



Audio Design Essentials (On Demand)

INTRODUCTION TO AUDIO DESIGN

COURSE TITLE	Design Essentials Introduction to Audio Design
COURSE NUMBER	AD131
SUGGESTED CORE	CC101 - 106 Core Curriculum - Audio, Cabling, Control, Video, Networking, PC
PREREQUISITES	None
CLASS TYPE	On Demand (online only)
DURATION	2hrs of recorded content
DESCRIPTION	This online course is for AV/IT systems designers and consists of several individual videos focusing on how integrating installed audio into a commercial space. Students who complete this course will have a better understanding of key Harman Professional Audio products and the tools needed to implement a single room audio design solution.
TOPICS COVERED	Ceiling Speaker Configurator Software Distributed System Design Software Loudspeakers (Basics and Product Overview) Amplifiers (Basics and Product Overview) Signal Processing (Basics and Product Overview) Microphones (Basics and Product Overview) Mixers (Basics and Product Overview)
REQUIRED MATERIALS	Computer with internet access
EXAM / PRACTICAL	AD160 Harman Certified Audio Associate Design - Online Exam
CREDITS EARNED	N/A
CERTIFICATE EARNED	Harman Certified Audio Associate Design (HCAA-D)

COLLEGE OF BSS



Course Map to Audio Designer Certification



Required ■
Optional ■



Audio Designer

AUDIO SYSTEM DESIGN FOR AV PROFESSIONALS

COURSE TITLE	Audio Designer Audio System Design for AV Professionals
COURSE NUMBER	AD232
SUGGESTED CORE	CC101 - 106 Core Curriculum - Audio, Cabling, Control, Video, Networking, PC
PREREQUISITES	Harman Certified Audio Associate Design (HCAA-D)
CLASS TYPE	Instructor Led
DURATION	2 day
DESCRIPTION	This instructor led course is intended for systems designers and consultants focused on integrating sound reinforcement into larger commercial applications using products from different Harman audio families. This two-day prep course will help student determine the various challenges that can affect an audio design; from small huddle spaces needing additional sound reinforcement to large cafeterias that need additional control. This course will prepare the student for completion of the Harman Certified Audio Professional Design Practical Exam (AD261)
TOPICS COVERED	Small room design Video and Audio Conference Designs Multi-zone Designs Calculations for acoustical variances and power requirements Hands-on exercises to solve common audio design challenges
REQUIRED MATERIALS	None
EXAM / PRACTICAL	AD260 Harman Certified Audio Professional Design - Online Exam AD261 Harman Certified Audio Professional Design - Practical Exam
CREDITS EARNED	InfoComm RUs—8
CERTIFICATE EARNED	Harman Certified Audio Professional Design (HCAP-D)



Course Map to Audio Designer Certification



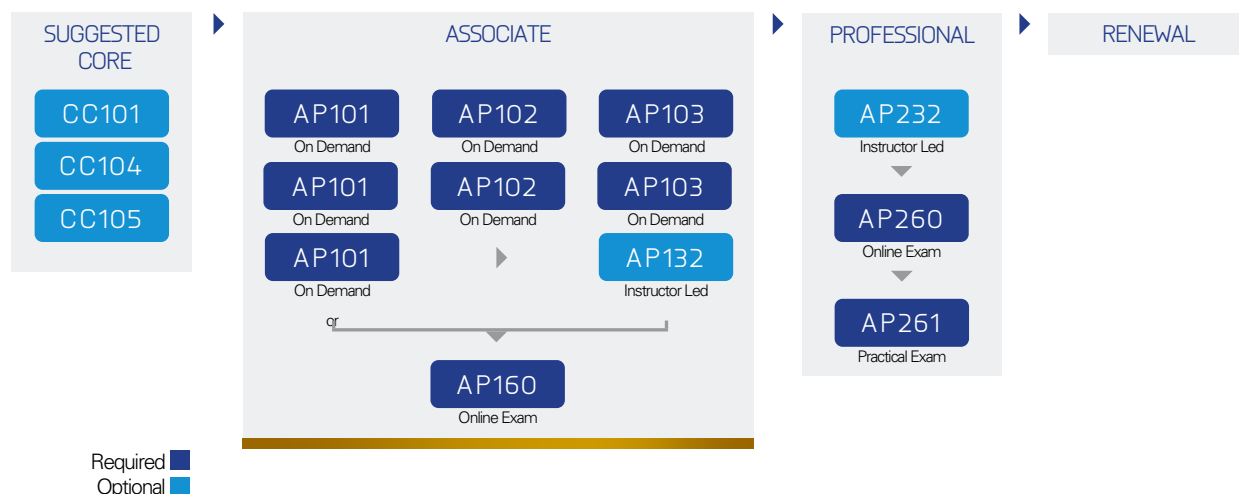
Required ■
Optional ■



Intro to Harman Installed Sound Solutions

COURSE TITLE	Intro to Harman Installed Sound Solutions
COURSE NUMBER	AP101
SUGGESTED CORE	CC101, 104, 105 Core Curriculum - Audio, Networking, PC
PREREQUISITES	N/A
CLASS TYPE	On Demand (online only)
DURATION	46 min (approximate video runtime)
DESCRIPTION	This course introduces HARMAN's premium solutions for installed sound systems, and some of the underlying technologies used in those systems. The objective of this course is to ensure a baseline level of proficiency in the subject of Installed Sound Solutions. These skills are essential to your success in working with Harman Professional solutions.
TOPICS COVERED	Core System Components HiQnet Audio Architect vs. Other Software History of Networked Audio Overview of digital audio signals How to choose the right networked audio
REQUIRED MATERIALS	Computer with internet access
EXAM / PRACTICAL	Online Exam
CREDITS EARNED	N/A
CERTIFICATE EARNED	None

Course Map to Audio Programmer Certification



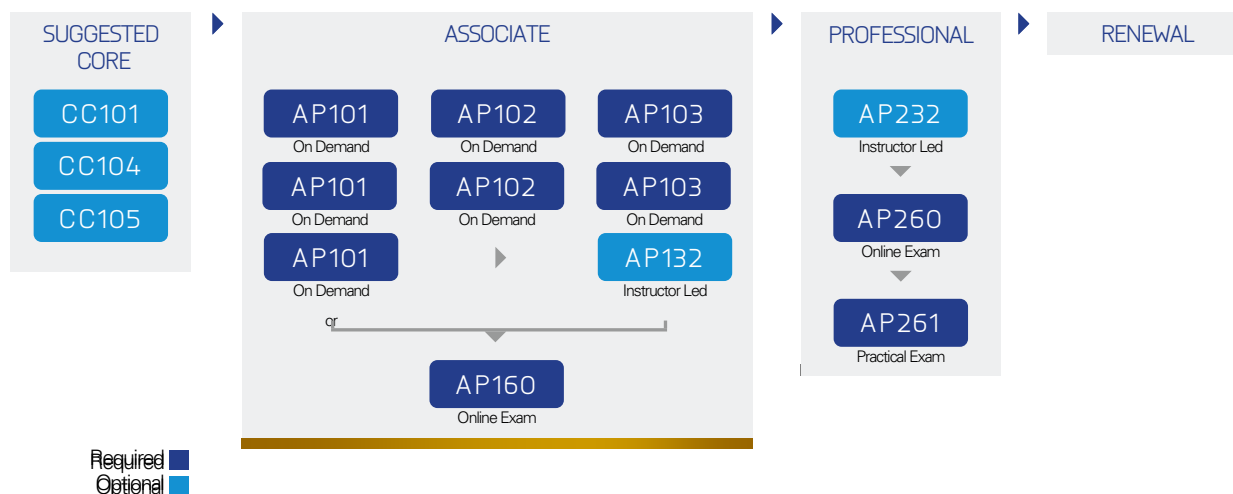


Soundweb London Hardware

COURSE TITLE	Soundweb London Hardware
COURSE NUMBER	AP102
SUGGESTED CORE	CC101, 104, 105 Core Curriculum - Audio, Networking, PC
PREREQUISITES	N/A
CLASS TYPE	On Demand (online only)
DURATION	68 minutes (approximate video runtime)
DESCRIPTION	This course provides a hardware overview for Soundweb London, an award winning product line of Digital Signal Processors designed and manufactured by BSS Audio, a HARMAN company. The objective of this course is to ensure a baseline level of proficiency in the subject of Soundweb London Hardware. These skills are essential to your success in working with Harman Professional solutions.
TOPICS COVERED	Overview of Soundweb London Hardware — Cards, GPIO, Networked Audio, DSP, Fixed IO Devices, BLU-BIB & BLU-BOB, Controllers
REQUIRED MATERIALS	Computer with internet access
EXAM / PRACTICAL	Online Exam
CREDITS EARNED	N/A
CERTIFICATE EARNED	None



Course Map to Audio Programmer Certification



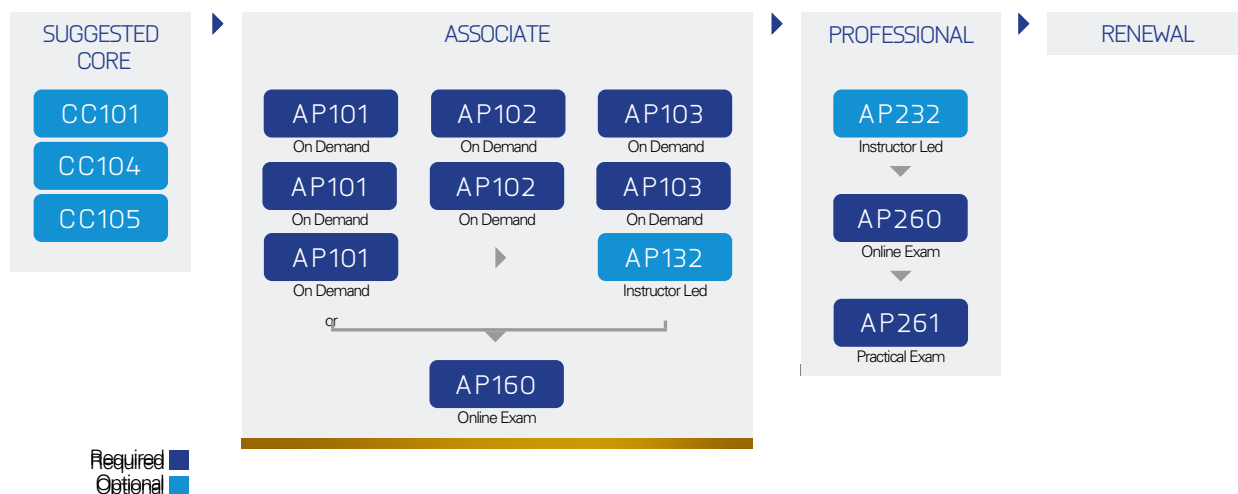


Drivecore Installation Training

COURSE TITLE	Drivecore Installation Training
COURSE NUMBER	AP103
SUGGESTED CORE	CC101, 104, 105 Core Curriculum - Audio, Networking, PC
PREREQUISITES	N/A
CLASS TYPE	On Demand (online only)
DURATION	43 min (approximate video runtime)
DESCRIPTION	This course provides an overview of the basic functions and features found in our flagship install amplifier series. The objective of this course is to ensure a baseline level of proficiency in the subject of DriveCore Installation. These skills are essential to your success in working with Harman Professional solutions.
TOPICS COVERED	Functions and features of the DriveCore Amplifier Series Overview of software and signal processing Input routing for analog Input routing for BLU Link How to select High Z Discussion on Mode Settings Priority Input Routing Signal Generation with the DriveCore series
REQUIRED MATERIALS	Computer with internet access
EXAM / PRACTICAL	Online Exam
CREDITS EARNED	N/A
CERTIFICATE EARNED	None



Course Map to Audio Programmer Certification





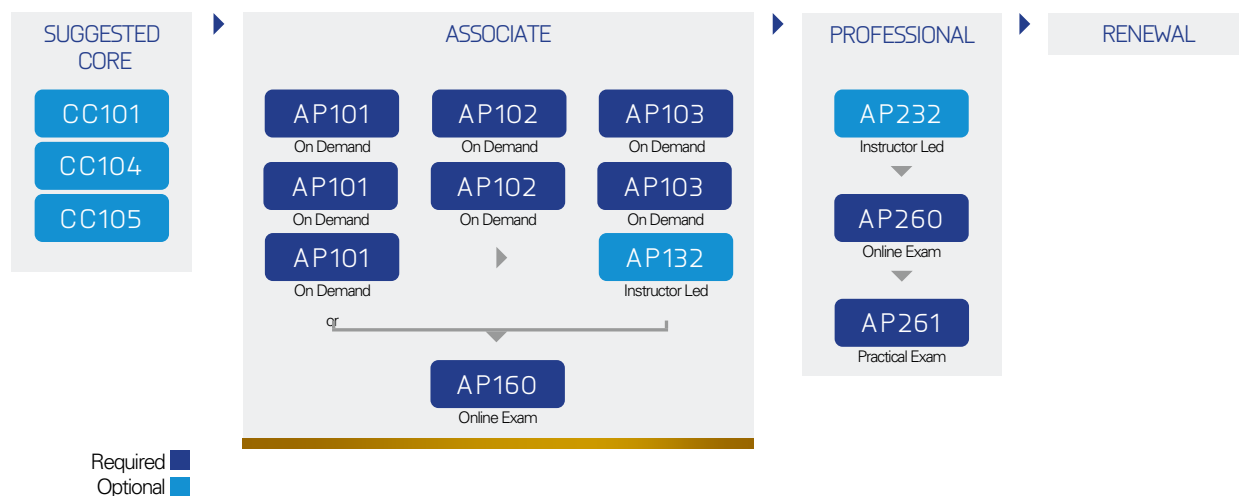
Workflow Overview Part 1

OFFLINE DESIGN

COURSE TITLE	Workflow Overview Part 1 (Offline Design)
COURSE NUMBER	AP104
SUGGESTED CORE	CC101, 104, 105 Core Curriculum - Audio, Networking, PC
PREREQUISITES	N/A
CLASS TYPE	On Demand (online only)
DURATION	32 min (approximate video runtime)
DESCRIPTION	This course provides a software overview for Audio Architect. The objective of this course is to ensure a baseline level of proficiency in the subject of Offline Design in Audio Architect. These skills are essential to your success in working with Harman Professional solutions.
TOPICS COVERED	Introduction to Audio Architect Defining Venue Adding Devices Route Audio Mode Associate Amplifiers Mode Configuring Monitoring through Audio Architect
REQUIRED MATERIALS	Computer with internet access
EXAM / PRACTICAL	Online Exam
CREDITS EARNED	N/A
CERTIFICATE EARNED	None



Course Map to Audio Programmer Certification





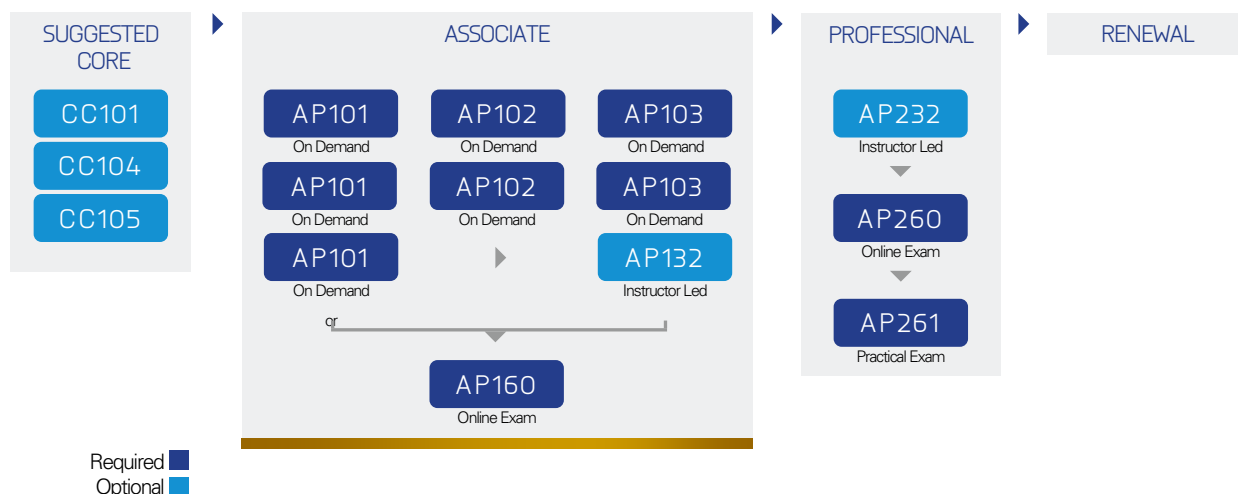
Workflow Overview Part 2

ONLINE OPERATE

COURSE TITLE	Workflow Overview Part 2 (Online Operate)
COURSE NUMBER	AP105
SUGGESTED CORE	CC101, 104, 105 Core Curriculum - Audio, Networking, PC
PREREQUISITES	N/A
CLASS TYPE	On Demand (online only)
DURATION	30 min (approximate video runtime)
DESCRIPTION	This course continues to provide a software overview for Audio Architect. The objective of this course is to ensure a baseline level of proficiency in the subject of Online Design in Audio Architect. These skills are essential to your success in working with Harman Professional solutions.
TOPICS COVERED	How to use Audio Architect in a network Networking basics Network Settings and Connectivity for Audio Architect Netsetter Match Devices Mode Synchronize Venue Mode Run Venue Mode
REQUIRED MATERIALS	Computer with internet access
EXAM / PRACTICAL	Online Exam
CREDITS EARNED	N/A
CERTIFICATE EARNED	None



Course Map to Audio Programmer Certification

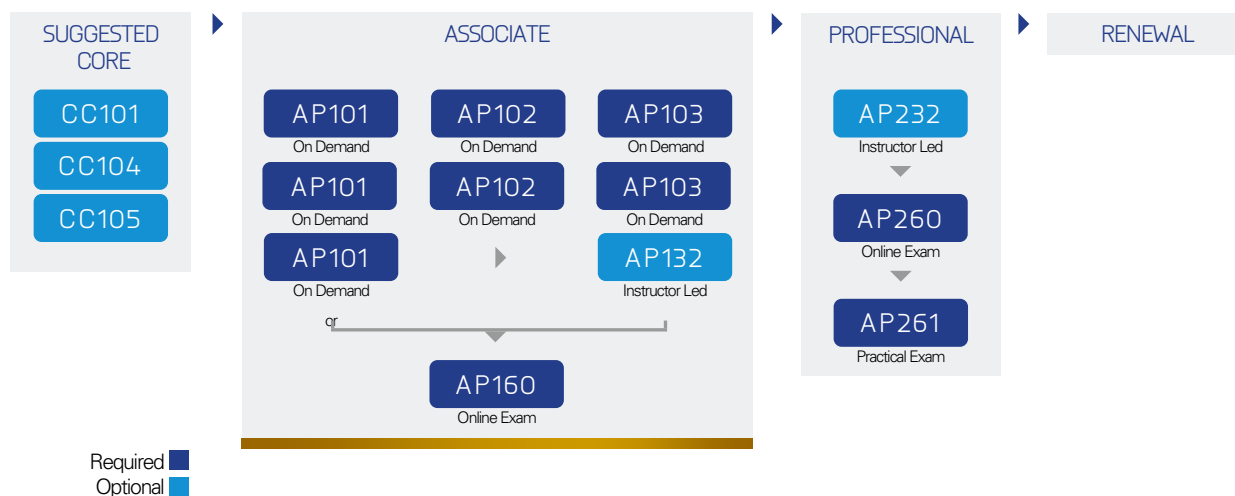


General Tips and Tricks

COURSE TITLE	General Tips and Tricks
COURSE NUMBER	AP106
SUGGESTED CORE	CC101, 104, 105 Core Curriculum - Audio, Networking, PC
PREREQUISITES	N/A
CLASS TYPE	On Demand (online only)
DURATION	15 min (approximate video runtime)
DESCRIPTION	This course offers some general tips and tricks for working with Audio Architect. The objective of this course is to ensure a baseline level of proficiency in the subject of managing and navigating Audio Architect. These skills are essential to your success in working with Harman Professional solutions.
TOPICS COVERED	Discussion about the File Menu in Audio Architect How to prevent data loss Managing Windows and Navigation
REQUIRED MATERIALS	Computer with internet access
EXAM / PRACTICAL	Online Exam
CREDITS EARNED	N/A
CERTIFICATE EARNED	None



Course Map to Audio Programmer Certification

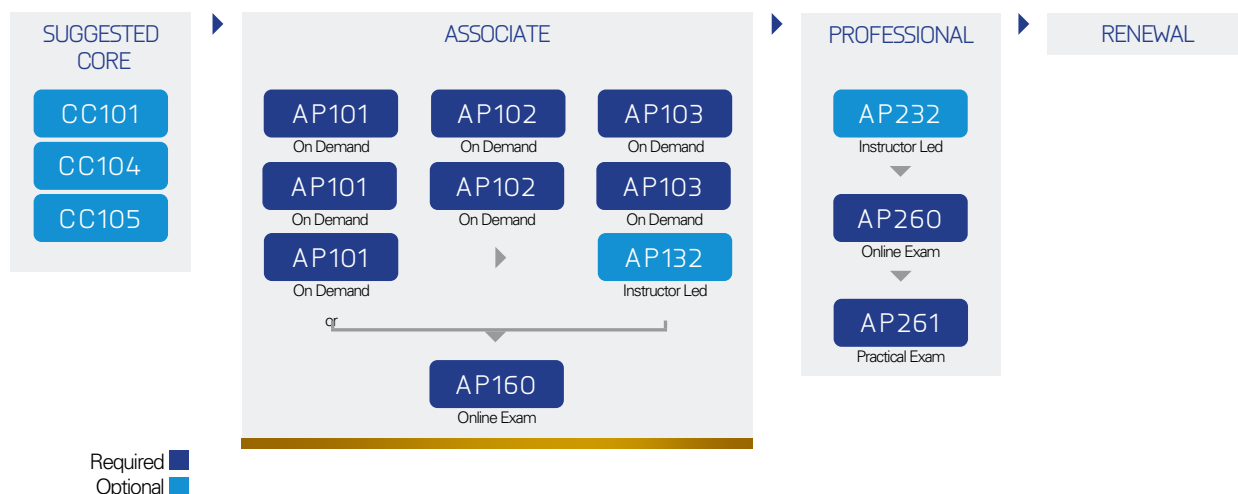




BSS Audio Fundamentals

COURSE TITLE	BSS Audio Fundamentals
COURSE NUMBER	AP107
SUGGESTED CORE	CC101, 104, 105 Core Curriculum - Audio, Networking, PC
PREREQUISITES	N/A
CLASS TYPE	On Demand (online only)
DURATION	22 min (approximate video runtime)
DESCRIPTION	This course introduces the basics of programming BSS Audio Soundweb London devices within Audio Architect. The objective of this course is to ensure a baseline level of proficiency in the subject of BSS Audio Fundamentals. These skills are essential to your success in working with Harman Professional solutions.
TOPICS COVERED	What is virtual wiring Signal Naming with BSS Troubleshooting Audio
REQUIRED MATERIALS	Computer with internet access
EXAM / PRACTICAL	Online Exam
CREDITS EARNED	N/A
CERTIFICATE EARNED	None

Course Map to Audio Programmer Certification





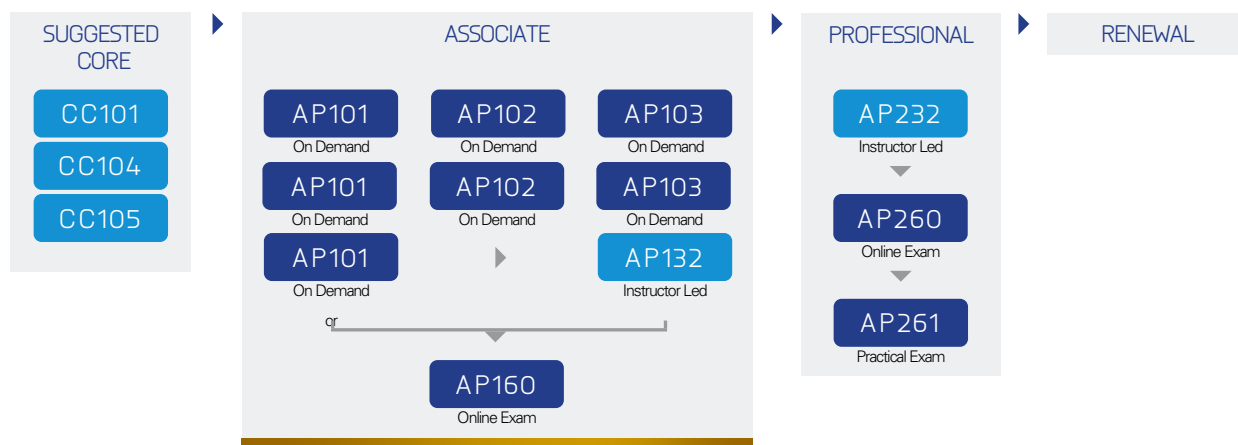
Audio Programmer 1 (Instructor Led)

INTRODUCTION TO AUDIO PROGRAMMING

COURSE TITLE	Audio Programmer 1 Introduction to Audio Programming
COURSE NUMBER	AP132
SUGGESTED CORE	CC101, 104, 105 Core Curriculum - Audio, Networking, PC
PREREQUISITES	<p>AP101 Intro to Harman Installed Sound Solutions</p> <p>AP102 Soundweb London Hardware</p> <p>AP103 DriveCore Installation Training</p> <p>AP104 Workflow Ov. Pt 1 (Offline Design)</p> <p>AP105 Workflow Ov. Pt 2 (Online Operate)</p> <p>AP106 General Tips and Tricks</p> <p>AP107 BSS Audio Fundamentals</p>
CLASS TYPE	Instructor Led
DURATION	1 day
DESCRIPTION	Audio Architect is a software application used to configure, control, and monitor hardware devices from several HARMAN brands, including AKG, BSS, Crown, dbx, and JBL. While BSS and Crown devices are primarily used during class as a basis for examples, this course (formerly known as Audio Architect 100) covers Audio Architect concepts common to products from all HARMAN brands within Audio Architect.
TOPICS COVERED	<p>Going Online with Audio Architect Scheduler</p> <p>Custom panel design</p> <p>Panel presets</p> <p>Access Control (i.e. security)</p> <p>iOS Control via HiQnet Motion Control</p> <p>Firmware</p> <p>Event Log</p> <p>Logic Rules Wizard</p> <p>Email Triggering</p> <p>Third-Party Controller tool</p> <p>BLU-8v2 & Conrio EC Programming</p>
REQUIRED MATERIALS	Laptop computer with 64bit Windows OS (Win7 or higher) Most current version of Audio Architect
EXAM / PRACTICAL	AP160 Harman Certified Audio Associate Programming - Online Exam
CREDITS EARNED	InfoComm RUs—4
CERTIFICATE EARNED	Harman Certified Audio Associate Programming (HCAA-P)



Course Map to Audio Programmer Certification



Required ■
Optional ■



Audio Programmer 2

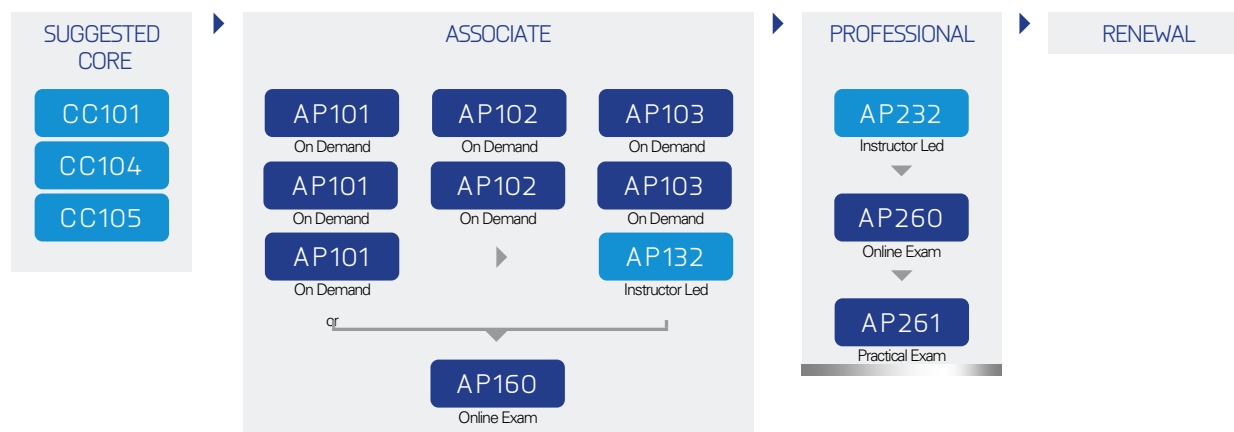
AUDIO PROGRAMMING FOR AV PROFESSIONALS

COURSE TITLE	Audio Programmer 2 Audio Programming for AV Professionals														
COURSE NUMBER	AP232														
SUGGESTED CORE	CC101, 104, 105 Core Curriculum - Audio, Networking, PC														
PREREQUISITES	Completion of, or concurrent enrollment in AP131 or AP132														
CLASS TYPE	Instructor Led														
DURATION	1 day														
DESCRIPTION	This instructor led course is covers advanced programming concepts for Soundweb London with Audio Architect. This one-day test prep provide information about the technologies within our award-winning product line of digital signal processors designed and manufactured by BSS audio and will prepare students for completion of the AP260 online exam and AP261 practical exam.														
TOPICS COVERED	<table border="0"> <tr> <td>Processing Object tour</td> <td>CobraNet programming</td> </tr> <tr> <td>BLU link programming</td> <td>Dante programming</td> </tr> <tr> <td>GPIO programming</td> <td>Parameter presets</td> </tr> <tr> <td>Linking</td> <td>Subranging</td> </tr> <tr> <td>Conditional Logic</td> <td>Automixers</td> </tr> <tr> <td>Acoustic Echo Cancellation</td> <td>Ambient Noise Compensation</td> </tr> <tr> <td>Room Combine</td> <td></td> </tr> </table>	Processing Object tour	CobraNet programming	BLU link programming	Dante programming	GPIO programming	Parameter presets	Linking	Subranging	Conditional Logic	Automixers	Acoustic Echo Cancellation	Ambient Noise Compensation	Room Combine	
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REQUIRED MATERIALS	Laptop computer with 64bit Windows OS (Win7 or higher) Most current version of Audio Architect														
EXAM / PRACTICAL	AP261 Harman Certified Audio Professional Programming - Online Exam AP262 Harman Certified Audio Professional Programming - Practical Exam														
CREDITS EARNED	InfoComm RUs—4														
CERTIFICATE EARNED	Harman Certified Audio Professional Programming (HCAP-P)														

COLLEGE OF BSS



Course Map to Audio Programmer Certification



Required ■
Optional ■