AUDIO-VISUAL TECHNOLOGY COURSE MODULES

Want to put together amazing audio-visual shows at mega concerts? Or be involved in lighting up the billboards of the Fl Night Race in Singapore? You could very well do so, when you take on the Diploma in Audio-visual Technology [AVT]!

With AVT, you will gain the technical and creative skills you need to succeed in the arts and entertainment industries. You will learn to plan and set up audio-visual components and equipment for meetings, conventions, exhibitions and stage entertainment events. You will also pick up skills in producing and editing creative media content as well as synthesising and mixing audio files using the latest software and professional equipment. Finally, you will learn to design, plan and manage technical theatres, live shows and events.

If you're musically inclined, you can also learn to arrange and compose music, and design sound for live performances and advertisements with our elective modules in Music Theory & Synthesis, Fundamentals of Sound Design and Sound Design for Live Performances. AVT's strong emphasis on hands-on training also means that you will get to go on internships with industry players like Esplanade and Mediacorp from as early as your first year.

LEVEL 3.1

Audio Effect Processing

This workshop-based module offers intensive hands- on sessions, where students learn to create, edit and mix music and special sound effects onto multiple audio tracks. It also provides theoretical and practical training on digital audio effects techniques that convert 2-channel stereo audio track to 5.1 surround-soundtracks, the professional use of AC-3, redirection to speakers through digital Dolby and surround sound decoders, and spatial enhancement in theatre and audio entertainment application. Principles of surround sound and encoding are also studied.

Live Sound Technology

This hands-on module teaches students the concepts and technical skills required for live event sound reinforcement. Topics include the operation of a basic sound system using interconnected components such as consoles, amplifiers, speakers, processors and microphones. Upon completion of this module, students will be able to apply the concepts of live sound reinforcement to set up and operate a small to medium-scale sound system for a live event, and to customise a recording set-up based on the ambience and multimedia requirements.

Stage Lighting

This module enables students to learn the technical and creative aspects of stage lighting. Topics include basic design, colour and exposure theory, types of lighting instruments, power distribution, control, safety, proper hanging, connection, focus, and control of instruments. Upon completion of this module, students will be able to perform creative lighting layout, install concert lighting, explain colour theory, integrate lighting control instrumentation, and set up a variety of motion lighting instruments.

Project ID - Connecting the Dots (IS Module)

This module aims to prepare students for an increasingly globalized and interconnected world where problems are multi-faceted and require interdisciplinary research and collaboration to solve. Using a project-based learning approach, students will have the opportunity to work in a multi-disciplinary team to investigate and propose comprehensive recommendations for a pressing real-world problem affecting Singapore. They will be guided to step out of their disciplinary silos and effectively communicate and collaborate with peers from different backgrounds. Ultimately, the module seeks to develop independent learning skills and the ability to synthesize diverse strands of knowledge to solve a complex problem, while impressing on students the importance of being a responsible global citizen.

Option Module

Video Conferencing & Streaming Technology

This module provides training in streaming technologies that include local network, internet audio and video streaming technology, webcasting and voice over IP (VoIP). Students will acquire knowledge of hardware configurations, transmitters and receivers, quality of service, routing, re-sequence, signal processing and streaming standards. The module also includes an overview of the MPEG-4 data compression mechanism; and issues related to shooting video for streaming, editing, quality control, and the formatting of streaming audio and video to fit various applications such as video conferencing, web-casting, pod-casting and mobile entertainment systems.

Fundamentals of Sound Design

This module introduces applications of sound design and related tools. This include Computer music sound scaping, Theatrical sound design, Jingles sound design (as introduction to Film/TV sound design) , Animation/Feature Film Sound FX and Animation/Feature Film Music Scoring. At the end of the module, students are able to perform simple sound design based on a small video (can be drama, advertising or parts of MTV) clip provided.

Sound Design for Live Performances

This module reinforces students' skills on sound design. The concepts and tools to apply sound design coupled with basic music composition are then used to create music masterpieces to support live performances. Students are given assignments to produce completed portfolios work for samples of live performances. These portfolios will enable the students to showcase their skills and experience in sound design and basic music composition for not only live performances but also short advertisement and moving images upon completing their studies.

LEVEL 3.2

6-Month Local/Overseas Internship

In this module, students will have the opportunity to apply the skills and knowledge acquired in the classroom in a real-time environment. Students are given on-the-job training in actual companies to develop skills in problem-solving, interpersonal communications, project planning, industrial liaisons and character building. Participating companies will also have the opportunity to assess prospective employees and secure the services of these students in advance.

COURSE CURRICULUM

Module Name	Credit Units
YEAR 3	
Level 3.1 (24 hours per week)	
Audio Effect Processing	5
Live Sound Technology	5
Stage Lighting	5
Video Conferencing & Streaming Technology / Fundamentals of Sound Design / Sound Design for Live Performance	5
Project ID: Connecting the Dots ^	4
Level 3.2 (22 hours per week)	
6-Month Internship (Local/Overseas)	22

or	
Final-year Project	22

Notes:

^ For more details on Interdisciplinary Studies (IS) electives, please log on to www.np.edu.sg/is/

IS Modules

The School of Interdisciplinary Studies (IS) delivers a broad-based curriculum, which nurtures a new generation of professionals with multidisciplinary skills and an innovative and entrepreneurial spirit to meet the challenges of a knowledge economy. IS offers both prescribed modules and electives to challenge boundaries. Prescribed modules develop students' competencies in core areas such as Communication, Innovation and Enterprise, Culture and Communication, and Personal Mastery and Development, while elective modules provide insights into Arts and Humanities, Business, Design, and Science and Technology.