IIT Classroom Types and Brief Descriptions

Standard AV Classrooms – Room capacity 10 to 60 students
- Includes a fixed presenter desk or podium, professional grade AV control system providing “user-friendly” centralized means of selecting and controlling audio and graphics from desired input, to one, or in some cases, multiple display devices.
- Graphics output can be presented using either, a ceiling-mounted projector and screen with electric controls, or a wall mounted flat panel display monitor. Screen and monitor sizes will be dependent on room layout.
- A minimum of 12 linear feet of uninterrupted whiteboard space on the front wall, even with screens lowered
- Audio output from selected source will be provided through ceiling mounted speakers, whenever possible. Volume adjustments for all sources will be available through the central AV control interface.
- All rooms will provide the following AV input sources:
  - Analog (VGA + 3.5mm Audio) and digital (HDMI) connections to a presenter laptop or tablet
  - Dedicated Classroom Computer or Terminal
  - Document Camera
- Presenter speech reinforcement (microphones, or similar) can be added if necessary

Enhanced AV Classrooms
- Offers the same AV functionality as the Standard AV Classroom, but also provides presenters with the means of Lecture Capture (LC). IIT defines Lecture Capture as recording a presentation for later review. This can be used for review by in-class students or on-line students when required.
  - LC Option 1 – Provides recording of selected audio and computer/video output and presenter microphone, no room camera to capture whiteboard or presenter. Intended to be presenter-controlled
  - LC Option 2 – Includes LC Option 1 functionality, plus a fixed room camera to capture the presenter and a single whiteboard. Presenter can view the output being recorded on a confidence monitor. Intended to be presenter-controlled.
  - LC Option 3 – Includes LC Option 1 functionality, plus an assistant-controlled camera to record presenter; room may also operate as an unattended LC Option 1 or LC Option 2.

Enhanced AV Auditorium – Room capacity > 60 with tiered row seating
- Includes all functionality of Enhanced AV Classroom with LC Option 3.
- Room size may require multiple output devices, each with independent selectable inputs.
  - The output devices can either be projectors and screens or multiple monitors, which could be combined into a “video wall”. Room usage will determine which method is appropriate.
- Lighting
  - Lights directly over the presenter and front wall need to be controllable from the presenter desk/podium. Ideally, lighting controls would be a function of the AV control program.
Collaborative Classroom

• In a Collaborative Classroom groups and individuals are able to share (and potentially record) displays with each other. The inputs to these displays may vary greatly due to students and faculty members bringing their own devices.

• Includes a fixed presenter desk, podium or AV cabinet, professional grade AV control system providing “user-friendly” centralized means of selecting and controlling audio and graphics from desired input, to multiple display devices.

• Graphics output can be presented using either, a ceiling-mounted projector and screen with electric controls, or a wall mounted flat panel display monitor. Screen and monitor sizes will be dependent on room layout.

• A minimum of 12 linear feet of uninterrupted whiteboard space on the front wall, even with screens lowered

• Audio output from selected source will be provided through ceiling mounted speakers, whenever possible. Volume adjustments for all sources will be available through the central AV control interface.

• All rooms will provide the following AV input sources:
  o Analog (VGA + 3.5mm Audio) and digital (HDMI) connections to a presenter laptop or tablet
  o Dedicated Classroom Computer or Terminal
  o Document Camera

• Presenter speech reinforcement can be added if necessary

• No Collaborative Classrooms currently exist on IIT’s Main Campus, therefore the Office of Technology Services and IIT Online, as IIT’s AV Planning Committee:
  o Would need to be included in design process
  o Would need to sign–off on the final design plans
  o Would need to be fully trained to support the new room

Recording Studio

• Small recording space, where presenters record sessions to post online. Many universities use these kinds of sessions in a “flipped classroom” model, where students view lectures before regularly scheduled class sessions freeing up instructors to prioritize and utilize class seat time for engaging instructional activities like discussions, problem-solving, etc.

• Includes a fixed cabinet for AV equipment, professional grade AV control system providing “user-friendly” centralized means of selecting and controlling audio and graphics from desired input.

• All rooms will provide the following AV input sources:
  o Analog (VGA + 3.5mm Audio) and digital (HDMI) connections to a presenter laptop or tablet
  o Optional Computer
  o Document Camera
  o Camera and audio equipment to record presenter

• No Recording Rooms currently exist on IIT’s Main Campus, therefore IIT Online and OTS, in conjunction with IIT’s AV Planning Committee:
  o Would need to be included in design process
  o Would need to sign–off on the final design plans
  o Would need to be fully trained to support the new room
Conference Room/Multipurpose space

- Includes a fixed cabinet for AV equipment, professional grade AV control system providing “user-friendly” centralized means of selecting and controlling audio and graphics from desired input, to one, or in some cases, multiple display devices.
- Graphics output can be presented using either, a ceiling-mounted projector and screen with electric controls, or a wall mounted flat panel display monitor. Screen and monitor sizes will be dependent on room layout.
- Audio output from selected source will be provided through ceiling or wall mounted speakers, whenever possible. Volume adjustments for all sources will be available through the central AV control interface.
- AV system should facilitate a means of video conferencing, approved by IIT OTS & IIT Online.
- All rooms will provide the following AV input sources:
  - Analog (VGA + 3.5mm Audio) and digital (HDMI) connections to a presenter laptop or tablet
  - Optional Computer
AV Component and Infrastructure Requirements

- **Fixed Instructor Desk/Podium/AV Cabinet with separate built-in AV rack and locking door** *(See Table 1. Current List of Approved Manufacturers)*
  - Power: Quad outlet on 20A dedicated circuit
  - Qty. 7 - Cat6 UTP cables to IDF for AV Controller, Touch Panel, Lecture Capture Box, Dedicated Classroom PC, Building AV In, Room AV Out, Voice
  - 1-Speaker Wire (14 AWG), 1- Cat6 UTP Screen Control, 1- Cat6 Shielded to each display device or room camera
  - The AV rack portion of the desk/podium/cabinet shall have vented, lockable, and removable panel/door on the front (door) and rear (panel) of the rack.
    - AV cabinets to be coordinated with the Office of Technology Services.
  - Presenter cable management with power outlets shall be included on the desktop.

- **Required Display Device Cabling**
  - **Ceiling Mounted Projector** *(See Table 1. Current List of Approved Manufacturers)*
    - Wide screen (16 x 9) native resolution
    - Mounting hardware must follow Manufacturer’s Standards
    - Power: Duplex outlet on 20A Dedicated Circuit
    - 1 Cat6 UTP Cable to IDF
    - 1 Cat6 Shielded cable back to desk/podium/cabinet
    - Projector must be RS232 controllable (carried over Cat6 AV cable)
  - **Projection Screen** *(See Table 1. Current List of Approved Manufacturers)*
    - 16 x 9 Aspect Ratio
    - Mounting hardware must follow Manufacturer’s Standards
    - Electric Motor w/Low Voltage Control
    - 1 Cat6 UTP cable back to desk/podium/cabinet
    - Power: hardwired on 20A Dedicated Circuit
  - **Flat Panel Monitor** *(See Table 1. Current List of Approved Manufacturers)*
    - Mounting hardware must follow Manufacturer’s Standards. (Wall mounting required whenever possible)
    - Screen size to be determined by classroom size and layout
    - Input shall be 1080P HDMI
    - Power: Duplex outlet on 20A Dedicated Circuit
    - 1 Cat6 UTP Cable to IDF
    - 1 Cat6 Shielded cable back to desk/podium/cabinet
    - Projector must be RS232 controllable (carried over Cat6 AV cable)
  - **Room Camera** *(See Table 1. Current List of Approved Manufacturers)*
    - Mounting hardware must follow Manufacturer’s Standards.
    - Power: Duplex outlet on 15A Circuit
    - 1 Cat6 UTP Cable to IDF
    - 1 Cat6 Shielded cable back to desk/podium/cabinet
  - **Confidence Monitor** *(See Table 1. Current List of Approved Manufacturers)*
    - Mounting hardware must follow Manufacturer’s Standards. Monitor must be installed on the rear wall of the space opposite the presenter.
    - Power: Duplex outlet on 20A Circuit
    - 1 Cat6 UTP Cable to IDF
    - 1 Cat6 Shielded cable back to desk/podium/cabinet
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