

FOUNDATION FOR INNOVATION AND TECHNOLOGY TRANSFER
(FITT)

REF: FT/2024/11/11 - I

Date: 30 Aug 2024

Notice Inviting Quotation

Project Name: Implementation of Learning Management System (LMS) integrated with online training environment including Operation, AMC and Integration for setting up Centres of Excellence for Learning (CoEL) in the following domains: - (i) Artificial Intelligence Basic Builder, (ii) AI powered Blockchain, (iii) AI powered Augmented Reality/ Virtual Reality (AR/VR) Computer Vision Builder, and (iv) AI powered IOT & 5G builder as part of Skill Development Program.

Client: FITT, IIT Delhi

Objective: FITT, IIT Delhi invites proposals from experienced companies specializing in LMS solutions for education / training to establish customised comprehensive platform for setting up Centre of Excellence for Learning (CoEL) in the following domains: - (i) Artificial Intelligence Basic Builder, (ii) AI powered Blockchain, (iii) AI powered Augmented Reality/ Virtual Reality (AR/VR) Computer Vision Builder, and (iv) AI powered IOT & 5G builder as part of Skill Development Program to approximately 1000 students in each of the 04 fields.

Scope of Work:

The selected company is expected to perform the following tasks:

1. LMS Implementation:

- Deploy a robust Learning Management System capable of accommodating 1000 students per domain of (i) Artificial Intelligence Basic Builder, (ii) AI powered Blockchain, (iii) AI powered Augmented Reality/ Virtual Reality (AR/VR) Computer Vision Builder, and (iv) AI powered IOT & 5G builder.
- Configure the system to host complete course content, slides, and resources for each domain of (i) Artificial Intelligence Basic Builder, (ii) AI powered Blockchain, (iii) AI powered Augmented Reality/ Virtual Reality (AR/VR) Computer Vision Builder, and (iv) AI powered IOT & 5G builder.
- The LMS should be **'Make in India'** customized solution, with limited components of Free and Open Source solutions.
- Should be integrated with online lab environment - (ability to link / call the following) Google Colaboratory, Remix IDE, Wokwix , Github

LMS Features:

- Integration with user email, calendar and online meeting / class environment.
- LMS custom space of 100 GB available for each teacher and student.
- Ability to host SCORM capsules, Slides (ppt/pdf), Videos, Audio Files and e-books.
- Track, monitor progress of all students- be able to pull assessment scores from suitable assessment modules, and preferably pull attendance from online environments.

2. Batches and Trainers Setup:

- Organize student's IDs into batches of approximately 100 each for effective management.
- Configure user roles and permissions for 10 trainers in each vertical facilitating the program.
- Configure 05 supervisor accounts giving access to each of the Trainer sessions and materials.

3. Monitoring, Delivery, and Assessment:

- Enable functionalities for monitoring student progress and engagement.
- Implement assessment tools and tracking mechanisms for evaluation.

4. Online Training Environment

- Deploy an established online training environment which can be easily accessed and integrated seamlessly with student email IDs.
- Integrate the online training environment with LMS solutions.
- Features should include the following: -
 - Auto attendance.
 - Online assessment with auto scoring.
 - Calendar and class scheduling by teachers and supervisors.

- Cyber Security Features:-
 - Secure login and 2FA for admin/supervisors.
 - Resilient against cyber attacks, especially DDoS attacks (forewarning feature integrated with cloud service provided).

5. Hands-on Practical Project Integration:

- Incorporate features facilitating hands-on practical projects, including labs within the LMS.

6. Annual Maintenance Contract (AMC) and Operationalization:

- Provide a one-year 24x7 AMC covering technical support, updates, and maintenance.
- Assist in the operationalization of the LMS and ensure smooth functioning.
- Availability of dedicated Point of Contact and escalation ladder for ensuring timely rectification of faults.
- All faults to be rectified within 1 hr of initial reporting, failing which Liquidated Damages of 1% of AMC Cost/ hour will be levied, subject to a maximum of 30%. Post than the contract will be liable to be canceled.
- 24x7 AMC for a period of one year will also be provided for LMS software working on Hardware installed at Center of Excellence Learning (CoEL) which includes 120 Laptops, 08 Display Devices, Internet Connection and Router.

7. Backend ERP Integration for Administration:

- Integrate backend Enterprise Resource Planning (ERP) solution for administrative purposes (relevant online portal of OSDA).
- Vendor will be responsible to update the relevant portals at OSDA and maintain complete records of enrolled students and trainers.

Eligibility Criteria for Companies:

- Should have provided LMS solutions for similar large scale training for education or skilling purposes.
- Previous work order with reputed organisations / Govt agencies is to be submitted with the bid.
- Proof of Concept, Demo and Presentation is to be made during evaluation.

- Annual turnover for last FY (2023-24) should be over Rs 25 Lakhs. (Audited / provisional balance sheet / copies of purchase orders to be provided).

Submission Requirements:

Interested companies should submit their proposals by **14 Sept. 2024**. Proposals should include: -

- Company profile highlighting experience in LMS implementation for education / training.
- Detailed approach and methodology for setting up the LMS as per project requirements.
- Proposed timeline and milestones for implementation.
- Cost breakdown covering each of the above requirements including setup, AMC, and operationalization as per format.
- References from previous LMS implementations in educational or training contexts.
- Companies must submit their compliance to the technical parameters as per the format provided.

Evaluation Criteria:

Proposals will be evaluated based on the following: -

- Experience and expertise in providing LMS solutions for education / training.
- Clarity and feasibility of the proposed approach and methodology.
- Alignment with project objectives and requirements.
- Cost-effectiveness and value for the proposed services.
- Demonstrated readiness of LMS with capacity as required.

Payment Terms and Timelines:-

The LMS should have capacity of accommodating 1000 students and 10 trainers in each vertical (**totaling 4000 students and 40 trainers**) with 05 supervisor accounts from Day 1. This service should be available for a period of one year. However, the payment will be released only on successful completion and certification of batches on pro-rata basis as explained below.

Milestone 1: 20% (of total overall cost) Payment post signing of contract on completion the following: -

- Readiness of LMS Platform before course commencement.
- Course Content with details of each module, labs, and assessment tests loaded for the first Two weeks of the training program.
- Creation of Trainer, Supervisor and Student accounts.
- Successful completion of seven training sessions of any one batch in each vertical

Milestone 2: **40% Payment** on pro-rata basis per batch, on successful enrollment and completion of two weeks of training. Vendors can raise invoices for payment every 2 months for the batches that have undergone two weeks of training.

Milestone 3: On Acceptance of All Batches Training Completion report by PI - **30% Payment**, on pro-rata basis (per vertical) on Successful Completion of the following:-

- Post monitoring assessment of students confirming successful completion of the training.
- Submission of Results of Training and Handing over of Training Certificates (virtual).

Milestone 4: **Balance 10% payment** would be made on receipt of project completion report, final tranche from the sponsor, and compliance to all regulations. Vendor will be responsible for submission of consolidated combined training report of all batches.

Note: Payments can be made only in case of remittances received from sponsor. In case of delay in payment from the sponsor, payments would be made post receipt of funds from the sponsor.

Pre-Bid Meeting: Pre-Bid meeting will be held at Room No. 106, Bharti School, IIT Delhi on **06 Sept 2024** at **15:30 Hours** to clarify vendor queries and arrive at a common understanding. It is compulsory for all bidders to attend the pre-bid meeting, failing which their bids will not be accepted.

Terms & Conditions Details

Preparation of Bids: The offer/bid should be submitted in two bid systems (i.e.) Technical bid and financial bid. The technical bid should consist of all technical details along with commercial terms and conditions. Financial bid should indicate item wise price for the items mentioned in the technical bid.

Opening of the tender: The bid will be opened by a committee duly constituted for this purpose. The technical bid will be opened first and it will be examined by a technical committee (as per specification and requirement). The financial offer/bid will be opened only for the offer/bid which technically meets all requirements as per the specification.

Liability of Bidder against Escalation of Cloud Prices / Cloud Usage: The bidder will be responsible for the final price quoted and FITT will not be liable for any payment over and above the cost included in the final purchase order; all risk and expense on account of over usage of cloud / change in prices of cloud across the industry etc will be borne by the bidder.

Acceptance/ Rejection of bids: The Committee reserves the right to reject any or all offers without assigning any reason.

Two separate sealed envelopes to be submitted for technical and financial bid (clearly labeled as “Technical bid” and “Commercial bid”) respectively.

FORMAT FOR COMPLIANCE SHEET FOR TECHNICAL PARAMETERS

(Should be printed on bidder letter head)

| <u>Module</u> | <u>COMPILED (YES/NO)</u> | <u>Remarks</u> |
|---|------------------------------|----------------|
| <p align="center">LMS Implementation</p> <ul style="list-style-type: none"> - Deploy a robust Learning Management System capable of accommodating 1000 students per domain of (i) Artificial Intelligence Basic Builder, (ii) AI powered Blockchain, (iii) AI powered Augmented Reality/ Virtual Reality (AR/VR) Computer Vision Builder, and (iv) AI powered IOT & 5G builder. - Configure the system to host complete course content, slides, and resources for each domain of (i) Artificial Intelligence Basic Builder, (ii) AI powered Blockchain, (iii) AI powered Augmented Reality/ Virtual Reality (AR/VR) Computer Vision Builder, and (iv) AI powered IOT & 5G builder. - The LMS should be Make in India customized solution, with limited components of Free and Open Source solutions. - Should be integrated with online lab environment - (ability to link / call the following) Google Colaboratory, Remix IDE, Wokwix , Github | | |
| <p>LMS Features:-</p> <ul style="list-style-type: none"> ● Integration with user email, calendar and online meeting / class environment. ● LMS custom space of 100 GB available for each teacher and student. ● Ability to host SCORM capsules, Slides (ppt/pdf), Videos. Audio Files and e-books. ● Track, monitor progress of all students- be able to pull assessment scores from suitable assessment module, and pull attendance from online environment. | | |

| | | |
|---|--|--|
| <p><u>Batches and Trainers Setup:-</u></p> <ul style="list-style-type: none"> - Organize students IDs into batches of approximately 100 each for effective management. - Configure user roles and permissions for 10 trainers in each vertical facilitating the program. - Configure 5 supervisor accounts giving access to each of the 10 Trainer sessions and material. | | |
| <p><u>Monitoring, Delivery, and Assessment:-</u></p> <ul style="list-style-type: none"> - Enable functionalities for monitoring student progress and engagement. - Implement assessment tools and tracking mechanisms for evaluation. | | |
| <p><u>Hands-on Practical Project Integration:-</u></p> <ul style="list-style-type: none"> - Incorporate features facilitating hands-on practical projects, including labs within the LMS. | | |
| <p><u>Backend ERP Integration for Administration:-</u></p> <ul style="list-style-type: none"> - Integrate backend Enterprise Resource Planning (ERP) solution for administrative purposes (relevant online portal of OSDA). - Vendor will be responsible to update the relevant portals at ODSA and maintain complete records of enrolled students and trainers. | | |

PRICE BID FORMAT

(Should be printed on bidder letter head)

The Price Bid Format is given below and Bidders are required to fill this up correctly with full details:

| S no | Item | Basic cost of the item/items | Qty | Total |
|-------------|---|-------------------------------------|---|--------------|
| 1. | Learning Management System capable of accommodating 1000 students per domain of (i) Artificial Intelligence Basic Builder, (ii) AI powered Blockchain, (iii) AI powered Augmented Reality/ Virtual Reality (AR/VR) Computer Vision Builder, and (iv) AI powered IOT & 5G builder (Integrated with online lab environment) as per specifications above (100 Gb per account, cyber security features, online assessment, integration etc) | | 4000 accounts, 40 trainer accounts , 05 supervisor accounts | |
| 2. | Hands-on Practical Project Integration | | - | |
| 3. | Annual Maintenance Contract (AMC) for 01 year and Operationalization | | - | |
| 4. | Backend ERP Integration for Administration as per requirement of OSDA | | - | |
| | | | Total | |
| | | | GST | |
| | | | Grand Total including GST | |

Last date of submitting the bids will be 14 Sept. 2024 before 5:00 pm to:

Prof. Brejesh Lall

Bharti School of Telecommunication

IIT Delhi, Hauz Khas

New Delhi, 110016

Email: brejesh@ee.iitd.ac.in & COO@fitt-iitd.in

Please quote prices for FOB New Delhi, inclusive of all taxes and duties.

Quote should be in Indian Rupees for agents of Indian manufacturers, or in foreign currency, for agents of foreign manufacturers, and need to be valid for at least three months.

Attach all the technical literature and a list of similar installations done in India.

If the quote is being submitted by a representative of the manufacturer, a valid agency-ship or dealership certificate authorizing the agent to quote to IIT Delhi on behalf of the manufacturers should be enclosed. The principal and the vendor, both, are not allowed to quote for the same product.

Complete set of manuals for the operation of the equipment should be given.

Authorized dealer for the OEM must attach a Certificate of Authorization.

Please specify all of your terms and conditions clearly, including delivery period.

Mode of payment for purchases in foreign currency through wire transfer on delivery. Only bank charges within India are payable by **FITT, IIT Delhi**, all bank charges outside India are the responsibility of the seller. For purchases in INR, payment is on delivery.