INFORMATION TECHNOLOGY COMPUTER LAB

SPACE DESCRIPTION

The IT Computer Lab is designed to accommodate computer-based learning with personal computers at individual workstations. The lab is similar in size to a General Classroom and must be able to accommodate 20 students in fixed workstation arrangements with ample power and data connections. Educational tools include a Learn Anywhere technology package with audio system and visual displays for group-based, collaborative, and interactive learning.

The IT Computer Lab is a building block of the larger **Information Technology Server Suite** and shall have direct access to the **Mock Server Room** and adjacent **Storage.**

SUCCESS FACTORS

Technology: Lab displays must be clearly legible from all locations within the lab. The display interface must be intuitive and able to adapt to multiple types of mobile and personal devices.

Furnishings: Fixed workstations as shown in the layout are the ideal arrangement for instruction and accommodating the desired number of students. The Training area at the back of the room shall include 2-tier workstations with power and data.

GENERAL

All perimeter walls shall extend full height to deck.

Consider access flooring system for optimal flexibility for power and data connections.

ACOUSTIC

Acoustic ratings for IT Lab perimeter walls: STC 50. Special accommodations may be required due to location in the building.

Maximum recommended HVAC Background Noise: 40dBa
Follow the recommended methodologies and best practices for mechanical system noise control in ANSI Standard S12.60; the 2015 ASHRAE Handbook-- HVAC Applications, Chapter 48, Noise and Vibration Control (with errata); and AHRI Standard 885–2008.

MECHANICAL

Window or room unit systems are not acceptable in IT Labs due to poor acoustic performance.

Provide additional cooling as may be required due to additional heat loads generated by equipment.

ELECTRICAL & DATA

For each student, provide data and two AC power outlets with USB at student stations. In new construction, provide floor outlets and access flooring system. Wall outlets or raceway are acceptable in renovations.

- Place wall outlets at no more than 6' intervals or as necessary to allow for 30% coverage. Coordinate with data requirements.
- Provide additional power and data for the following standard equipment:
    o 2 (+/-) 75" touchscreen TVs on the front teaching wall

- o 1 (+/-) 75" smart TV and camera on the rear wall for virtual classes
- o Rear wall power and data for 2-tier training stations
- o Instructor station with PC
- o Audio/ sound system to include instructor microphone, soundbars and wireless connection to student headsets as needed.
- ALTERNATE: Provide power and data in ceiling for 2 projectors at the front wall, in lieu of touchscreen TVs.

LIGHTING
- Provide LED lighting system with appreciable indirect component and good diffusion for maximum visibility from all directions.
- Provide controls for zoning and dimming. Front row shall be switched separately with three preset dimmable levels: low, medium, high.
- Provide low-brightness luminaires with high visual comfort probability (VCP) in all viewing directions.   Average 40fc at 30" A.F.F. Min CRI 80.

TECHNOLOGY

There will be two separate data services within the facility: the campus-wide system and the Information Technology programs' training system. Students will use this dedicated system to train in network physical infrastructure, operating systems, Cyber Security (attack and defense), and similar exercises so as not to put the campus-wide system at risk.
- Provide Wireless capability in all IT Labs.
- Coordinate equipment for Learn Anywhere technology package, per Ivy Tech specification.
- Provide data outlets at same interval as power in coordination with classroom type.

ACCESSORIES AND EQUIPMENT
- Provide two 75" touch screen TVs with web cam and soundbar speakers on front wall.
- Provide small tackboard on side wall for announcements.
- Student Computer Stations to have dual monitors

In ALTERNATE layout:
- On front teaching wall, provide 16' wide projectable whiteboard with marker tray in lieu of 75" touch screen TVs. Whiteboard shall be matte white, low-glare, 4.0 gain; and must support 16:9 projection dimensions.

DOORS AND WINDOWS
- Doors shall be minimum STC 30 with 6" x 30" Window Lite preferred for typical IT Labs.

FINISHES

Ceilings
Recommended Height: 9' to 10', with special consideration to acoustics when greater than 10'.

Ceilings shall have an NRC of .70 to .85.

In renovations, classrooms and labs without full height perimeter walls shall have ceilings with high CAC (Ceiling Attenuation Class) values.

Floors

Carpet tile is preferred for acoustic properties and over access flooring system.

FURNITURE

For IT Computer Labs, tables shall be fixed, wedge-shaped to facilitate view to the instructional wall, with integral power and data connections. Provide chairs on casters, coordinating caster type with flooring material.