



FAST TRACK TO SKILLS.

AVL North America Open Enrollment Trainings 2023

Disclaimer

Copyright 2022 by AVL North America

The contents of this document may not be reproduced in any form or communicated to any third party without the prior written consent of AVL. While every effort is made to ensure its correctness, AVL assumes no responsibility for errors or omissions which may occur in this document or for damage caused by them.

All mentioned trademarks or registered trademarks are owned by their respective owners.

Printed in United States at AVL - All rights reserved

TABLE OF CONTENTS

TABLE OF CONTENTS	3
TRAINING – AVL Approach.....	4
HOW TO READ THIS CATALOG	6
CANCELLATION AND RESCHEDULING	6
OPEN-ENROLLMENT TRAINING	7
OPERATION & BASIC PARAMETERIZATION OF PUMA 2 ENGINE TESTBED	7
DEVELOPMENT OF AUTOMATIC TESTRUNS IN PUMA 2.....	9
OPERATION OF AND MODEL INTEGRATION WITH Testbed.CONNECT™	10
DEVELOPMENT OF VB SCRIPTS IN PUMA 2.....	11
FROM DATASOURCE TO REPORT WITH CONCERTO	12
AUTOMATIC DATA PROCESSING WITH CONCERTO	13
TRAINING PYTHON IN AVL CONCERTO	14
BOBCAT OPERATION & PARAMETERIZATION	15
LYNX BATTERY TESTING OPERATION & PARAMETERIZATION	16
INDICATING SETUP & OPERATION	17
AMA i60/SL OPERATING	18
OPEN-ENROLLMENT TRAINING SCHEDULE	19



FAST TRACK TO
COMPREHENSIVE
SKILLS.



TRAINING – AVL Approach

High-quality, professional training classes at customer site or at AVL Training Centers provide first-class knowledge for competent, safe and reliable operation and the best utilization of test systems. AVL training courses are carried out by our specially qualified, professional trainers.

Instructor-led Training

Training classes are conducted either at the customer site or at one of the global AVL Training Centers. AVL Training Facilities provide the perfect environment for fast and efficient learning. Modern classrooms equipped with the latest technologies for presentation and communication - as well as a wide range of simulators and test equipment for practical exercises - enable the delivery of high quality AVL training classes.

Didactically and professionally skilled trainers impart the necessary knowledge to perform the testing tasks.



Available training classes:

Product Training courses allow staff to develop knowledge to understand and utilize AVL test systems for engine / battery/ eMotor /powertrain testing.

Open-Enrollment Training for staff to develop knowledge to understand and utilize AVL test systems for engine / battery/ eMotor /powertrain testing. Regularly scheduled throughout the year. Subject to cancellation if minimum enrollment levers are not reached.

Benefits

- Cost-effective and professional learning process
- Increases the qualification and competence of staff members
- Ensures safe and reliable operation of test systems
- High quality of test results from the beginning
- Supports in developing specific test procedures

Financial Aspects

Return on this effective training investment is immediate. E.g. avoiding the additional costs associated with a 2-week time delay in a development project would already pay for the education of a small team of operators and testing engineers

References

- > 1600 training days per year for products and technologies at customer sites or AVL Training Centers
- > 500 trainees per year from almost all engine and powertrain companies

Customer statements

- Expectations met to 100%
- Professional trainers - excellent expertise and know-how of trainers
- Interesting discussions and mutual exchange of experiences
- Well-structured and consistent training content

www.avl.com/training

HOW TO READ THIS CATALOG

Different job titles require different skill sets (“User Level”).

Taking this into account, you’ll find the relevant “Target Group” information in each course description based upon the following common tasks and roles:

- Operation (Test Operator)
- Parameterization (Test Engineer)
- Data Evaluation (Post Processing Personnel)
- Maintenance & Service (Calibration / Maintenance / Service Personnel)
- Administration (Test Field Administrator)

OPERATION & BASIC PARAMETERIZATION OF PUMA 2 ENGINE TESTBED

TNASKTR531.01 - TRAINING PUMA 2 ENGINE TESTBED

This training refers to PUMA version 2 – for a training dealing with older versions, please contact your local representative.

Target Group

Operation (Test Operator), Parameterization (Test Engineer)

Target

The participants are able to operate the PUMA Engine testbed automation system. Further trainees are able to modify the parameters regarding the main automation system tasks for control measurement and monitoring. Additionally, they know the main tools to perform automatic tests.

The training includes:

- 4 days instructor led training with hands-on practical exercises
- Training Materials.
- AVL Certificate for participants

Content

- Testbed Operating:
 - Starting the PUMA system
 - PUMA operating steps and operator interface
 - Control of UUT and dyno:
 - * Control modes and demand values
 - * Operating with panel, manual operation window and in automatic mode
 - Monitoring:
 - * Handling of testbed and limit monitoring

If there are different job titles / tasks available in your organization and you need assistance in setting up a curriculum / education package for your organization, please get in touch with either your local representative or the AVL Skills Center North America (mailto: bruce.digna@avl.com).

CANCELLATION AND RESCHEDULING

Cancellation or rescheduling of confirmed training dates are subject to the following cancellation policy and fees:

- More than 14 calendar days prior to training start: 50% of the training fee
- 14 calendar days or less prior to training start: 100% of the training fee

OPEN-ENROLLMENT TRAINING

OPERATION & BASIC PARAMETERIZATION OF PUMA 2 ENGINE TESTBED

TNASKTR531.01 - TRAINING PUMA 2 ENGINE TESTBED

This training refers to PUMA version 2 – for a training dealing with older versions, please contact your local representative.

Target Group

Operation (Test Operator), Parameterization (Test Engineer)

Target

The participants are able to operate the PUMA Engine testbed automation system. Furthermore, the trainees are able to modify the parameters regarding the main automation system tasks for controlling, measurement and monitoring. Additionally, they know the main tools to perform automatic testruns.

The training includes:

- 4 days instructor led training with hands-on practical exercises
- Training Materials.
- AVL Certificate for participants

Content

- Testbed Operating:
 - Starting the PUMA system
 - PUMA operating steps and operator interface
 - Control of UUT and dyno:
 - * Control modes and demand values
 - * Operating with panel, manual operation window and in automatic mode
 - Monitoring:
 - * Handling of testbed and limit monitoring
 - Measurement:
 - * Operation of stationary and recorder measurement
 - * Simple data evaluation with AVL CONCERTO
- PUMA Parameterization:
 - Parameterization tools – the navigator
 - Parameter set overview and handling
 - Data acquisition and quantities in general
 - Measurement:
 - * Parameterization of steady state and recorder measurement
 - UUT Control:
 - * Overview of main UUT parameters (max. speed, start, stop...)
 - * Overview of main UUT set values and controllers (ALPHA, TORQUE, SPEED)
 - Monitoring:
 - * Parameterization of testbed monitoring, limit monitoring and the post mortem recorder
 - Formulas:
 - * Parameters and functions of cyclic and on demand formulas in PUMA
 - Automatic testrun:
 - * Overview of main tools for program flow control and Dyno/UUT control
 - * Parameterization of simple automatic testruns

Notes

- Training class is conducted in English
- Session will be held if minimum headcount (4) is reached two weeks before the training start date
- Training Price is for ONE participant
- Venue at AVL



Prerequisites

- Basic knowledge of the operation of a unit under test
- Knowledge of PC's and Windows

Cancellation and Rescheduling

Cancellation or rescheduling of confirmed training dates are subject to the following cancellation policy and fees:

- > 14 calendar days prior to training start: 50% of the training fee
- 14 calendar days or less prior to training start: 100% of the training fee

DEVELOPMENT OF AUTOMATIC TESTRUNS IN PUMA 2

TNASKTR524.01 - TRAINING PUMA 2 TESTRUN PREP.

This training refers to PUMA version 2 – for a training dealing with older versions, please contact your local representative.

Target Group

Parameterization (Test Engineer)

Target

The participant is able to parameterize automatic test runs according to complex test requirements and display the results.

The training includes

- 3 days instructor led training with hands-on practical exercises
- Training Materials on USB memory stick
- AVL Certificate for participants

Content

- Functions and tools
 - General functions like cut / copy / paste ..., search, compare
 - Quantities versus local variables
 - Link status, import functions and version handling
- BSQ (Block SeQuences)
 - General properties (timing) and program flow elements
 - Operator interface commands and online window (debugging)
 - Structural elements (group, subroutine, exception)
- SSQ (Step SeQuences)
 - SSQ demand value definition, properties of steady state and dynamic SSQ
 - Step buffer handling, export/import example
- Recorder
- Steady State Measurement
- Exception Handling
 - Exception types, definition of exception handlers, remind / recover
- Library Handling
 - Purpose and overview
- Functions and tools
 - Creation of a complex automatic testrun example

Notes

- Training class is conducted in English
- Session will be held if minimum headcount (4) is reached two weeks before the training start date
- Training Price is for ONE participant
- Venue at AVL

Prerequisites

- Experience in operation and parameterization of the PUMA 2 System

Cancellation and Rescheduling

Cancellation or rescheduling of confirmed training dates are subject to the following cancellation policy and fees:

- > 14 calendar days prior to training start: 50% of the training fee
- 14 calendar days or less prior to training start: 100% of the training fee

OPERATION OF AND MODEL INTEGRATION WITH Testbed.CONNECT™

TNASKTR599.01 - TRAINING AVL TESTBED.CONNECT

This training refers to version 1R3 of Testbed.CONNECT™, Model.CONNECT™ version R2017b as well as AVL fmi.LAB™ version 1R3 or higher. It covers only the integration of real-time models. For the usage of non – real-time models within Model.CONNECT™ separate trainings by AVL AST are offered.

Target Group

Parameterization (Test Engineer)

Target

The participants are able to build simulation models using AVL fmi.LAB™ and know how to integrate these models into a PUMA system or at a Testbed.CONNECT™ workstation. Furthermore, the trainees can define, view and adapt the model parameters online. Information: The functions are explained using example models. The integration of customer models is not part of the training – if there is any need, additional application support can be ordered at AVL.

The training includes

- 3 days instructor led training with hands-on practical exercises
- Training Materials on USB memory stick
- AVL Certificate for participants

Content

- Installation of AVL fmi.LAB™ and Model.CONNECT™, licensing
- Building and executing a Simulink example model
- Usage of interface functions of the PUMA automation system (system channels, messages)
- Parameter design and usage in Simulink models
- Parameter checker/updater/preprocessor design
- Model Parameter Editor (MPE), Testbed.CONNECT™ Explorer
- Deployment at PUMA systems (if available) or Testbed.CONNECT™ Workstation
- Development of a simple application by the trainee
- Usage of the Model.CONNECT™ configurator to link several models

Notes

- Training class is conducted in English
- Session will be held if minimum headcount (4) is reached two weeks before the training start date
- Training Price is for ONE participant
- Venue at AVL

Prerequisites

- PUMA knowledge (basics) when using a PUMA system
- MATLAB/Simulink knowledge
- If the training class is conducted at customer site, training equipment and safety gear for hands-on exercises must be provided by the customer
- If the training class is conducted at AVL it is recommended that the trainees bring a laptop with the required SW versions installed:
 - MATLAB, Simulink, Simulink Coder & MATLAB Coder (R2012b to R2018b – 64 bit only!)
 - Microsoft Visual Studio 2010 Prof., 2012 Prof. (from MATLAB R2013b), 2015 Prof. (from MATLAB R2016a) or 2017 Prof. (from MATLAB R2017b)

Cancellation and Rescheduling

Cancellation or rescheduling of confirmed training dates are subject to the following cancellation policy and fees:

- > 14 calendar days prior to training start: 50% of the training fee
- 14 calendar days or less prior to training start: 100% of the training fee

DEVELOPMENT OF VB SCRIPTS IN PUMA 2

TNASKTR343.01 - TRAINING SCRIPTING IN PUMA OPEN

This training refers to PUMA 2 – for a training dealing with older versions, please contact your local representative.

Target Group

Parameterization (Test Engineer)

Target

The participants understand the basic usage of scripting in PUMA (Activation Objects, Scripting, Extensibility Scripts, State Machine and BSQ/SSQ). They can create, modify and test the scripts in the PUMA system.

The training includes:

- 4 days instructor led training with hands-on practical exercises
- Training Material
- Training Materials on USB memory stick

Content

- Introduction into the VB programming language
- VB script syntax and best practices
- VB concepts: variables, constants and control structures
- VB concepts: functions, subroutines, data arrays
- Basic introduction into scripting in PUMA 2
- Creation and modification of script contexts
- Definition of hand-over parameters (Systemchannels / script parameters)
- Integration of scripts into the automatic testrun (BSQ/SSQ)
- Execution of scripts from other PUMA components
- Practical exercises using extensibility scripts
- Debugging and problem analysis

Notes

- Training class is conducted in English
- Session will be held if minimum headcount (4) is reached two weeks before the training start date
- Training Price is for ONE participant
- Max. participants: 6 persons
- Venue at AVL

Prerequisites

- It is necessary to have basic knowledge in programming languages e.g. C++, VBA, VBS and to understand the fundamental concepts of those, e.g. functions/subroutines, hand-over of parameters by reference and by value, indexed data types
- Experience in operation and parameterization of the PUMA 2 System
- Knowledge of drawing up automatic test runs with BSQ / SSQ
- If the training class is conducted on site the client has to provide sufficiently installed and commissioned equipment running properly for practical exercises

Cancellation and Rescheduling

Cancellation or rescheduling of confirmed training dates are subject to the following cancellation policy and fees:

- > 14 calendar days prior to training start: 50% of the training fee
- 14 calendar days or less prior to training start: 100% of the training fee

FROM DATASOURCE TO REPORT WITH CONCERTO

TNASKTR527.01 – TRAINING CONCERTO EVALUATION

This training refers to all AVL CONCERTO 5 releases – for a training dealing with older versions, please contact your local representative.

Target Group

Operation (Test Operator), Data Evaluation (Post Processing Personnel)

Target

The participants can handle the complete post-processing workflow with AVL CONCERTO from data import to visualization and evaluation.

The training includes:

- 2 days instructor led training with hands-on practical exercises
- Training Material
- Training Materials on USB memory stick

Content

- Overview of the data structure and data management
- Import of test result data from a wide variety of sources (AVL PUMA, ETAS INCA, AVL iFiles, CSV, etc.)
- Creation of diagrams, tables and reports
- Evaluation and interpretation of measurement data
- Data comparison (of test results from the same data source)
- Export and merging of data
- Management of layouts and data sources in work environments and libraries
- Hands-on exercises with application examples for above topics

Notes

- Training class is conducted in English
- Session will be held if minimum headcount (4) is reached two weeks before the training start date
- Training Price is for ONE participant
- Venue at AVL

Prerequisites

- Knowledge of PC's and Windows

Cancellation and Rescheduling

Cancellation or rescheduling of confirmed training dates are subject to the following cancellation policy and fees:

- > 14 calendar days prior to training start: 50% of the training fee
- 14 calendar days or less prior to training start: 100% of the training fee

AUTOMATIC DATA PROCESSING WITH CONCERTO

TNASKTR529.01 – TRAINING CONCERTO ADVANCED

This training refers to all AVL CONCERTO 5 releases – for a training dealing with older versions, please contact your local representative.

Target Group

Data evaluation (post processing personnel with established CONCERTO experience), data post processing.

Target

The participants can design and implement advanced post-processing applications using AVL CONCERTO. This includes development of formulae/macros/scripts to extend the basic CONCERTO functionality and to automate large post processing tasks and create a GUI to guide operators through complex evaluation processes.

The training includes:

- 2 days instructor led training with hands-on practical exercises
- Training Material
- Training Materials on USB memory stick

Content

- Creation of CONCERTO formulae, macros and scripts
- Resource management
 - Organization of CONCERTO components in multi user environments
 - Library concept
 - Advanced data source configuration
- Application development
 - Data handling (resampling, extracting, filtering, etc.)
 - Creation of GUI
 - Automation of work flows
 - Data export
- Hands-on exercises with application examples for above topics

Notes

- Training class is conducted in English
- Session will be held if minimum headcount (4) is reached two weeks before the training start date
- Training Price is for ONE participant
- Venue at AVL

Prerequisites

- TRAINING CONCERTO Evaluation

Cancellation and Rescheduling

Cancellation or rescheduling of confirmed training dates are subject to the following cancellation policy and fees:

- > 14 calendar days prior to training start: 50% of the training fee
- 14 calendar days or less prior to training start: 100% of the training fee

TRAINING PYTHON IN AVL CONCERTO

TNASKTR308.01 TRAINING: PYTHON WITH AVL CONCERTO

This training refers to all AVL CONCERTO 5 R3 releases and newer.

Target Group

Group Data Evaluation Engineers with knowledge in Python. Experienced CONCERTO App Developer.

Target

The participants understand how Python functions can be embedded in CONCERTO post processing applications. Practical examples should highlight the advantages of Python over CONCERTO scripting language.

The training includes

- 2 days instructor led training with hands-on practical exercise sessions
- Training Materials.
- AVL Certificate for participants

Content

- Introduction / Overview of the Python implementation
- Data transfer between CONCERTO / Python
- Data structures in Python
- Calculations / Automation with Python
- Comparison to existing CONCERTO scripting functionality
- Hands-on exercises with application examples for above topics

Notes

- Training class is conducted in English
- Session will be held if minimum headcount (4) is reached two weeks before the training start date
- Training Price is for ONE participant
- Venue at AVL

Prerequisites

- Training CONCERTO Advanced (TNASKTR529.01) or equivalent knowledge
- Basic skills with Python are mandatory, this is NOT a training for Python coding
- If the training class is conducted at customer site sufficient workplaces / notebooks with installed and running AVL CONCERTO software for practical exercises must be provided by the customer. CONCERTO licenses can be provided by AVL for the duration of the training on prior notice

Cancellation and Rescheduling

Cancellation or rescheduling of confirmed training dates are subject to the following cancellation policy and fees:

- > 14 calendar days prior to training start: 50% of the training fee
- 14 calendar days or less prior to training start: 100% of the training fee

BOBCAT OPERATION & PARAMETERIZATION

TNASKTR522.01 - TRAINING OPERATING BOBCAT OP-ENROLL

Target Group

Operation (Test Operator), Maintenance & Service (Calibration / Maintenance / Service Personnel)

Target

The participant is able to operate the bobcat automation system. He is able to define and execute manual measurements, run pre-defined test runs and modify basic parameters.

The training includes

- 4 days instructor led training with hands-on practical exercise sessions
- Training Materials on USB memory stick - printed training manuals may be ordered optionally.
- AVL Certificate for participants

Content

- Starting the system
- Manual and automatic operation
- Limit monitoring and operating states
- Definition and execution of manual measurements
- Operation of a pre-defined recorder
- Use pre-defined values and results displays
- Overview of bobcat parameter sets (Testcell, Engine, and Test parameters)
- Selection of test bed parameters
- Using the message window
- Using the help functions
- Reviewing data with the Data Browser
- Overview of bobcat hardware architecture
- Contents of testcell, engine, and test parameters
- Setting up Input/Output channels
- Writing automatic test runs, startup and shutdown routines
- Sequence Library and subroutines
- Creating and use Datasheets
- Setup of Exception routine
- Creating and editing formulas
- Setting up of testcell limits and engine limit groups

Notes

- Training class is conducted in English
- Session will be held if minimum headcount (4) is reached two weeks before the training start date
- Training Price is for ONE participant
- Venue at AVL

Prerequisites

- Basic knowledge of the operation of a unit under test
- Knowledge of PC's and Windows

Cancellation and Rescheduling

Cancellation or rescheduling of confirmed training dates are subject to the following cancellation policy and fees:

- > 14 calendar days prior to training start: 50% of the training fee
- 14 calendar days or less prior to training start: 100% of the training fee

LYNX BATTERY TESTING OPERATION & PARAMETERIZATION

TNASKTR337.01 - TRAINING LYNX BATT. TEST. OPER. OP-ENR.

This training refers to version 2 – for a training dealing with older versions, please contact your local representative.

Target Group

Operation (Test Operator), Parameterization (Test Engineer)

Target

The participant is able to operate the Lynx Automation System. He/She is able to define and execute manual measurements, run pre-defined test runs and modify basic parameters. He/She is able to set up channels, connect input/output devices, and parameterize automatic test runs.

The training includes

- 4 days instructor led training with hands-on practical exercise sessions
- Training Materials on USB memory stick - printed training manuals may be ordered optionally.
- AVL Certificate for participants

Content

- Starting the system
- Manual and automatic operation
- Limit monitoring and operating states
- Definition and execution of manual measurements
- Operation of a pre-defined recorder
- Use pre-defined values and results displays
- Overview of automation parameter sets (Testcell, Stand, Battery, and Test)
- Selection of test bed parameters
- Using the message window and help functions
- Reviewing data with the Data Browser
- Writing automatic test runs, startup and shutdown routines
- Sequence Library and subroutines
- Creating and use Data sheets
- Setup of Exception routines
- Creating and editing formulas
- Setting up of testcell limits
- Importing and exporting of testrun parameters

Notes

- Training class is conducted in English
- Session will be held if minimum headcount (4) is reached two weeks before the training start date
- Training Price is for ONE participant
- Venue at AVL

Cancellation and Rescheduling

Cancellation or rescheduling of confirmed training dates are subject to the following cancellation policy and fees:

- > 14 calendar days prior to training start: 50% of the training fee
- 14 calendar days or less prior to training start: 100% of the training fee

INDICATING SETUP & OPERATION

TNASKTR519.01 - TRAINING INDICATING OPEN - ENROLLMENT

Target Group

Operation (Test Operator), Parameterization (Test Engineer)

Target

The participant is able to perform measurements and evaluations and to manage combustion data with an AVL indicating system. He understands the setup of an AVL indicating system and is able to parameterize it to perform measurements. In addition, he is familiar with the calibration of the system the diagnoses of failures and the indicating data management.

The training includes

- 4 days instructor led training with hands-on practical exercise sessions
- Training Materials on USB memory stick
- AVL Certificate for participants

Content

- Basic knowledge in engine indicating and the indicating measurement chain
- Signal conditioning
- Operating Interface
- Execution of crank angle- and/or time based measurements
- Data presentation
- Management of measured data
- Calculation of results by means of Calcgraf
- Data comparison
- Data Import / Export
- Plausibility check and diagnosis of failures based on the measured data
- Setup of the AVL indicating system and connected pressure transducers, crank angle encoder and amplifier
- Parameterization, signal conditioning and TDC-determination
- Management of indicating data
- Remote control and interface to a test bed automation system
- Set up of single measurement, durability measurement, monitoring and automatic mode
- Calibration
- Plausibility check and diagnosis of failures regarding the parameterization
- Data evaluation (e.g. Calcgraf) and data presentation using different display methods
- Numerous hands-on exercises based on simulated combustion sensor signals

Notes

- Training class is conducted in English
- Session will be held if minimum headcount (4) is reached two weeks before the training start date
- Training Price is for ONE participant
- Venue at AVL
- General Cancellation Policy applies to this training, see page 6 of this catalog.

Prerequisites

- Skills for indicating data

Cancellation and Rescheduling

Cancellation or rescheduling of confirmed training dates are subject to the following cancellation policy and fees:

- > 14 calendar days prior to training start: 50% of the training fee
- 14 calendar days or less prior to training start: 100% of the training fee

AMA i60/SL OPERATING

TNASKTR559.01 - EXH. GAS ANALYZER AMA i60, OPEN-ENROLL.

This training refers to both AMA i60 generation series I and II and Slim Line.

Target Group

Operation (Test Operator)

Target

The participant understands the principles of analyzers and the layout of AMA i60. He is able to operate the main functions and to do the basic maintenance task. The participant obtains a basic understanding of the foundations of emissions measurement.

The training contains

- 4 days instructor led training with hands-on practical exercise sessions
- Training Materials on USB memory stick - printed training manuals may be ordered optionally.
- AVL Certificate for participants

Content

- Basics of emissions measurement and legislation
- Overview of the generic system configurations
- HSS-Prefilter
- Measurement principles of the analyzers
- Pneumatic layout of the generic analyzers
- Physical and pneumatic layout of AMA i60
- Electric components and control layout
- iGEM AMA software operation
- Operation of AMA i60
- Parameterization on operator level
- Basic maintenance tasks

Notes

- Training class is conducted in English
- Session will be held if minimum headcount (4) is reached two weeks before the training start date
- Training Price is for ONE participant
- Venue at AVL, remote attendance option also available
- The daily, weekly and monthly maintenance measures have to be performed by local staff in time because otherwise the measuring quality is no longer guaranteed (loss of accuracy). To qualify the maintenance staff the adequate training class "TRAINING L2: AMA i60 MAINTENANCE" has to be ordered in addition
- General Cancellation Policy applies to this training, see page 6 of this catalog.

Prerequisites

- Technical, electrical/electronic and physical background
- General knowledge of engine or vehicle testing

OPEN-ENROLLMENT TRAINING SCHEDULE

Open-enrollment trainings are offered on a regularly scheduled basis.

This provides a cost-effective option when a dedicated training session is not feasible.

These sessions will be held if minimum headcount (4) is reached two weeks before the training start date.

Training Price is for ONE participant.

Cancellation and Rescheduling

Cancellation or rescheduling of confirmed training dates are subject to the following cancellation policy and fees:

- More than 14 calendar days prior to training start: 50% of the training fee
- 14 calendar days or less prior to training start: 100% of the training fee

OPERATION & BASIC PARAMETERIZATION OF PUMA 2 ENGINE TESTBED

- March 14 - 17
- July 11 - 14
- November 7 – 11

DEVELOPMENT OF AUTOMATIC TESTRUNS IN PUMA 2

- March 21 - 23
- July 18 - 20
- November 13 – 15

FROM DATASOURCE TO REPORT WITH CONCERTO

- March 28 - 29
- July 24 - 25
- November 17 & 20

AUTOMATIC DATA PROCESSING WITH CONCERTO

- March 30 - 31
- July 26 - 27
- November 21 – 22

IMPLEMENTATION OF PYTHON CODE WITH CONCERTO

- Please Inquire

DEVELOPMENT OF VB SCRIPTS IN PUMA 2

- May 2 - 5
- November 28 – December 1

BOBCAT OPERATION & PARAMETER- IZATION

- Please Inquire

INDICATING SETUP & OPERATION

- Please Inquire

LYNX BATTERY TESTING OPERATION & PARAMETERIZATION

- May 9 - 12
- August 22 - 25
- December 19 – 22

AMA i60/SL OPERATING

- April 25 – 28
- August 15 – 18
- December 5 – 8

OPERATION OF AND MODEL INTEGRATION WITH Testbed.CONNECT™

- Please Inquire