

الجامعة الألمانية الأردنية German Jordanian University RFP for Acoustic/Sound Proofing and Lighting for Smart Classroom Solution.

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#### 1. INTRODUCTION

The German Jordanian University (GJU) intends to acquire and implement Acoustic/Sound Proofing and Lighting for Smart Classroom at the Consultation and Training Center (CTC) located in Jabal Amman, bidders are invited to submit their proposals for this project, the project should include the following features:

- Acoustic/Sound Proofing Solution
- Room Lightning/Dimming

# 2. GENERAL INSTRUCTIONS AND REQUIREMENTS

# 2.1 Bid Requirements

- Equipment to be provided as part of the proposal should meet the best commercial practices, reliability, maintainability as defined in this document.
- Any accessories and/or parts that are needed for the installation and were not stated in the offer are the bidder's responsibility to provide at no extra cost.
- The selected bidder should perform the transportation, storing, assembly of the parts.
- The selected bidder should coordinate with another bidder (for the smart classroom digital equipment) to make sure that all digital smart classroom equipment i.e. Interactive Screen, Cabinet System, Cabling Paths could be installed properly on the Acoustic/Sound Proofing System.
- All works during the installation of Acoustic/Sound Proofing and Lighting will be carried out by the bidder, suitable cap with tidy and clean appearance in the classroom should be implemented.
- The selected bidder should not involve Sub-Bidders without GJU knowledge and approval.
- Bidders preferred to have all equipment installed and ready for testing within 6 weeks from receiving the PO.
- The selected bidder will be responsible for any damage to GJU facilities and assets during the implementation period.

### 2.2 Notices

Any notices, questions concerning technical specifications or commercial questions should be sent to GJU in writing and delivered either by hand, by facsimile, or by email (with a hard copy sent by letter) addressed to Works Tenders Committee, phone 06-429 4444.

### 2.3 Format of Proposals

- The bidder should submit the Technical and Financial Proposals in one sealed box.
- A compliance checklist sheet should be included in the Technical Proposal.

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# 3. ACOUSTIC/SOUND PROOFING AND LIGHTING

This section discusses minimum requirements Acoustic/Sound Proofing and Lighting for the GJU Smart Classroom, all bidders are welcome to suggest any solution that meets the requirements in this RFP. The requested quantity for this solution is **One** Classroom.

# 3.1 Acoustic/Sound Proofing Solution

- 3.1.1 Wall insulation inside classroom must satisfy Sound Transmission Class (STC) value of 40 - 45 dB, and Recommended Noise Criteria (NC) values inside the classroom of 25-30 dB. This should be proven by providing an acoustic measurement's report.
- 3.1.2 Wall cladding with the minimum specifications as following:
  - 1) Wall cladding layers should include at least:
    - a. Gypsum boards- Double layers,
    - b. 50mm Fiber glass 48/Kg/M3.
    - c. K-Flex 6mm or MLV 2.5 mm
  - 2) All walls should be painted and finished with Warm White Emulsion paint- easy-clean.
  - 3) All parts of the walls inside the room should be cladded, this includes the area above door(s), above and under window(s), exposed beams/columns if any etc. In addition, sealing of the connection between the wall cladding and the existing ceiling and floor is required.
- 3.1.3 Acoustic Door minimum specifications:
  - 1) Door panels and door frame and accessories should be replaced with a sound insulating door panel (Acoustic Door), and frame.
  - 2) New acoustic door minimum specifications are:
    - a. Single fold door
    - b. STC value 35-40 dB.
    - c. Acoustic Tape around the new door frame
    - d. Automatic acoustical drop-down sealing accessory
  - 3) The outside finishing (color and texture) of the Door should be similar to the existing door of the classroom.
- 3.1.4 Window insulation minimum specifications:
  - 1) STC value at least 40 dB
  - 2) Addition of an inside layer of white-frame, double glazed, well-sealed window(s) in front of the existing fenestration system, without affecting the existing exterior image of the building.
  - 3) The windows should be properly sealed and connected to the new wall insulation layers without any breaks or disconnections.
  - 4) Acoustical solution should be provided for the shutter's box above the window(s).
  - 5) At least 1 window should have an operable pane for natural ventilation, complimenting the existing fenestration system. This operable pane should have proper accessories that insure sound insulation when closed.
  - 6) Addition of Roll-down indoor light-blocking curtain to all windows- easy to cleaneasy to maintain and operate.

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- 3.1.5 Sound quality inside classroom minimum specifications:
  - 1) Floor insulation solution should have an Impact Insulation Class (IIC) value between 46 and 49 dB.
  - 2) Carpet (with proper padding) must be added, Dark grey color, easy to clean, easy to maintain, resilient to human traffic and student use.
  - 3) Provide any additional details inside room to minimize reverberation time to (0.7-0.8s), this might include addition of acoustic panels on walls to minimize the reverberation time.
  - 4) Provide proof that the reverberation time inside the room after complete execution of the construction work (points 3.1.1 to 3.1.5) doesn't exceed 0.8 seconds, by conducting physical acoustical measurements and evaluation report.
  - 5) Provide a design solution to insure sound muting for any operating or running system inside the room, such as the AC machines, Data cabinets or air outlets, etc.

### 3.2 Room Lightning/Dimming

- 3.2.1 Replace all existing lighting fixtures on ceiling with the following lighting fixture minimum specification:
  - 1) LED panel 60x60cm lighting fixture, Warm white light color.
  - 2) Aluminum body
  - 3) IP20, 38W 3800 lumen
  - 4) White frame
- 3.2.2 Light switch and controls should be at least 4 (separating the front-right area from the front-left area, and the back-right area from the back-left area)
- 3.2.3 Light switches should enable manual operation not automated.
- 3.2.4 Light switches should include dimming options
- 3.2.5 Provide the room with one Master Scenario- Dimming System and gateway, with supporting and connecting device, and all needed requirements

### 4 WARRANTY AND SUPPORT

All products should have a warranty and support term, all bidders must offer the two options below. (Note that only one option will be selected by GJU as found appropriate)

### 4.1 Option 1 - Warranty and Support

Three Year – Mother company warranty, Onsite Spare parts and Labor.

#### 4.2 Option 2 – Warranty and Support

o Five Year – Mother company warranty, Onsite Spare parts and Labor.

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