

# ASPECT® Basic Certification Syllabus

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## Prerequisites

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None

## Details

## Upon Completion

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After the successful completion of the class, each student will be able to do the following:

### Day 1

Section 1 – Introduction to Cylon Energy		Powerpoint Presentation
Cylon Auto-Matrix	Introduction to Cylon Auto-Matrix	
	ASPECT® / BACnet® architecture	
	Presentation of the ASPECT® System	
	Presentation of CB Line of controllers	

Section 2 – Hardware Introduction		Powerpoint Presentation
ASPECT®/CB Controllers	ASPECT® Targets, products and features	
	CB Controllers	
	Wiring Considerations	

Section 3 – Introduction to ASPECT®		Interactive
ASPECT®	Architecture choices, local vs. distributed	
	Installation scenarios and practices for small, medium and large sites	
	Database options, SQLite vs MySQL considerations	
	Installing ASPECT®	

Section 4 – Setting up ASPECT® Targets		Interactive
ASPECT®	Connecting to an ASPECT® device for the first time	
	Web-UI and explanation of sub-menus	
	Licensing of targets	
	Terminology and understanding of the interfaces	

Section 5 – Setting up BACnet® Routing		Interactive
Router Configuration	Configuring the routing on an ASPECT® target	
	Review of system Menus	
	Port Configuration	
	BACnet Settings	
	Time Sync Settings	
	<b>Class Exercise 1</b>	

Section 6 – Opening Studio for the First Time		Interactive
ASPECT®	Review File structure	
	Review of windows, toolbars, project tree, trace tab	
	MAP technology Explained	
	Setting up database connections, (which to use)	
	Creating your first project	
	<b>Class Exercise 2 Creating a Project</b>	

Section 7– Networks and Devices		Interactive
ASPECT®	Review BACnet networks structure	
	Discovering Networks and Devices	
	Manually adding Networks and Devices	
	Understanding Communications Mechanisms	
	Importing A Site from Engineering Center	
	Importing Satellites into an Enterprise Project	
	<b>Class Exercise 3 Adding Networks and Devices</b>	

Section 8– Points and Their Attributes		Interactive
ASPECT®	Review BACnet point object	
	Discovering points under a Device	
	Manually adding Points to a device	
	Map point Properties	
	Making Points User Friendly	
	<b>Class Exercise 4 Adding and configuring points</b>	

## Day 2

Section 9 – Points Editability and Display Options		Interactive
ASPECT®	Review of the Edit/Display Properties	
	Display Class and Display order	
	Edit Ranges and Edit Styles	
	Viewing Points	
	Ranged Status	
	<b>Class Exercise 5 Configuring Editing and Viewing</b>	

Section 10 – MAP Alarming		Interactive
ASPECT®	Review of MAP Alarm Properties	
	Configuring Analog Alarms	
	Configuring Binary Alarms	
	Conditional Alarming - interlocks	
	Organizing Alarms – priorities and filtering	
	<b>Class Exercise 6 Configuring Alarms</b>	

Section 11 – Trending		Interactive
ASPECT®	Review of MAP Trend options	
	Review of MAP Trend Properties	
	Configuring Trends	
	Configuring Sparklines (what are they)	
	Organizing Alarms – priorities and filtering	
	<b>Class Exercise 7 Configuring Trends and Sparklines</b>	

Section 12 – Templates, the power of templates		Interactive
ASPECT®	What is a template?	
	How to create a template	
	Applying a template to a discovered device	
	Create devices offline using templates	
	<b>Class Exercise 8 Create and applying templates</b>	

Section 13 – Static Graphics		Interactive
ASPECT®	What is a Static Graphics?	
	How to create a Static Graphic	
	Backgrounds vs images	
	Adding a data point to a static graphic	
	Adding multiple data points to a static graphics	
	Annunciator Properties	
	How to View a Static Graphic	
	<b>Class Exercise 9 Creating a Static Graphic</b>	

### Day 3

Section 14 – How the Data is Displayed		Interactive
ASPECT®	What is Style	
	Review the Style Properties	
	Creating and Configuring Styles	
	Applying Styles to a Point on a Graphic	
	<b>Class Exercise 10 Creating and Applying Styles</b>	

Section 15 – Polygons – Flood Fill		Interactive
ASPECT®	What is a Polygon?	
	Polygon Properties	
	Creating a Color Fill Area	
	Color Fill Options	
	<b>Class Exercise 11 Creating and Applying Polygons</b>	

Section 16 – Relative Graphics		Interactive
ASPECT®	What is Relative Graphics?	
	How to Create a Relative Graphic	
	Background vs Images	
	Adding a Data Point to a Relative Graphic	
	Adding Multiple Data Points to Relative Graphics	
	Annunciator Properties	
	How to View a Relative Graphic	
	<b>Class Exercise 12 Creating a Relative Graphic</b>	

Section 17 – Enumerated Images		Interactive
ASPECT®	What is an Enumerated Image?	
	Properties of the Enumerated Image	
	Creating an Enumerated Image	
	<b>Class Exercise 13 Created Enumerated Images</b>	

Section 18 – Schedules		Interactive
ASPECT®	Scheduling in ASPECT® What are Your Options	
	How to Create an ASPECT® Schedule	
	Configuration of an ASPECT® Schedule	
	How the Schedules Work	
	Linking the Schedule to Data Points	
	<b>Class Exercise 14 Creating an ASPECT® Schedule. Linking the Schedule to Points and Objects</b>	

Section 19 – System Users		Interactive
ASPECT®	Adding Users to the System	
	Adding User Groups	
	Permissioning Users to Edit and See Data	
	How the users can gain or be denied access to data	
	<b>Class Exercise 15 Creating System User and assigning them privileges</b>	

Section 20 – Map References		Interactive
ASPECT®	What is a Map Reference?	
	How Can they be Used	
	Reorganizing the Data Views	
	Properties of a Ref Map Point	
	<b>Class Exercise 15 Creating System User and assigning them privileges</b>	

Section 20 – Map References		Interactive
ASPECT®	What is a Map Reference?	
	How Can they be Used	
	Permissioning Users to Edit and See Data	
	Reorganizing the Data Views	
	<b>Class Exercise 16 Mapping data from one device to another</b>	
	Map Reference Expressions	
	How They Work	
	Boolean or Analog Result	
	<b>Class Exercise 17 Creating Analog and Binary Map Reference Expressions</b>	
	Exposing Map Point Properties	
	<b>Class Exercise 18 Exposing Map Point Properties for Editing</b>	

Section 21 – Conditional Visibility		Interactive
ASPECT®	What is Conditional Visibility	
	Adding Conditional Visibility to a Map Point	
	<b>Class Exercise 19 Making Objects Conditionally Visible</b>	

Section 22 – Alarm Delivery		Interactive
ASPECT®	Alarming Methods	
	Setting Up the Email Notification Service	
	Class Exercise 20 Setting Up the Email Notification Service	
	Notifiers – Organizing Alarms	
	Creating Notifiers	
	Setting Default Information in Notifiers	
	Setting Filters	
	Editing Notifiers Online	
	<b>Class Exercise 21 Creating and Editing Notifiers</b>	

Section 23 – User Dashboard Review		Interactive
ASPECT®	What is the User Dashboard	
	How to Navigate ASPECT®	
	Favorite Points and Object	
	Viewing Trend Information	
	Creating and Saving Trends	
	<b>Class Exercise 22 Modifying the User Dashboard</b>	



**Day 4**

Section 24 – Review		AAM/Cylon Training Manual
ASPECT®	Deployments and System Architectures	
	Steps to Create an ASPECT® System	
	Open Discussion – Your Input	
	<b>Class Exam</b>	