

Equipment List for DAE E-commerce

To meet the practical teaching requirements of the E-commerce program, it is necessary to equip at least two training labs: one for E-commerce Operations and another for Live Streaming Operations. The detailed equipment specifications for each training laboratory are outlined in the following table.

I.E-commerce Operations Lab

No.	Item	Specification	Quantity
1	Server	As per latest MIS Specification	1
2	Computer	As per latest MIS Specification with 2 GB Graphic Card	51
3	Network SWITCH	24 ports Giga bit Switch	1
4	Wireless Access Point	wireless Ap 2.5ghz and 5ghz supported. capable of handling 50 clients	1
5	Networking	51 Computers Connectivity	1
6	Fiber Connection	25Mbps or above	1
7	UPS	3KVA Solar Supported (120 Amp Tubelar, 2 Batteries)	1
8	Multimedia Projector	As per latest MIS Specification with wireless Display	1
9	Operating Systems and Software	•Windows 10 operating system •Chrome/Firefox browsers	1
10	E-commerce Operations Software	Main Functions: Designed to simulate e-commerce operations activities, the system should support: Online store operations, Product management, Storefront customization, SEO optimization, SEM advertising, Customer service modules practice etc.	

		Technical Requirements: Three-tier architecture with B/S (Browser/Server) mode	
	VPS(virtual private server)	• Available Options Based on Current Market Trends • international business contact numbers for e-commerce-related VPS providers	

II.Live Streaming Operations

No.	Item	Specification	Quantity
1	Server	As per latest MIS Specification	1
2	Computer	As per latest MIS Specification with 2 GB Graphic Card	1 unit /room
3	Network SWITCH	24 ports Giga bit Switch	1
4	Wireless Access Point	wireless Ap 2.5ghz and 5ghz supported. capable of handling 50 clients	1
5	Networking	51 Computers Connectivity	1
6	Fiber Connection	25Mbps or above	1
7	UPS	3KVA Solar Supported (120 Amp Tubelar, 2 Batteries)	1
8	Multimedia Projector	As per latest MIS Specification with wireless Display	1
9	Operating Systems and Software	•Windows 10 operating system •Chrome/Firefox browsers	1
10	Live Streaming Lighting Equipment	Fill Light: 18-inch beauty fill light, 15W fill light	1 piece /room
11	Auxiliary live streaming stand	Multi-device tripod for fill lights & smartphones	1 piece /room
12	Smartphone/Tablet	•RAM: ≥4GB	1 piece /room

		•ROM: $\geq 64\text{GB}$ Screen Resolution: $\geq 1280 \times 720$	
13	Wireless Microphone	•Real-time monitoring •External power supply compatible •Environmental noise reduction •Real-time headphone monitoring (ear return)	1 piece /room
14	Virtual Background Screen	Size: $\geq 1.5\text{m (W)} \times 2\text{m (H)}$	1 piece /room
15	Live Streaming Software	Main Functions: Designed to simulate the entire live streaming operation process, featuring live video recording, product listing during broadcasts, live event planning, real-time interactive bullet comments (danmu), and live streaming data analysis capabilities. Technical Requirements: Supports mainstream video codecs including H.264, MPEG-4, and AVS.	1

I . E-commerce Operations Training Lab – Equipment List

Core Computing Infrastructure

1. **High-Performance Server**
 - For managing e-commerce simulations, databases, and user management.
 - *Specification:* Latest MIS-compliant.
 2. **Workstation Computers (51 Units)**
 - For student use in practical tasks like website setup, product listing, and SEO exercises.
 - *Specification:* Latest MIS-compliant with 2 GB Graphic Card.
 3. **Operating System & Browsers**
 - Windows 10 with Chrome/Firefox for web-based e-commerce tools and browsing.
 4. **E-commerce Simulation Software**
 - Simulates real-world online store operations including:
 - Product management
 - Storefront design
 - SEO/SEM marketing
 - Customer service training
 - *Technical Requirement:* 3-tier architecture (Browser/Server mode).
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Networking & Connectivity

5. **Gigabit Network Switch (24-Port)**
 - Ensures high-speed internal connectivity between systems.
6. **Wireless Access Point (Dual-Band)**
 - Supports up to 50 clients for flexible wireless access.
7. **Structured Networking System**
 - Physical network setup connecting all 51 computers.
8. **Fiber Internet Connection (≥25 Mbps)**
 - Reliable, high-speed external connectivity for real-time e-commerce operations.

Power & Display

9. **Uninterruptible Power Supply (UPS)**
 - 3KVA solar-compatible UPS with 2 tubular batteries for consistent power supply.

10. Multimedia Projector with Wireless Display

- For instructor-led demonstrations and student presentations.
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II. Live Streaming Operations Training Lab – Equipment List

Streaming Workstation Setup

1. **High-Performance Server**
 - For managing live streaming data, media storage, and system control.
 - *Specification:* Latest MIS-compliant.
 2. **Live Streaming Computer (1 Unit)**
 - Dedicated to video editing, broadcasting, and real-time engagement tasks.
 - *Specification:* Latest MIS-compliant with 2 GB Graphic Card.
 3. **Live Streaming Software**
 - Key Features:
 - Live video capture
 - Real-time product showcasing
 - Interactive chat (danmu) (**Danmu (弹幕)**—also known as "**bullet comments**"—is a real-time comment feature commonly used in live streaming and video platforms, especially in East Asia.
 - Data analytics for viewer engagement
 - *Supports:* H.264, MPEG-4, AVS codecs.
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Audio-Visual Equipment

4. **LED Fill Light (18-inch, 15W)**
 - Enhances on-camera appearance for product demonstrations.
5. **Multi-device Tripod Stand**
 - Holds smartphones and fill lights simultaneously for optimal setup.
6. **Smartphone/Tablet for Streaming**
 - RAM $\geq$ 4GB, ROM $\geq$ 64GB, Screen Resolution $\geq$ 1280 $\times$ 720 for HD streaming.
7. **Wireless Microphone with Monitoring**
 - Ensures clear audio with features like:
 - Noise reduction
 - Real-time headphone feedback
 - External power support
8. **Virtual Background Screen ($\geq 1.5\text{m} \times 2\text{m}$)**

- Provides professional-looking backgrounds for varied streaming scenarios.

Connectivity & Power

9. Gigabit Network Switch (24-Port)
10. Wireless Access Point (Dual-Band, 50-client capacity)
11. Structured Networking System (51 terminals support)
12. Fiber Internet Connection (≥ 25 Mbps)
13. UPS (3KVA Solar Supported)
14. Multimedia Projector with Wireless Display
15. Windows 10 OS & Chrome/Firefox