This generic plan is intended to show only the level & type of information that is required by BU or any co-ordinated fire safety plans provided by consultants or design teams etc.

It does not denote or limit the individual items of fire safety equipment required in each type of room or space, nor does it replace any statutory regulations etc.

Where alterations to an existing building take place symbols used on the fire strategy plan are to differentiate between existing & proposed fire safety equipment.

All fire safety proposals are to be agreed with BU's Fire Safety Officer on a project specific basis.

Key to Fire Symbols

Audible warning device
Visual warning device
Smoke detector
Heat detector
Door fitted with lock which is operable from side indicated, without a key or draw/barrel bolt
General fire action sign
Fire safety sign – fire door keep shut
Fire safety sign – fire door keep locked
Existing fire safety sign – automatic fire door keep
Fire exit sign
Directional arrow on existing fire exit keep
Self-closing automatic release

Example Fire Strategy Plan

Scale 1:200 at A3
23rd June 2016

Bournemouth University
Denotes allocated work positions with fixed PC's & under-desk storage. Associated storage space at end of desk cluster.

Denotes unallocated hot-desk work position with laptop docking station, monitor & keyboard. No under-desk storage.

Unallocated laptop work corner + table for further laptop use or brief discussions etc.

Hatching denotes electric, height adjustable desk.

Cupboard space for storage of general office supplies & equipment etc.

Preferred desk size/shape for all desks (allocated & hot-desks) is 1400x800 rectangular.

Denotes allocated lockers for laptop/hot-desk users.

Meeting rooms readily accessible from open plan offices for 1:1 use, group meetings & quiet working. See BU generic drawings MR-EST-1 & 2 for more details.
CONSULTATION WITH BU IT (AUDIO VISUAL TEAM):
For all projects incorporating AV equipment, proposed drawings are to be issued to the Audio Visual Project Manager of BU(T) during the design stage for comment/testing. This applies to jobs requiring new AV equipment or where existing equipment is being moved.

NB: Lecturer's table & chair omitted for clarity.
Outlets to generally be flush mounted in 3 compartment trunking.
If required, power consumption details of all anticipated AV equipment to be confirmed by BU IT - in kW.

KEY TO SYMBOLS:
- Proposed data outlet
- Proposed data outlet backbox
- Proposed win 13 Amp, switched power points
- Containment high-level
- Containment low-level

GEMER GENER SPECIFICATION
AUDIO-VISUAL REQUIREMENTS FOR "TYPE 1" ROOMS:
TEACHING ROOMS (LESS THAN 20 PERSON CAPACITY) & MEETING ROOMS
AV/EST/1A
CONSULTATION WITH BU IT (AUDIO VISUAL TEAM):  
For all projects incorporating AV equipment, proposed drawings are to be issued to the Audio Visual Project Manager of BU(IT) during the design stage for comment/control. This applies to jobs requiring new AV equipment or where existing equipment is being moved.

Outlets to generally be flush mounted in 3 compartment trunking.

If required, power consumption details of all anticipated AV equipment to be confirmed by BU IT — in ink.

PLAN
PROJECTOR FIXING REQUIREMENTS:
The projector outlets are to be located adjacent to the projector & located on the underside of the structural soffit.

The soffit plate mounting bracket (Unichem CPF) is to be securely fixed to the structural soffit using the 4 no. bolt holes. This projector mounting plate & projector plate are to be supplied by BU IT. The plate will be provided drilled & cut to length.

Ladder — where a suitable solid soffit is not available (e.g. on upper floors beneath the roof structure) allowance is to be made in this design for a suitable method of support. For adjustment sufficient fixing will have to be provided for the ladder to be supported at both ends. Allow for 70kg test weight.

The supply & fit of wire baskets within ceiling void for AV cables is by the contractor. All AV cables by BU IT. The AV cables to be installed before the suspended ceiling tiles are placed in their correct position.

ELEVATION

25mm conduit from under floor data basket to single gang AV outlet at projector

Teaching Room, between 21 & 40

ROOM CENTRELINE

25mm conduit from projector to data basket

CONSULTATION WITH BU IT (AUDIO VISUAL TEAM):  
For all projects incorporating AV equipment, proposed drawings are to be issued to the Audio Visual Project Manager of BU(IT) during the design stage for comment/control. This applies to jobs requiring new AV equipment or where existing equipment is being moved.

Outlets to generally be flush mounted in 3 compartment trunking.

If required, power consumption details of all anticipated AV equipment to be confirmed by BU IT — in ink.

ELEVATION

These outlets to be mounted adjacent to projector & on underside of floor slab

Teaching Room, between 21 & 40

ROOM CENTRELINE

25mm conduit from projector to data basket

CONSULTATION WITH BU IT (AUDIO VISUAL TEAM):  
For all projects incorporating AV equipment, proposed drawings are to be issued to the Audio Visual Project Manager of BU(IT) during the design stage for comment/control. This applies to jobs requiring new AV equipment or where existing equipment is being moved.

Outlets to generally be flush mounted in 3 compartment trunking.

If required, power consumption details of all anticipated AV equipment to be confirmed by BU IT — in ink.

ELEVATION

These outlets to be mounted adjacent to projector & on underside of floor slab
CONSULTATION WITH BU IT (AUDIO VISUAL TEAM): For all projects incorporating AV equipment, proposed drawings are to be issued to the Audio Visual Project Manager of BU IT during the design stage for comment/casting. This applies to jobs requiring new AV equipment or where existing equipment is being moved. As the shapes & sizes of Lecture Theatres will vary, each layout is to be individually tailored to suit in terms of projector throw size & quantity of speakers.

Outlets to generally be flush mounted in 3 compartment trunking.

If required, power consumption details of all anticipated AV equipment to be confirmed by BU IT – in kW.

These outlets to be mounted adjacent to projector & above ceiling line.
CONSULTATION WITH BU IT (AUDIO VISUAL TEAM):
For all projects incorporating AV equipment, proposed
drawings are to be issued to the Audio Visual Project
Manager of BU IT during the design stage for
commenting/cutting. This applies to jobs requiring new AV
equipment or where existing equipment is being moved.

Outlets to generally be flush mounted in 3 compartment
trunking.

If required, power consumption details of all anticipated AV
equipment to be confirmed by BU IT - in KW.

Wall-mounted or ceiling-mounted TV screen
Under normal circumstances there will be
4m. agile screens in the room. Positions are
to be agreed with BU IT (Audio Visual Team).

These outlets to be mounted adjacent to projector &
above ceiling line

Sony VPL FH31 projector

These outlets to be mounted adjacent to projector &
on underside of floor slab
Audio 108 Loudspeaker
Whiteboard

Room centreline
Sony VPL FH31 projector
Fixed frame projector screen; 2000x1300mm; 16:9 ratio
25mm conduit from under floor data basket
to single gang AV outlet at projector

Floor level
Data basket under floor

Floorbox if available or see
drawing AV/EST/5 for
wall-mounted trunking details

Generic Specification
Audio-visual requirements for "Type 4" Room:
Agile Space
SPACE STANDARDS:
The following guide areas should be allowed for agile spaces assuming regular square or rectangular room shapes ~ between 2.25sq.m & 2.5sq.m per student depending on type of furniture used.

NB: aisle widths to be at least as wide as entrance door opening taking into account column projections and the like.

Rooms are preferred in square or near square proportions to provide greater flexibility of table layout and to achieve the preferred whiteboard / screen arrangement.

The maximum acceptable viewing distance to the screen is 10.00m. A minimum distance of 2.4m is preferred between the student tables and whiteboard / screen to ensure adequate space for the lecturer.

ENTRANCE DOORS:
Minimum 920mm wide doors to be provided to agile spaces. Doors to incorporate single slot vision panel i.e. type 2 door as shown on BU drawing BD/10/301, “Preferred Internal Door Styles”.

NB: Where ceiling mounted projectors are required entrance doors should be positioned to ensure that the projector lamp beam is not visible to any person entering/exiting the room whilst the projector is in use.

AUDIO VISUAL REQUIREMENTS:
Please refer to the following generic specification drawings for audio visual requirements: AV/EST/4.

FURNITURE:
Furniture sizes, styles & colours etc. are to be confirmed by BU on a project specific basis.

BLINDS:
Windows to be fitted with with Venetian blinds as standard. Any additional special requirements such as blackout roller blinds to be agreed on a project by project basis with BU IT.

ELECTRICAL:
All lighting & electrical works are to meet the minimum standards laid down by the BU Estates Design Guide document.

Where possible outlets are to be located in 3-compartment dado trunking, fitted above table height where conditions allow.

NOTICE BOARD:
Space to be provided for an aluminium framed, information board ~ approx. 500mm wide x 300mm high, as used by BU in all seminar rooms. Details available from BU Estates. Final position to be agreed with BU Estates on project specific basis.

PERFORATIONS WHERE ACOUSTIC CEILING TILE SYSTEM USED:
Perforations are to be minimised. Any such perforations (e.g. around projector holes fixed to structural soffite) are to be carefully positioned within suspended ceiling grid to minimise the amount of cutting & drilling required. Any gaps to be sealed using an appropriate acoustic sealant system.

PARTITIONS, SUSPENDED CEILINGS, DOORS & CARPET:
For details on the above elements see separate specification.

EXAMPLES OF FURNITURE OPTIONS – 1:50
Generally only one type of furniture will be used in each room.

KEY TO SYMBOLS:

- Dado trunking (indicated)
- Proposed single 13 Amp power point
- Proposed twin 13 amp, switched power point
- Proposed fused spur within room to control power outlets within ceiling void where overhead projector used. NB must not be switchable.
- Proposed ceiling mounted wireless router to give sufficient coverage to all occupants
- Proposed data outlet
- Proposed AV outlet
- Proposed USB charging point

These electrical & USB outlets are to be mounted within the surface of the desk top.

These outlets are to serve the Synergy Desk & can either be within a fascia set in the railed floor or on dados trunking, depending on the structure of the room.

Exact type & quantities of outlets are project specific to suit the style of desk used.

NB: for all AV requirements see drawing AV/EST/4.
KEY TO SYMBOLS:

------------
Dado trunking (indicative)

Trunking riser (indicative)

Proposed twin 13 amp, switched power point

Proposed ceiling mounted wireless router to give sufficient coverage to the capacity of the room

---

NB: for all AV requirements for Meeting Rooms see drawing AV-EST-1.

Where possible outlets are to be located in 3-compartment dado trunking (as Estates Electrical Spec.). Trunking to be fitted above table height where conditions allow.

Furniture to be procured from current BU SUPC preferred supplier unless agreed otherwise. See section B of Design Standards for details.

Windows to be fitted with Venetian blinds as standard. Any special requirements, such as block out roller blinds, to be identified by end users on a project specific basis.

Indicative rooms area for larger meeting rooms (8–12 people) = 15–22 sq.m.

All lighting and electrical works to comply with the minimum standards laid down by the Estates General Specification for Electrical Installations.
KEY TO SYMBOLS:

- Dado trunking (indicative)
- Trunking rear (indicative)
- Proposed twin 13 amp, switched power point
- Proposed ceiling mounted wireless router to give sufficient coverage to the capacity of the room

NB: for all AV requirements for Meeting Rooms see drawing AV-EST-1.

Where possible outlets are to be located in 3-compartment dado trunking (to Estates Electrical Spec.). Trunking to be fitted above table height where conditions allow.

Furniture to be procured from current BU SUFC preferred supplier unless agreed otherwise. See section B of Design Standards for details.

Windows to be fitted with Venetian blinds as standard. Any special requirements, such as black out roller blinds, to be identified by end users on a project specific basis.

Indicative room area for smaller meeting rooms = 10–20sq.m.

All lighting and electrical works to comply with the minimum standards laid down by the Estates General Specification for Electrical Installations.
Intra-red or similar approved hearing support system to be incorporated in all new teaching facilities.

For provisional guidance on AV requirements for PC labs see also generic specification drawing for Type 2 rooms, AV-EST-2.

SPACE STANDARDS:
For teaching PC laboratories a guide allowance of at least 2.5-3.0 sqm per student should be allowed for the overall room area. The minimum aisle width between back to back rows of PC tables is 1500mm, preferably more.

Table layouts can be varied to suit school requirements (peninsular arrangement shown), but clear sight of the whiteboard/screen area should be provided from all seats. Students should not have to turn through 180 degrees to see whiteboard/screen.

A minimum clear distance of 1500mm is required between the lecturer's table (if required) & whiteboard/screen wall.

Viewing distance to the whiteboard/screen to be not more than 10m.

ENTRANCE DOORS:
Minimum 900mm wide doors to be provided, incorporating single slot vision panel i.e. type 2 door shown on BU drawing BU/10/1741, "Preferred Internal Door Styles".

NB: Where ceiling mounted projectors are required entrance doors should be positioned to ensure that the projector lamp beam is not visible to any people entering/exiting the room whilst the projector is in use.

AV EQUIPMENT REQUIREMENTS/CONSULTATION WITH BU/IT:
For initial guidance purposes allowance should be made for a ceiling mounted projector install based on the Type 2/room type (see drawing AV-EST-2). Projector linked to AV equipment contained within rack under lecturer's PC table. Final AV requirements to be agreed between end users & BU/IT Audio Visual team.

Where projects are to incorporate AV equipment, drawings are to be issued to the Audio Visual Project Manager of BU/IT for comment/usages etc. later than the design stage. This also applies to projects where existing AV equipment is to be moved.

OUTLET Provision:
For guidance purposes 1 no. twin power outlet & 1 no. data outlet should be allowed for each PC position – see key to symbols also.
NB or alternative/replacement works existing outlets are to be used where possible. See also Electrical Partitions, Suspended Ceilings, Doors & Carpet.

For details on the above elements see separate specification.

RENOV:
Windows to be fitted with Venetian blinds as standard. Any additional special requirements such as blackout roller blinds to be agreed on a project by project basis with end users / BU/IT Audio Visual team).

Furniture:
The preferred minimum PC table size is 1200x800. Where space constraints prevent the required room capacity being achieved with this size, the use of 1000x800 PC table will be considered subject to the agreement of the end users.

New furniture to be supplied from BOF via BU (Estates) based on the following:

- Tables: to be all-weather style and incorporate min. 2 no. cable ports. Finishes to frame & table top to be agreed on project specific basis – reference number to be confirmed by BU (Estates).

- Where cable management system to be used, modesty panel to be set back & incorporate 2 no. cable ports, plus cable tray.

- Operator chairs: to be high back chair with no arms. Upholstery & finish to be agreed on project specific basis – reference number to be confirmed by BU (Estates).

FIRE SAFETY:
Emergency lighting, smoke detection & alarm sounders are to be provided in all PC labs. Final number & positions to be agreed with the BU Fire Safety Officer on a project specific basis.
SPACE STANDARDS:
The following guide areas should be allowed for seminar rooms assuming regular square or rectangular room shapes:
1) For tables in rows - 2.0 sq.m. per student;
2) For tables in 'U' shape layout - 2.25 sq.m. per student.
NB: Wide aisles to be at least an extra six feet as entrance door opening. Additional circulation space is to be allowed around outside of tables in 'U' shaped layout, taking into account column projections and the like.

Rooms are preferred in square or near square proportions to provide greater flexibility of table layout, and to achieve the preferred whiteboard / screen arrangement.

The maximum acceptable viewing distance to the screen is 10.00m.
A minimum distance of 2.4m is preferred between the student tables and whiteboard / screen to ensure adequate space for the lecturer.

ENTRANCE DOORS:
Minimum 900mm wide doors to be provided to seminar rooms. Doors to incorporate single shot vision panel i.e. Type 2 door as shown on BU drawing BD/12/S1/1, 'Preferred Internal Door Styles'.
NB: Where ceiling mounted projectors are required entrance doors should be positioned to ensure that the projector lamp beam is not visible to any people entering/exiting the room whilst the projector is in use.

AUDI-VISUAL REQUIREMENTS:
Please refer to the following generic specification drawings for audio visual requirements:
AV/EST/1 - for rooms up to 20 capacity.
AV/EST/2 - for rooms from 21-40 capacity.

FURNITURE:
New furniture to be supplied from BDF comprising:
Tables - 1200x600 generally but supplemented with 600x600 tables where odd numbers required in rows etc. Reference numbers + frame & top finishes to be agreed with BU Estates.
Chairs - Reference numbers + frame & top finishes to be agreed with BU Estates.
Allow for 1200x600 table & chair for lecturer.

BLINDS:
Windows to be fitted with Venetian blinds as standard. Any additional special requirements such as blackout roller blinds to be agreed on a project by project basis with BU IT.

ELECTRICAL:
All lighting & electrical works are to meet the minimum standards laid down by the BU Estates Design Guide document.
Where possible outlets are to be located in 3-compartment dado trawing, fitted above table height where conditions allow.

NOTICE BOARD:
Space to be provided for an aluminum framed, information board - approx. 500mm wide x 300mm high, as used by BU in all seminar rooms. Details available from BU Estates. Final position to be agreed with BU Estates on project specific basis.

PERFORATIONS WHERE ACOUSTIC CEILING TIRE SYSTEM USED:
Perforations are to be minimised. Any such perforations (e.g. around projector pales fixed to structural soffite) are to be carefully positioned within suspended ceiling grid to minimise the amount of cutting & drilling required. Any gaps to be sealed using an appropriate acoustic sealant system.
Meeting stile intumescent strips & smoke seals, whether combined or individual fittings, are to be fitted to master leaf not the slave leaf.

Fire Door Notices

Notes
1) Dimensions & positions of ironmongery items shown are to be used whether the door leaf is type 1 or 2.
2) Any variance to the dimensions shown above due to door manufacturer requirements is to be brought to the attention of BU(Estates) before any work to fit the ironmongery is started.
3) Hinges are to be fitted & positioned in accordance with door manufacturer’s specification.
Compliance requirements for door sets with mechanical solenoid or battery operated access control locks & lever handles used for rooms normally occupied (under 60 people), where the users have knowledge of using building. (NB excludes electric locks & electrically operated doors on escape routes).

Additional notes:
1) Delivery Plan Works—predominantly involves demountable partition works, with a few doors in masonry walls/Gyproc style plasterboard partitions.

CCF have been providing non-fire rated & half-hour fire rated doors with metal & timber frames for the last 3-4 years.

CCF have established with their fire engineers that doors & frames, including half-hour fire rated, can be provided factory prepared to receive the ABloy solenoid lock kit. NB requires intumescent gaskets & pads to CCF specification on fire rated doors.

CCH have established with their fire engineers that the above Salto wireless lock/escutcheon sets or their non-fire rated & half-hour fire rated door sets are permissible. NB requires intumescent gaskets & pads to CCF specification on fire rated doors.

2) Capped-off Works—predominantly masonry walls where broadcast, or Gyproc style plasterboard partitions where non-broadcasting. Possible door set options—

a) If a door set performance specification is maintained to ensure competitive pricing, the Design Team need to ensure that any single source, door manufacturer proposed by the contractor has the necessary fire test evidence to suit the proposed door hardware. If this is not available, bespoke, 3rd party fire testing would be required to verify the selected door set / hardware combination(s) with the wall & partition types proposed.

b) Use of single source, factory pre-hung door/frame sets approved for use in the wall / partition types proposed. Where fire rated, the pre-hung assemblies are to have 3rd party fire test evidence for the combinations proposed for each wall / partition type.

For either of these options full details of the door & hardware used should be provided, including a copy of the fire test evidence, including any conditions & restrictions that apply.

3) Estates FM Works—maintenance works, retro-fitting / door hardware upgrades:

Such works are likely to be on older doors—where this is a fire rated door, CCF information for the door / frame may not be available. If it is not possible to determine the conditions & restrictions of the fire test evidence for the door, it should be noted that any alterations made will be at BU’s risk. Therefore, whatever official condition restriction for a door that is not possible to use them on double doors, (ie with one locked back).

a) If a) is not possible, and the existing door / frame are retained the following suggestions should be considered, pending comment by the Fire Safety Officers—

i) Provide an intumescent gasket around the lockcase & intumescent material behind the forend plate & strike plate. The requirement for CCF 01/05 doors is — lock body to be wrapped with a 2mm non-pressure forming intumescent sheet. Lock face to be fixed to metal 1mm graphite based intumescent material. Sketchplate to be bedded on 2mm non-pressuring forming intumescent material.

ii) If the room is normally occupied ensure that the lock & levers fitted comprise of an escape sash lock set complying with EN 179.

b) All lever sets are to comply with accessibility requirements of BS 8300.

c) An escape door is deemed to be any door that allows people to pass through it en-route to existing a building.

d) For full door set & door hardware requirements please refer to the main Design Standard document.
NB: THIS SET-UP TO BE USED ONLY WHEN FLOOR BOXES ARE NOT AVAILABLE

TO DESK/MEDIA MAST

FLOOR LEVEL

STANDARD IT BACKBOX WITH HOLE IN BACK TO PROVIDE BRUSHPLATE

3 X 2 GANG SOCKETS

3 COMPARTMENT MK PRESTIGE TRUNKING, SIDE COMPARTMENTS APPROX 45x45mm

4NO. DATA (WHITE)

I.T. ROUTE ETC.

I.T. ROUTE ETC.

24OV ROUTE

CEILING

DETAILS OF POWER & I.T. SUPPLY TO TEACHING ROOMS FOR TYPE 2 & TYPE 4

NIS April 2015

AV/EST/7/5A

BU

Bournemouth University