



Duties and Tasks	Knowledge of	Skills and Abilities	Tools, Equipment, and Resources
A Conduct a Needs Assessment			
1 Identify functional requirements (e.g., user stories, user experience, benchmarking, client expectations)			
	accessibility requirements acoustical principles (e.g. isolation, reverberation, noise reduction, speech intelligibility, ambient noise) allied trades (e.g., mechanical, electrical, plumbing, security, comms, HVAC, structural, BMS) audiovisual products and appropriate applications client needs (e.g., existing infrastructure, standards, desired outcomes) client organizational structure industry best practices and standards industry jargon and terminology (e.g., AV and allied trades) industry products and trends interaction between AV design and other systems interview techniques IT and networking lighting design principles local laws and regulations measurement conversions project budgeting project contractual relationships project procurement process user experience design user interface design	ability to conduct a site survey ability to document findings ability to identify appropriate stakeholders ability to manage expectations attention to detail customer service skills interviewing skills measurement skills observational skills presentation skills prioritization skills professional communication skills research skills technical writing skills	accessibility standards architectural models and renderings as-builts benchmarking samples camera case studies client technology standards computer document management tools industry resources industry standards internet local and regional regulations measurement instruments measurement software user stories white papers
2 Review or formulate client technology master plan			
	accessibility requirements acoustical principles (e.g. isolation, reverberation, noise reduction, speech intelligibility, ambient noise) allied trades (e.g., mechanical, electrical, plumbing, security, comms, HVAC, structural, BMS) audiovisual products and appropriate applications client needs (e.g., existing infrastructure, standards, desired outcomes) client organizational structure	ability to document findings ability to identify appropriate stakeholders ability to manage expectations attention to detail customer service skills interviewing skills	accessibility standards architectural models and renderings as-builts benchmarking samples case studies client technology standards



	<p>equipment life cycles</p> <p>industry best practices and standards</p> <p>industry jargon and terminology (e.g., AV and allied trades)</p> <p>industry products and trends</p> <p>interaction between AV design and other systems</p> <p>interview techniques</p> <p>IT and networking</p> <p>lighting design principles</p> <p>local laws and regulations</p> <p>project budgeting</p> <p>project contractual relationships</p> <p>project procurement process</p> <p>user experience design</p> <p>user interface design</p>	<p>measurement skills</p> <p>observational skills</p> <p>presentation skills</p> <p>prioritization skills</p> <p>professional communication skills</p> <p>technical writing skills</p>	<p>computer</p> <p>document management tools</p> <p>industry resources</p> <p>industry standards</p> <p>internet</p> <p>local and regional regulations</p> <p>user stories</p> <p>white papers</p>
3 Generate and/or Review the Program Report			
	<p>accessibility requirements</p> <p>acoustical principles (e.g. isolation, reverberation, noise reduction, speech intelligibility, ambient noise)</p> <p>allied trades (e.g., mechanical, electrical, plumbing, security, comms, HVAC, structural, BMS)</p> <p>audiovisual products and appropriate applications</p> <p>bid/tender process</p> <p>client needs (e.g., existing infrastructure, standards, desired outcomes)</p> <p>client organizational structure</p> <p>contract requirements</p> <p>industry best practices and standards</p> <p>industry jargon and terminology (e.g., AV and allied trades)</p> <p>industry products and trends</p> <p>interaction between AV design and other systems</p> <p>IT and networking</p> <p>lighting design principles</p> <p>local laws and regulations</p>	<p>ability to budget and estimate</p> <p>ability to document findings</p> <p>ability to identify appropriate stakeholders</p> <p>ability to manage expectations</p> <p>attention to detail</p> <p>AV math skills</p> <p>measurement skills</p> <p>observational skills</p> <p>presentation skills</p> <p>prioritization skills</p> <p>professional communication skills</p> <p>technical writing skills</p>	<p>accessibility standards</p> <p>architectural models and renderings</p> <p>benchmarking samples</p> <p>budgeting tools</p> <p>case studies</p> <p>client technology standards</p> <p>computer</p> <p>cut sheets and product specifications</p> <p>document management tools</p> <p>industry resources</p> <p>industry standards</p> <p>internet</p> <p>local and regional regulations</p> <p>measurement instruments</p> <p>user stories</p>



	<p>project budgeting</p> <p>project contractual relationships</p> <p>project procurement process</p> <p>user experience design</p> <p>user interface design</p>		<p>white papers</p>
<p>B Coordinate with Other Professionals</p>			
<p>I Coordinate with architectural/interior design professionals</p>			
	<p>accessibility requirements</p> <p>acoustical principles (e.g. isolation, reverberation, noise reduction, speech intelligibility, ambient noise)</p> <p>aesthetic considerations</p> <p>allied trades (e.g., mechanical, electrical, plumbing, security, comms, HVAC, structural, BMS)</p> <p>construction drawings and plans</p> <p>contract requirements</p> <p>drawing and symbol standards</p> <p>ergonomic considerations</p> <p>financial impacts of design changes</p> <p>image capturing best practices (e.g. wall and furniture colors, patterns, lighting, surface reflectivity)</p> <p>impact of materials on room acoustics</p> <p>industry jargon and terminology (e.g., AV and allied trades)</p> <p>interaction between AV design and other systems</p> <p>lighting design principles</p> <p>local laws and regulations</p> <p>measurement conversions</p> <p>project contractual relationships</p> <p>project management techniques</p>	<p>ability to annotate drawings</p> <p>ability to collaborate with allied trades</p> <p>ability to convey the impact of architectural and interior design on AV system design</p> <p>ability to document findings</p> <p>ability to estimate cost impacts</p> <p>ability to identify appropriate stakeholders</p> <p>ability to interpret charts and schedules</p> <p>ability to manage expectations</p> <p>ability to read construction drawings</p> <p>ability to read technical drawings and specifications</p> <p>attention to detail</p> <p>AV math skills</p> <p>drafting skills</p> <p>general math skills</p> <p>measurement skills</p> <p>negotiation skills</p> <p>observational skills</p> <p>prioritization skills</p> <p>professional communication skills</p> <p>spatial awareness skills</p> <p>technical writing skills</p>	<p>A/E (architectural and engineering) drawing package</p> <p>accessibility standards</p> <p>architectural models and renderings</p> <p>BIM</p> <p>budgeting tools</p> <p>CAD</p> <p>client technology standards</p> <p>computer</p> <p>document management tools</p> <p>industry and allied trade standards</p> <p>internet</p> <p>local and regional regulations</p> <p>measurement instruments</p> <p>PDF reader/writer</p>



2 Coordinate with structural professionals			
	<p>acoustical principles (e.g. isolation, reverberation, noise reduction, speech intelligibility, ambient noise)</p> <p>aesthetic considerations</p> <p>allied trades (e.g., mechanical, electrical, plumbing, security, comms, HVAC, structural, BMS)</p> <p>construction drawings and plans</p> <p>contract requirements</p> <p>drawing and symbol standards</p> <p>equipment rigging and mounting best practices</p> <p>financial impacts of design changes</p> <p>impact of materials on room acoustics</p> <p>industry jargon and terminology (e.g., AV and allied trades)</p> <p>interaction between AV design and other systems</p> <p>local laws and regulations</p> <p>measurement conversions</p> <p>project contractual relationships</p> <p>project management techniques</p> <p>structural terminology</p> <p>working loads and safety factors</p>	<p>ability to annotate drawings</p> <p>ability to collaborate with allied trades</p> <p>ability to convey the impact of structural design (e.g. acoustic, safety, aesthetic)</p> <p>ability to document findings</p> <p>ability to estimate cost impacts</p> <p>ability to identify appropriate stakeholders</p> <p>ability to interpret charts and schedules</p> <p>ability to manage expectations</p> <p>ability to read construction drawings</p> <p>ability to read technical drawings and specifications</p> <p>attention to detail</p> <p>AV math skills</p> <p>drafting skills</p> <p>general math skills</p> <p>measurement skills</p> <p>negotiation skills</p> <p>observational skills</p> <p>prioritization skills</p> <p>professional communication skills</p> <p>spatial awareness skills</p> <p>technical writing skills</p>	<p>A/E (architectural and engineering) drawing package</p> <p>architectural models and renderings</p> <p>BIM</p> <p>budgeting tools</p> <p>CAD</p> <p>computer</p> <p>document management tools</p> <p>industry and allied trade standards</p> <p>internet</p> <p>local and regional regulations</p> <p>measurement instruments</p> <p>PDF reader/writer</p> <p>structural engineer contact</p>
3 Coordinate with mechanical, electrical, and plumbing professionals			
	<p>accessibility requirements</p> <p>acoustical principles (e.g. isolation, reverberation, noise reduction, speech intelligibility, ambient noise)</p> <p>allied trades (e.g., mechanical, electrical, plumbing, security, comms, HVAC, structural, BMS)</p>	<p>ability to annotate drawings</p> <p>ability to collaborate with allied trades</p> <p>ability to document findings</p>	<p>A/E (architectural and engineering) drawing package</p> <p>accessibility standards</p> <p>architectural models and renderings</p>



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	<p>cable management best practices</p> <p>construction drawings and plans</p> <p>contract requirements</p> <p>drawing and symbol standards</p> <p>financial impacts of design changes</p> <p>industry jargon and terminology (e.g., AV and allied trades)</p> <p>interaction between AV design and other systems</p> <p>lighting design principles</p> <p>local laws and regulations</p> <p>measurement conversions</p> <p>project contractual relationships</p> <p>project management techniques</p>	<p>ability to document findings</p> <p>ability to estimate cost impacts</p> <p>ability to interpret charts and schedules</p> <p>ability to manage expectations</p> <p>ability to read construction drawings</p> <p>ability to read technical drawings and specifications</p> <p>attention to detail</p> <p>AV math skills</p> <p>drafting skills</p> <p>general math skills</p> <p>measurement skills</p> <p>negotiation skills</p> <p>observational skills</p> <p>prioritization skills</p> <p>professional communication skills</p> <p>spatial awareness skills</p> <p>technical writing skills</p>	<p>BIM</p> <p>budgeting tools</p> <p>CAD</p> <p>client technology standards</p> <p>computer</p> <p>document management tools</p> <p>industry and allied trade standards</p> <p>internet</p> <p>local and regional regulations</p> <p>measurement instruments</p> <p>PDF reader/writer</p>
<p>4 Coordinate with IT and network security professionals</p>			
	<p>accessibility requirements</p> <p>aesthetic considerations</p> <p>allied trades (e.g., mechanical, electrical, plumbing, security, comms, HVAC, structural, BMS)</p> <p>bandwidth and latency requirements</p> <p>cabling infrastructure (e.g. fiber optics, copper, connections)</p> <p>construction drawings and plans</p> <p>contract requirements</p> <p>drawing and symbol standards</p> <p>encryption standards</p>	<p>ability to annotate drawings</p> <p>ability to calculate bandwidth and PoE requirements</p> <p>ability to collaborate with allied trades</p> <p>ability to convey the impact of network design on AV system design (e.g. budgetary, existing network vs separate network, redundancy)</p> <p>ability to document findings</p> <p>ability to estimate cost impacts</p> <p>ability to identify appropriate stakeholders</p> <p>ability to identify AV transport methodology requirements</p> <p>ability to interpret charts and schedules</p>	<p>A/E (architectural and engineering) drawing package</p> <p>accessibility standards</p> <p>architectural models and renderings</p> <p>BIM</p> <p>budgeting tools</p> <p>CAD</p> <p>client technology standards</p> <p>computer</p> <p>computer</p>



	<p>financial impacts of design changes</p> <p>fundamentals of switch configuration (e.g. QoS, prioritization, green ethernet)</p> <p>industry jargon and terminology (e.g., AV and allied trades)</p> <p>interaction between AV design and other systems</p> <p>IT and networking terminology</p> <p>local laws and regulations</p> <p>measurement conversions</p> <p>network access requirements</p> <p>network architecture (e.g. logical topology, physical topology, VLAN, routing, PoE requirements)</p> <p>network security standards (e.g. wireless)</p> <p>OSI model</p> <p>project contractual relationships</p> <p>project management techniques</p> <p>signal protocols and requirements (e.g. conference, voice, audio, video, wireless)</p>	<p>ability to manage expectations</p> <p>ability to read construction drawings</p> <p>ability to read technical drawings and specifications</p> <p>attention to detail</p> <p>AV math skills</p> <p>cable management skills</p> <p>drafting skills</p> <p>general math skills</p> <p>measurement skills</p> <p>negotiation skills</p> <p>observational skills</p> <p>prioritization skills</p> <p>professional communication skills</p> <p>technical writing skills</p>	<p>document management tools</p> <p>industry and allied trade standards</p> <p>internet</p> <p>IT drawings</p> <p>local and regional regulations</p> <p>measurement instruments</p> <p>network standards</p> <p>PDF reader/writer</p>
5 Coordinate with acoustical professionals			
	<p>acoustical principles (e.g. isolation, reverberation, noise reduction, speech intelligibility, ambient noise)</p> <p>aesthetic considerations</p> <p>allied trades (e.g., mechanical, electrical, plumbing, security, comms, HVAC, structural, BMS)</p> <p>audio best practices (e.g. room materials, capturing, reinforcement)</p> <p>construction drawings and plans</p> <p>contract requirements</p> <p>drawing and symbol standards</p> <p>financial impacts of design changes</p> <p>impact of materials on room acoustics</p>	<p>ability to annotate drawings</p> <p>ability to collaborate with allied trades</p> <p>ability to convey the acoustical needs for the AV design</p> <p>ability to document findings</p> <p>ability to estimate cost impacts</p> <p>ability to identify appropriate stakeholders</p> <p>ability to interpret charts and schedules</p> <p>ability to manage expectations</p> <p>ability to read construction drawings</p>	<p>A/E (architectural and engineering) drawing package</p> <p>accessibility standards</p> <p>acoustical modeling software</p> <p>acoustical reports</p> <p>architectural models and renderings</p> <p>BIM</p> <p>budgeting tools</p> <p>CAD</p> <p>computer</p>



	<p>industry jargon and terminology (e.g., AV and allied trades)</p> <p>interaction between AV design and other systems</p> <p>local laws and regulations measurement conversions project contractual relationships project management techniques</p>	<p>ability to read technical drawings and specifications</p> <p>attention to detail</p> <p>AV math skills drafting skills general math skills measurement skills</p> <p>negotiation skills</p> <p>observational skills</p> <p>prioritization skills</p> <p>professional communication skills</p> <p>spatial awareness skills</p> <p>technical writing skills</p>	<p>document management tools</p> <p>industry and allied trade standards</p> <p>internet local and regional regulations measurement instruments PDF reader/writer</p> <p>sound system modeling software</p>
6 Coordinate with life safety and security professionals			
	<p>allied trades (e.g., mechanical, electrical, plumbing, security, comms, HVAC, structural, BMS)</p> <p>basic control protocols</p> <p>construction drawings and plans</p> <p>contract requirements</p> <p>drawing and symbol standards financial impacts of design changes</p> <p>industry jargon and terminology (e.g., AV and allied trades)</p> <p>interaction between AV design and other systems (e.g., BMS, fire detection, access control, camera surveillance)</p> <p>life safety principles (e.g., intelligibility, alarm notifications, mass notifications, emergency power)</p> <p>lighting design principles</p>	<p>ability to annotate drawings</p> <p>ability to collaborate with allied trades</p> <p>ability to document findings</p> <p>ability to estimate cost impacts</p> <p>ability to identify appropriate stakeholders ability to interpret charts and schedules</p> <p>ability to manage expectations</p> <p>ability to read construction drawings</p> <p>ability to read technical drawings and specifications</p> <p>attention to detail</p>	<p>A/E (architectural and engineering) drawing package</p> <p>accessibility standards</p> <p>architectural models and renderings</p> <p>BIM</p> <p>budgeting tools CAD</p> <p>client technology standards</p> <p>computer</p> <p>document management tools</p> <p>industry and allied trade standards</p>



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	<p>local laws and regulations measurement conversions physical security issues project contractual relationships project management techniques</p>	<p>AV math skills cable management skills drafting skills general math skills measurement skills negotiation skills observational skills prioritization skills professional communication skills technical writing skills</p>	<p>internet local and regional regulations measurement instruments PDF reader/writer sound system modeling software</p>
7 Coordinate with site or project specific professionals (e.g., content creators, theatrical, exhibit designer)			
	<p>accessibility requirements acoustical principles (e.g. isolation, reverberation, noise reduction, speech intelligibility, ambient noise) aesthetic considerations allied trades (e.g., mechanical, electrical, plumbing, security, comms, HVAC, structural, BMS) audio best practices (e.g. room materials, capturing, reinforcement) construction contractual relationships construction drawings and plans contract requirements drawing and symbol standards ergonomic considerations financial impacts of design changes image capturing best practices (e.g. wall and furniture colors, patterns, lighting, surface reflectivity) impact of materials on room acoustics industry jargon and terminology (e.g., AV and interaction between AV design and other systems life safety considerations lighting design principles local laws and regulations</p>	<p>ability to annotate drawings ability to collaborate with allied trades ability to convey the specialty needs of the AV design ability to document findings ability to estimate cost impacts ability to identify appropriate stakeholders ability to interpret charts and schedules ability to manage expectations ability to read construction drawings ability to read technical drawings and specifications attention to detail AV math skills drafting skills general math skills measurement skills negotiation skills observational skills prioritization skills</p>	<p>A/E (architectural and engineering) drawing package accessibility standards architectural models and renderings BIM budgeting tools CAD client technology standards computer document management tools industry and allied trade standards internet local and regional regulations measurement instruments PDF reader/writer</p>



	measurement conversions project management techniques	professional communication skills spatial awareness skills technical writing skills	
C Develop and Document AV Designs			
I Create conceptual AV design			
	accessibility requirements acoustical principles (e.g. isolation, reverberation, noise reduction, speech intelligibility, ambient noise) allied trades (e.g., mechanical, electrical, plumbing, security, comms, HVAC, structural, BMS) audio, video, and control systems architectures audiovisual products and appropriate applications AV services (e.g., software, conferencing, storage, streaming, digital signage) cabling infrastructure client needs (e.g., existing infrastructure, standards, desired outcomes) client organizational structure contract requirements drawing and symbol standards industry best practices and standards industry jargon and terminology (e.g., AV and allied trades) industry products and trends interaction between AV design and other systems IT and networking lighting design principles local laws and regulations project budgeting	ability to budget and estimate ability to design a sound system (e.g., number of speakers, appropriate type of speaker, loudness needed) ability to design a video system (e.g., brightness, viewing requirements, sightlines, contrast) ability to determine viewing angles, sightlines, and viewing distance ability to document findings ability to identify appropriate stakeholders ability to interpret charts and schedules ability to manage expectations ability to read technical drawings and specifications attention to detail AV math skills customer service skills drafting skills measurement skills observational skills presentation skills prioritization skills problem solving skills professional communication skills	accessibility standards acoustical modeling software architectural models and renderings benchmarking samples BIM budgeting tools CAD case studies client technology standards computer construction development drawings construction documents contract cut sheets and product specifications document management tools industry resources industry standards internet local and regional regulations



	<p>project contractual relationships</p> <p>project documentation process</p> <p>project procurement process</p> <p>project timelines and milestones</p> <p>signal flow</p> <p>system operation</p> <p>user experience design</p> <p>user interface design</p>	<p>technical writing skills</p>	<p>measurement instruments</p> <p>program report</p> <p>scope of work</p> <p>sound system modeling software</p> <p>user stories</p> <p>white papers</p>
2 Revise conceptual design to be compatible with site conditions and/or A&E drawing package			
	<p>accessibility requirements</p> <p>acoustical principles (e.g. isolation, reverberation, noise reduction, speech intelligibility, ambient noise)</p> <p>allied trades (e.g., mechanical, electrical, plumbing, security, comms, HVAC, structural, BMS)</p> <p>audio, video, and control systems architectures</p> <p>audiovisual products and appropriate applications</p> <p>AV services (e.g., software, conferencing, storage, streaming, digital signage)</p> <p>cabling infrastructure</p> <p>client needs (e.g., existing infrastructure, standards, desired outcomes)</p> <p>client organizational structure</p> <p>drawing and symbol standards</p> <p>electrical systems power and grounding/earthing</p> <p>equipment mounting</p> <p>industry best practices and standards</p> <p>industry jargon and terminology (e.g., AV and allied trades)</p>	<p>ability to budget and estimate</p> <p>ability to document findings</p> <p>ability to identify appropriate stakeholders</p> <p>ability to identify infrastructure requirements</p> <p>ability to manage expectations</p> <p>ability to read technical drawings and specifications</p> <p>attention to detail</p> <p>AV math skills</p> <p>drafting skills</p> <p>measurement skills</p> <p>observational skills</p> <p>presentation skills</p> <p>prioritization skills</p> <p>problem solving skills</p>	<p>accessibility standards</p> <p>architectural models and renderings</p> <p>av conceptual design</p> <p>BIM</p> <p>budgeting tools</p> <p>CAD</p> <p>camera</p> <p>client technology standards</p> <p>computer</p> <p>construction development drawings</p> <p>cut sheets and product specifications</p> <p>document management tools</p> <p>industry resources</p> <p>industry standards</p>



	<p>industry products and trends</p> <p>interaction between AV design and other systems</p> <p>interaction between AV design and other systems</p> <p>IT and networking</p> <p>life safety principles (e.g., intelligibility, alarm notifications, mass notifications, emergency power)</p> <p>lighting design principles</p> <p>local laws and regulations</p> <p>project budgeting</p> <p>project contractual relationships</p> <p>project requirements</p> <p>signal flow</p> <p>signal limitations</p> <p>system operation</p> <p>user experience design</p> <p>user interface design</p>	<p>professional communication skills</p> <p>technical writing skills</p>	<p>internet</p> <p>local and regional regulations</p> <p>measurement instruments</p> <p>PDF reader/writer</p> <p>Personal Protective Equipment (PPE)</p> <p>program report</p> <p>tool kit</p>
3 Produce final design and drawing package			
	<p>accessibility requirements</p> <p>acoustical principles (e.g. isolation, reverberation, noise reduction, speech intelligibility, ambient noise)</p> <p>allied trades (e.g., mechanical, electrical, plumbing, security, comms, HVAC, structural, BMS)</p> <p>audio components</p> <p>audiovisual products and appropriate applications</p> <p>AV furniture</p> <p>AV services (e.g., software, conferencing, storage, streaming, digital signage)</p> <p>AV signal types (e.g., control protocols, content, data)</p>	<p>ability to budget and estimate</p> <p>ability to create schematic diagrams</p> <p>ability to design a sound system (e.g., number of speakers, appropriate type of speaker, loudness needed)</p> <p>ability to design a video system (e.g., brightness, viewing requirements, sightlines, contrast)</p> <p>ability to determine image size for application</p> <p>ability to determine viewing angles, sightlines, and viewing distance</p> <p>ability to document findings</p> <p>ability to identify appropriate stakeholders</p>	<p>accessibility standards</p> <p>acoustical modeling software</p> <p>architectural models and renderings</p> <p>audio design software</p> <p>av conceptual design</p> <p>BIM</p> <p>budgeting tools</p> <p>cable specifications and guidelines</p>



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<p>bid/tender process</p> <p>cabling infrastructure</p> <p>client needs (e.g., existing infrastructure, standards, desired outcomes)</p> <p>contract requirements</p> <p>control components</p> <p>digital rights management</p> <p>digital signal processing</p> <p>display image attributes</p> <p>EDID management</p> <p>electrical systems power and grounding/earthing</p> <p>equipment rigging and mounting best practices</p> <p>ergonomic considerations</p> <p>human factors (e.g. ergonomics, intelligibility, psychoacoustics)</p> <p>industry best practices and standards</p> <p>industry jargon and terminology (e.g., AV and allied trades)</p> <p>industry products and trends</p> <p>IP based audio and video protocols</p> <p>IT and networking</p> <p>life safety principles (e.g., intelligibility, alarm notifications, mass notifications, emergency power)</p> <p>lighting design principles</p> <p>local laws and regulations</p> <p>principles of RF and IR</p> <p>project budgeting</p> <p>project contractual relationships</p> <p>project documentation process</p>	<p>ability to identify infrastructure requirements</p> <p>ability to identify potential interferences</p> <p>ability to interpret charts and schedules</p> <p>ability to manage expectations</p> <p>ability to produce custom furniture details</p> <p>ability to read and evaluate product specifications</p> <p>ability to read technical drawings and specifications</p> <p>attention to detail</p> <p>AV math skills</p> <p>customer service skills</p> <p>drafting skills</p> <p>measurement skills</p> <p>observational skills</p> <p>presentation skills</p> <p>prioritization skills</p> <p>problem solving skills</p> <p>professional communication skills</p> <p>research skills</p> <p>technical writing skills</p>	<p>CAD</p> <p>case studies</p> <p>client branding guidelines</p> <p>client network standards</p> <p>client technology standards</p> <p>computer</p> <p>construction documents</p> <p>construction drawings</p> <p>contract</p> <p>cut sheets and product specifications</p> <p>document management tools</p> <p>industry resources</p> <p>industry standards</p> <p>internet</p> <p>local and regional regulations</p> <p>manufacturer contacts</p> <p>measurement instruments</p> <p>PDF reader/writer</p> <p>Printer/plotter</p> <p>program report</p> <p>reference manuals</p> <p>scope of work</p> <p>site survey</p> <p>sound system modeling software</p> <p>user and installation manuals</p>
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	<p>project procurement process</p> <p>project timelines and milestones</p> <p>redundancy</p> <p>signal distance limitations</p> <p>signal flow</p> <p>signal timing (e.g., Genlock, video sync, audio sync)</p> <p>system operation</p> <p>user experience design</p> <p>user interface design</p> <p>video components</p> <p>video formats (e.g., HDTV, 4K, UHD)</p> <p>visual acuity (e.g., relationship between font size, screen size, and viewing distance)</p>		<p>white papers</p>
<p>4 Finalize project documentation (e.g., bill of materials, bid spec, drawings, scope of work)</p>			
	<p>accessibility requirements</p> <p>allied trades (e.g., mechanical, electrical, plumbing, security, comms, HVAC, structural, BMS)</p> <p>audiovisual products and appropriate applications</p> <p>bid/tender process</p> <p>client needs (e.g., existing infrastructure, standards, desired outcomes)</p> <p>construction contractual relationships</p> <p>contract requirements</p> <p>industry best practices and standards</p> <p>industry jargon and terminology (e.g., AV and allied trades)</p> <p>interaction between AV design and other systems</p> <p>IT and networking</p> <p>local laws and regulations</p> <p>project budgeting</p> <p>project procurement process</p>	<p>ability to budget and estimate</p> <p>ability to conduct quality assurance (QA)</p> <p>ability to manage expectations</p> <p>ability to specify performance criteria</p> <p>attention to detail</p> <p>drafting skills</p> <p>presentation skills</p> <p>professional communication skills</p> <p>technical writing skills</p>	<p>bid/tender documentation</p> <p>BIM</p> <p>budgeting tools</p> <p>CAD</p> <p>client technology standards</p> <p>computer</p> <p>cut sheets and product specifications</p> <p>document management tools</p> <p>industry resources</p> <p>industry standards</p> <p>internet</p> <p>local and regional regulations</p> <p>PDF reader/writer</p>



	user experience design user interface design		
D Deploy AV Designs			
1 Support project execution activities			
	accessibility requirements allied trades (e.g., mechanical, electrical, plumbing, security, comms, HVAC, structural, BMS) audiovisual products and appropriate applications cable management techniques construction contractual relationships construction documentation process construction roles and relationships construction timelines and milestones industry best practices and standards industry jargon and terminology (e.g., AV and allied trades) industry products and trends local laws and regulations measurement conversions project management structure	ability to collaborate with allied trades ability to document findings ability to interpret charts and schedules ability to read technical drawings and specifications attention to detail cable management skills customer service skills measurement skills observational skills prioritization skills professional communication skills technical writing skills	accessibility standards BIM computer construction documents document management tools industry resources industry standards internet local and regional regulations measurement instruments measurement software Personal Protective Equipment (PPE)
2 Verify system performance			
	accessibility requirements audiovisual products and appropriate applications cable management techniques construction contractual relationships construction documentation process construction timelines and milestones industry best practices and standards	ability to document findings ability to interpret charts and schedules ability to read technical drawings and specifications attention to detail cable management skills measurement skills observational skills	accessibility standards BIM computer construction documents document management tools industry resources industry standards



CTS-D Job Task Analysis



	<p>industry jargon and terminology (e.g., AV and allied trades)</p> <p>local laws and regulations</p> <p>measurement conversions</p>	<p>problem solving skills</p> <p>professional communication skills</p>	<p>internet</p> <p>local and regional regulations</p> <p>measurement instruments</p> <p>measurement software</p> <p>Personal Protective Equipment (PPE)</p> <p>specialty measurement instruments (e.g., sound level meters, light meter)</p> <p>specialty measurement software (e.g., RTA, network protocol analyzer, EDID analyzer)</p> <p>system performance checklist or specifications</p>
<p>3 Conduct project close out activities (e.g., as-builts, system manuals, training, programing information)</p>			
	<p>audiovisual products and appropriate applications</p> <p>construction contractual relationships</p> <p>construction documentation process</p> <p>construction timelines and milestones</p> <p>industry best practices and standards</p> <p>industry jargon and terminology (e.g., AV and system operation</p> <p>training and adult learning techniques</p>	<p>ability to document findings</p> <p>ability to interpret charts and schedules</p> <p>ability to interpret field conditions and field mark ups</p> <p>ability to read technical drawings and specifications</p> <p>ability to train and educate end-users</p> <p>attention to detail</p> <p>customer service skills</p> <p>drafting skills</p> <p>presentation skills</p> <p>problem solving skills</p> <p>professional communication skills</p> <p>technical writing skills</p>	<p>BIM</p> <p>CAD</p> <p>computer</p> <p>construction documents</p> <p>contract</p> <p>document management tools</p> <p>documentation of record</p> <p>final code files</p> <p>industry resources</p> <p>industry standards</p> <p>internet</p> <p>project close-out documentation and field mark up</p> <p>scope of work</p>