must be able to perform specific tasks on a computer (PC) with a Windows 8.1 operating system before enrollment acceptance.
- These skills include the use of Windows Explorer to copy and paste files to and from different locations, rename files and directories (folders), create files and directories (folders) and a general knowledge and understanding of PCs.
- The proficient use of a mouse utilizing drag and drop methods will also be required.



IND-410 FB4000 Instrumentation Prerequisites:

Course Name	Training	
	WBT	Classroom
IND-101 Analog Instrumentation (NexWeigh, FB1200, FB2255)		✓
IND-406 FB6000 Instrumentation OR IND-401 FB7100 Instrumentation		✓
IND-404 FB2560 Instrumentation		✓
IND-407 FB2560 Advanced Instrumentation		✓

Course Title:

IND-702 FB7200 SERIES INSTRUMENTATION

Description:

This course covers the following items:
Basic scales review, Intalogix technology, standard features, product comparison, product specifications, security, navigation short cuts, grounding, load cell wiring, accessories, audit trail, Product Table, Customer Table, adding prompts, remote display, outputs, importing table data, backup and restore, programming ticket syntax and formatting.

GTN mode, In/Out mode, Inbound ticket formatting, Outbound ticket formatting, inverted outbound formatting.

Instruction will include hands on Laboratory exercises. There will be a final assessment test.

Objectives:

At the completion of this course, you will be able to do and understand the following:

- Understand the capabilities of the FB7200 series instruments.
- Understand and successfully demonstrate how to format a ticket.
- Understand and successfully demonstrate how to use the WEB utility to set up and configure the FB7200 series.
- Demonstrate the ability to assemble, setup, program, & calibrate FB7211 to meet given requirements in a timely manner.
- Understand the available accessories for the FB7200 series.

- Demonstrate the ability to install the available accessories for the FB7211 to meet given requirements in a timely manner.
- Understand the terms and application of the Setpoint features of the FB7211.
- Demonstrate the ability to configure the different modes of Setpoint Operation as per given requirements, in a timely manner.
- Demonstrate the ability to test and troubleshoot a FB7211 system with its available accessories in a timely manner.

IND-702 FB7200 Instrumentation Prerequisites:

Course Name	Training	
	WBT	Classroom
IND-101 Analog Instrumentation (NexWeigh, FB1200, FB2255)		✓
ALL WBT FB7100 lessons	✓	
Troubleshooting Basics	✓	
IND-401 FB7100 Instrumentation		✓

Course Title:

MECH-101 MECHANICAL 1

Description:

This course covers the following topics:

- Safety
- Terminology
- Part names
- Nomenclature
- Factory tour
- The basics of Mechanical Scales
- Assemble a Type S scale
- Disassemble and assemble suspension
- Overhauls
- Troubleshooting
- Remove/Replace Suspension Exam (performed individually)

Instruction will include hands on Laboratory exercises. There will be a final assessment test.

Objectives:

At the completion of this course, you will be able to do and understand the following:

- Understand and demonstrate proper safety equipment.
- Understand and demonstrate proper weighbridge support, (blocking), while jacking up and working on a pit type scale. Hands on.
- Understand how to choose the proper tool for the job and how to use them.
- Understand the different classes of levers.
- Understand how to determine the multiple of a lever system.
- Understand the function of pivots and bearings.
- Understand Lever Sensitivity.
- Understand and demonstrate knowledge of the portable beam. Hands on, assemble/test/disassemble. If time allows, we will perform repairs to 1124s.
- Understand function of all levers in the Type S truck scale.
- Understand and demonstrate MTS suspension. How it works, nomenclature, what type of wear to look for. Hands on, disassemble/identify/assemble suspension in one corner.
- Understand how to determine the correct sized load cell for a Type S truck scale.
- Understand the function of checking and how to properly adjust.
- Understand and demonstrate the assembly of a MTS. Hands on. Assemble/disassemble two section livestock scale. Safety and proper equipment are observed at the same time.

**MECH-101
Mechanical 1
Prerequisites:**

Course Name	Training	
	WBT	Classroom
M1 – Introduction to Levers	✓	
M2 – Pivots & Bearings	✓	

Section 5: In-Field Training

In addition to providing training in Overland Park, KS, the Training Department will also conduct personalized sessions at distributor or Customer Support Center locations. In specialized instances, training will be provided directly to customers at their location or one of the training centers. The policies and procedures detailed below have been established to allow for the relaying of consistent information.

IFLD - 101 Fairbanks Service Center/ Distributor In-Field

1. In-field training classes are the same length as those conducted in Overland Park, KS. Trainers travel on Monday and Friday and conduct class on Tuesday, Wednesday, and Thursday.
2. There is to be a maximum of eight (8) attendees at any in-field training class.
3. The Fairbanks Training Department will provide, at no cost to the distributor / Fairbanks Customer Support Center, a trainer from the Technical Support Department, and service manuals (in electronic format). The Training Department will also absorb all travel, lodging, and meal expenses of the trainer.
4. **The Customer Support Center/distributor is expected to provide the following:**
 - a. A training location **free from interruption and distractions**, with enough room to set-up a maximum of 8 stations of equipment. There should be enough outlets, power strips, and extension cords.
 - b. Lunch for the attendees if no restaurants are convenient to the training site.
 - c. A load cell simulator, digital voltmeter, and calculator for each attendee.
 - d. **Equipment per the list provided.**
5. Training requests are to be made emailing the Technical Training Manager at: dmashaney@fairbanks.com.
 - a. Requests should include name and address of Customer Support Center/distributor, location of training (if other than Customer Support Center or distributor office) and number of trainees expected.



- b. Requests should include the preferred training dates and one or two alternate dates for training to occur.
6. Requests will be reviewed by the Technical Training Manager and the Manager of Technical Product Support, a date confirmed, and trainer assigned, based on business levels and availability.
7. Attendees are expected to participate in all three days of **uninterrupted** training. Failure to do so will result in an unsatisfactory evaluation and prevention from advancement to the next level of Technical Training.

Section 6: Customer Training

Customers requesting factory training may attend a Fairbanks course if the following conditions are met:

IFLD-201 Customer Attendance at Training Facility

1. The customer's distributor or Customer Support Center will email the Technical Training Manager at: dmashaney@fairbanks.com
 - a. All communication should be between the Customer Support Center or distributor on behalf of their customer.
2. The information will be reviewed by the Technical Training Manager and the Manager of Technical Product Support. Attendance will be confirmed or denied based on availability in the requested training course.
3. The customer is responsible for his/her own expenses and reservations, including transportation, lodging, meals and ground transfers.
 - a. The Training Department will provide a list of hotels convenient to the Training Center and will indicate the preferred hotel used by the department.
 - b. The Training Department will provide transportation from the preferred hotel to the training center provided the customer arrives at the hotel prior to the scheduled departure time.
 - c. The Training Department will provide the customer, via a pre-course Welcome Letter sent to the Customer Support Center or distributor contact, any necessary schedules, directions, and other information approximately 2 weeks prior to the start of the class.
4. The customer is expected to provide hand tools and equipment listed within pre-course Welcome Letter for the training class.
5. Attire for Fairbanks training classes is an appropriate work uniform, including safety shoes.
6. Following the course, the customer will receive an evaluation.
 - a. Upon receipt of a grade 80% or higher, the customer will receive certification of factory training on the products covered.
 - b. The customer location must be recertified every two years. In the event the customer does not recertify, all authorizations to perform warranty repairs will be revoked. Recertification is required due to updates in product and improvements in repair methods and procedures.



- c. It is the responsibility of the Customer Support Center or distributor to follow-up with the customer to ensure all information for the filing of valid warranty claims is received and proper procedures followed.
7. The local Customer Support Center or distributor will be billed at a per-person charge for each customer who attends training. The charges are detailed in Appendix I: Fees, located at the end of this document price. It is the responsibility of the local Customer Support Center or distributor to forward any charges to the customer.

Section 7: Customer In-Field Training

In special circumstances, training may be conducted at the customer site.

IFLD-202 Customer In-Field Training

1. The customer's distributor or Customer Support Center will email the Technical Training Manager at: dmashaney@fairbanks.com
2. Requests to include the following information:
 - a. Name of Customer Support Center or distributor.
 - b. Customer's primary contact at distributor or Customer Support Center.
 - c. Name and address of customer and address of training location if different.
 - d. Number of attendees (up to a maximum of 8). **NOTE: The number of students will dictate the number of trainers required.**
 - e. Exact model number(s) of equipment at site.
 - f. Preferred and alternate dates of training.
 - g. Name of closest airport.
3. The Technical Training Manager and the Manager of Technical Product Support will review the requests, confirm a date, and assign trainer(s) based on business demands and trainer proximity.
4. All communication should be between the Customer Support Center or distributor on behalf of their customer. **Do not give the Training Department phone number to the customer.**
5. The Training Department will provide:
 - a. The In-Field trainer(s) selected by the Technical Support Department to conduct the training.
 - b. All necessary service manuals (in PDF form) covering the customer's equipment, accessories and peripherals.
6. The customer and/or Customer Support Center/distributor is responsible for the following:
 - a. Safe area training facility **free from interruption and distractions** capable of allowing up to eight (8) attendees and a trainer(s) to view and work on equipment.
 - b. Providing equipment as specified by the Training Department for each attendee.

- c. Lunch for attendees and trainer(s).
 - i. Lunch can be at local restaurants or brought in, depending on what is most convenient.
 - d. All equipment for training of students.
 - e. Providing the name and location of a hotel local to the training location.
7. Following the training, the Customer Support Center or distributor will receive an invoice for the following: (It is the responsibility of the Customer Support Center or distributor to bill the customer, if desired.)
- a. The services of the trainer, including travel days.
 - b. Trainer's expenses, including but not limited to:
 - i. Airfare
 - ii. Hotel
 - iii. Meals
 - iv. Ground transportation - taxis, rental car, parking, etc.
 - v. Any misc. expenses
8. Following the course, the customer will receive an evaluation.
- a. Upon receipt of a grade 80% or higher, the customer will receive certification of factory training on the products covered.
 - b. The customer location must be recertified every two years. In the event the customer does not recertify, all authorizations to perform warranty repairs will be revoked. Recertification is required due to updates in product and improvements in repair methods and procedures.
 - c. It is the responsibility of the Customer Support Center or distributor to follow-up with the customer to ensure all information for the filing of valid warranty claims is received and proper procedures followed.
9. The local Customer Support Center or distributor will be billed at a per-person charge for each customer who attends training. The charges are detailed in Appendix I: Fees, located at the end of this document price. It is the responsibility of the local Customer Support Center or distributor to forward these charges to the customer.

Appendix I: Fees

Classroom Training

\$1,000 per person, plus all Expenses. Maximum **2** customers in any class. 20% discount for 2nd person from same company in same class.

In-Field Training at Customer Site

Charge for travel days per trainer = \$900 each training, each day.

On-site training fee = \$1500 per day per trainer.

Plus all expenses.

Maximum of eight (**8**) customers per class.

Customer to provide equipment for use during training.

Appendix II: 2024 Instructor Led Training Class Schedule

Unless otherwise noted all class are conducted in the Overland Park, KS Corporate office.

Date	Course #	Course Title	Max Students	Minimum Students
01/22 – 01/26	IND-101	Analog Instrumentation	8	4
02/05 – 02/09	MECH-101	Mechanical 1 (Meridian, MS)	8	4
02/12 – 02/16	IND-401	FB7100 Instrumentation	8	4
03/04 – 03/08	IND-702	FB7200 Instrumentation	8	4
03/25 – 03/29	IND-103	Intrinsically Safe Instrumentation	6	4
04/08 – 04/12	IND-404	FB2560 Instrumentation	8	4
04/22 – 04/26	IND-101	Analog Instrumentation	8	4
04/29 – 05/03	MECH-101	Mechanical 1 (Meridian, MS)	8	4
05/06 – 05/10	IND-401	FB7100 Instrumentation	8	4
05/20 – 05/24	IND-103	Intrinsically Safe Instrumentation	6	4
06/03 – 06/07	IND-101	Analog Instrumentation	8	4
06/17 – 06/21	MECH-101	Mechanical 1 (Meridian, MS)	8	4
07/15 – 07/19	IND-103	Intrinsically Safe Instrumentation	6	4
08/05 – 08/09	IND-404	FB2560 Instrumentation	8	4
08/26 – 08/30	IND-401	FB7100 Instrumentation	8	4
09/16 – 09/20	IND-702	FB7200 Instrumentation	8	4
10/07 – 10/11	IND-103	Intrinsically Safe Instrumentation	6	4
10/21 – 10/24	MECH-101	Mechanical 1 (Meridian, MS)	8	4
11/04 – 11/08	IND-407	Advanced FB2560 Instrumentation	8	4
12/09 – 12/13	IND-101	Analog Instrumentation	8	4

Important notes:

All classes will start at 8 am sharp each day. Classes typically end at 5 pm, sometimes a bit longer if sessions run long. Travel days are Monday and Friday morning, unless otherwise noted.

ADDITIONAL INFORMATION:

- * Unless notified otherwise, the first date listed will be the arrival date into the Kansas City airport (MCI); departure will be on the last date listed.
- * Schedule is subject to change based on business trends and demands.



Fairbanks Scales, Inc.

www.fairbanks.com

Technical Training

Course Catalog
Document 50590