Indian Institute of Technology Kanpur
Kanpur 208016

Call for Request for Proposal (RFP)
for
Augmentation of Institute Automation System

27th July 2021

1. Preamble

This is in continuation of our selection process for a vendor for augmentation of automation system of IIT Kanpur. We floated a pre-bid EOI tender on 25th March 2021, after which we had a pre-bid selection. Through the RFP and final tender, we invite the selected companies to present their solution and make a financial offer for writing and maintaining the automation system.

In the present document we list our requirements, and the tendering process to be followed. We request the selected companies to provide all the information. Some parts of the document may be repeated from the pre-bid tender. Note that all the terms and conditions of pre-bid EOI tender applies for this tender as well.

2. Description of the required automation system

IIT Kanpur is involved in cutting edge research as well as in teaching engineering and science curriculum. At present we have approximately 7000 students, 500 faculty, and 2000 permanent, contractual, and project staff. Our campus is fully residential with a large number of amenities. We plan to augment our existing institute automation system. The units to be automated or augmented include offices of Administration, Director (DIRO), Deputy Director (DD), Dean of Academic Affairs (DOAA), Dean of Faculty Affairs (DOFA), Dean of Student Affairs (DOSA), Dean of Resource and Alumni Affairs (DORA), Dean of Research and Development (DORD), Dean of Infrastructure and Planning (DOIP), Dean of Digital Infrastructure and Automation (DDIA), Registrar, Personnel Management, Finance and Accounting, Stores and Purchase, Audit, Library, Institute Works Department (IWD), Student Hostels, Student Gymkhana, Council of Wardens (COW), Estate Office, Identity Card Cell (ID Cell), Health Centre, Guest House, DAK and Dispatch System, Online Leave System, Security, Pension, Recruitment, Transport, Horticulture, Legal, Right to Information (RTI), Placement, Survey and all departments.

A summary of the processes that are to be augmented are as given below. Some of them may require original development or augmentation of existing systems:

1. **Administrative** modules such as finance, accrual based accounting, HR, payroll, income tax, pension and fund, all dean's offices, facility management, department offices, audit and legal activities, materials management, stores & purchase, asset management, etc.
2. **Academic** modules such as student information systems, classroom and learning management systems such as content management systems, Computer based evaluating System, conducting of online test, course registration and grade submission, class-room management and time tabling, document management systems, examination scheduling, student admissions, scholarships, thesis processing, student hostels and fees management, student gymkhana, council of wardens (COW), festivals and student related events, no-dues clearance from the institute, alumni membership, convocation, awards & medals, faculty publications, quality improvement program (QIP), related activities etc.
3. **Research Project Management** systems for sponsored and institute projects that involve purchases, audit, and accrual based accounting, project staff hiring, income tax, different taxes, project employee payroll, pension, QIP scholarships, fellowships, project management and monitoring, intellectual property rights (IPR), memorandum of understanding (MOU), patents, etc.
4. **External connect** systems that provide links to outside the institute including alumni relations, placement, donations, summer internships, etc.
5. **Institute services management** systems involving health centre, student gymkhana,

guest house, institute works department (IWD), identity card cell (ID cell), security, attendance system for students and employees, transport, no-dues, smart card based applications, etc. The system should allow online booking, queries, and complaint management.

6. **E-payment** gateways where payment can be made through various modes such as credit/debit cards, SBI I-collect Internet banking, e-challan etc.

In addition, we are looking for the following features in the automation:

1. **Efficient class management:** (a) online examination, (b) mechanized attendance taking using biometrics/barcode/RFID or similar tools, (c) clicker-like solution for large classes, (d) interfacing with smart classrooms, e.g., saving the blackboard screenshots, (e) online course feedback, (f) classroom booking, (g) timetabling of courses, (h) classroom allocation for courses. (i) Content Management, Learning management System, computer based evaluation system etc.

2. **Information and discussion portal:** (a) forums for student, faculty, staff, campus community, and alumni; (b) lost-and-found boards; (c) announcements of seminars (including M.Tech., Ph.D. defenses) and major events; (d) online surveys; and other similar tasks.

3. **Library automation:** Search and index facilities, biometrics/barcode/RFID features for borrowing books, e-book borrowing, digital library, online recommendation for purchases of books by faculty, research scholar and staff, inter-library loan, budgeting for library, stock reconciliation, etc.

4. **Easy report generation:** Concerned personnel should be able to generate dynamic reports easily using the database by ticking various fields in different formats such as rich text format, spreadsheet, comma-separated-value, pdf, text, etc. The data access, however, must be protected, and only the appropriate personnel with authority should be able to access the relevant data.

5. **Process engineering:** Minor modification in the processes should be easily implementable.

6. **No duplication of data:** data flow from various modules should be seamless and the updated data must be visible to all the concerned personnel.

7. **Data security**: only the concerned authority or user should see the relevant data; access permission at all levels; role based authentication and access at various level such as application, module, form and fields.

8. The automation system should run **efficiently and seamlessly** on all platforms (Windows, Linux, Mac, etc.). For users, UI should work on common browsers like Internet Explorer, Firefox, Chrome, Safari, etc.

9. The number of students, faculty, and staff could double over the years. The software should be **scalable** for such expansion.

10. Automation software should provide relevant services on **mobile and handheld devices**.

11. The vendor should provide complete database schema and access to raw data, so that in the event IITK decides to change the automation software in part or whole, the existing data can be easily and seamlessly ported to the new software.

12. IITK would encourage the vendor to share the source code of application software.

13. Biometrics and smart-id features should be included for the appropriate modules. Digital signatures should also be implemented.

14. We should go paperless as much as possible and the document delivery system should include biometric/barcode/RFID features to enable tracking.

15. We would need to port all our existing digital databases to the new system. This includes student and faculty data, research projects, accounts, etc. The porting to the

new system should be smooth and error free. Most of our data is in a digital format.

16. Remote access in a secure and authenticated way when the faculty and students are away from the institute.
17. Information security and data integrity. If any ready-made software is to be used, then it should have proper certification about the quality. The passwords and valuable data should be encrypted.
18. Feedback/acknowledgments through email/sms/mobile app.
19. Regular backup and recovery of the complete database and application software. Complete protection against data losses.
20. The system should be available 24x7.

A complete list of automation process is provided in Summarized Automation Requirements (attached pdf file).

3. Detailed information and instructions for applicants

3.1 Definitions
In this document the following words and expressions have the meaning hereby assigned to them.

1. Employer: Means Indian Institute of Technology Kanpur acting through its Director.
2. Applicant: Means the individual, proprietary firm, firm in partnership, limited company private or public or corporation.
3. "Year" means "Financial Year" unless stated otherwise.
4. Pre-bid means and refers to the EOI tender floated on March 25th, 2021.
5. IITK means IIT Kanpur.

3.2 Method of application
1. If the applicant is an individual, the application must be signed above the full typewritten name and current address of the applicant.
2. If the applicant is a proprietary firm, the application must be signed by the proprietor above his full typewritten name and the full name of the firm with its current address.
3. If the applicant is a firm in partnership, the application must be signed by all the partners of the firm above their full typewritten names and current addresses, or alternatively by a partner holding power of attorney for the firm. In the latter case a certified copy of the power of attorney must accompany the application. In both the cases, however, a certified copy of the partnership deed and current addresses of all the partners of the firm must accompany the application.
4. If the applicant is a limited company or a corporation, the application must be signed by a duly authorized person holding power of attorney for signing the application; in this case, a copy of the power of attorney must be provided. The applicant must also furnish a copy of the Memorandum of Articles of Association duly attested by a Public Notary.

3.3 Instructions
1. All information called for must be furnished. The applicants are cautioned that by not providing complete information called for, or not giving it in clear terms, or making any change later, or deliberately suppressing the information may result in the applicant being summarily disqualified. Applications made by email, telegram or telex and those received late will not be entertained.

2. **The application should be in A4 size sheets and in printed format and it must be endorsed with the seal and signature of the applicant(s) along with the date of submission.**

3. Overwriting should be avoided. Corrections, if any, must be made by neatly crossing out, initialing, dating and rewriting. Pages of the pre-qualification document are numbered. Additional sheets, if added by the applicant, must also be numbered by the applicant. The complete application must be submitted as a package with a signed letter of transmittal.

4. References, information and certificates from the respective clients certifying suitability, technical know-how or capability of the applicant must be signed by the authorized person or equivalent.

5. The applicant may furnish any additional information, which the applicant thinks is necessary to establish its capabilities to successfully complete the envisaged work. The applicant is, however, advised not to furnish superfluous information. No information shall be entertained after submission of RFP document unless IITK calls for it.

6. Response to the section 5.2 should be filled regarding any third party software/license.Any additional documents that the Bidder deems fit for achieving the objective setforth can be included.

7. The application should be duly completed, and the signed copy must be submitted online on CPP Portal.

8. Any information furnished by the applicant found to be incorrect, either immediately or at a later date, shall render the applicant liable to be debarred from participation in this work as well as in future works.

3.4 Letter of transmittal
The applicant must submit letter of transmittal attached with response to Request for Information document.

3.5 Terms
This Agreement shall remain in full force and effect until the expiry of 18 months from awarding of the contract or six months after the issuance of performance certificate by the third party post completion of all the modules whichever is later, unless terminated earlier in accordance with the terms of this Agreement.

1. **Representations As To Capability And Capacity**

   The Bidder represents that:
   a. It has reviewed all documentation provided by IITK in connection with this Agreement;
   b. It has obtained and reviewed all other necessary information and documentation to the best of its knowledge; and
   c. It has examined and familiarized itself with all information to the best of its knowledge regarding this project to enable it:
      i. To enter into this Agreement and
      ii. To satisfy itself that it is able to fully perform and strictly comply with all its agreed obligations under this Agreement.

2. **Scope of Company's Responsibility**

   The Company acknowledges and agrees that:

   a. It shall be solely responsible for the successful performance of the Services in accordance with the requirements set out in this Agreement during the subsistence of this Agreement;

   b. It shall, if known earlier to it, pro-actively advise IITK in relation to IITK's responsibilities under this Agreement which may hinder the Service Provider from performing its obligations in accordance with this Agreement; and

   c. It shall not be relieved of any responsibility for the performance of the Services in accordance with the requirements of this Agreement, or under any of the representations given in Clause 2 (**Representations as to Capability and Capacity)**, as a result of any comment, direction, approval or acceptance given by IITK in connection with this Agreement. However, where the Company is required by IITK to comply with specific directions and/or instructions issued by IITK and such compliance would directly result in the Company being in non-compliance with its obligations hereunder, the Company shall not be liable for such non-compliance.

   d. Where Input is required by the Company from IITK, the Company shall remind IITK of the Input required under this Agreement from time to time. However, IITK shall be equally responsible to provide the Inputs required under this Agreement to the Service Provider on its own to enable the Service Provider to provide the Services under this Agreement.

3. **Disclosures**

   The Company shall promptly notify and fully disclose to IITK in writing of any events or occurrences actual or threaten during the Term which would affect the Service Provider's ability to perform any of its obligations under this Agreement

4. **Provision of Services for IITK**

   In providing the Services to entities comprising IITK, the Parties agree that:

   All communications including notices, requests for approvals and the provision of reports required to be given by the Company to IITK shall be given by the Company to the Dean of Infrastructure and Automation (DDIA) at IITK, shall be deemed to be givento IITK;

   All communications including instructions, notices, directions, requests, consents and approvals under this Agreement, shall be given by DDIA of IITK only.

3.6 Financial information

The companies provided these documents in the pre-bid applications. If the company has some additional information, it should provide them in this application.

3.7 Experience in works highlighting experience in similar works

The companies provided these documents in the pre-bid applications. If the company has some additional information, it should provide them in this application.

3.8 Declaration

Each participating company in this bid must sign the declaration on page 21 of this document.

3.9 Organizational information

Applicant is required to submit the following information in respect of its organization:

   1. Name and postal address including email, telephone, fax & telex numbers etc.
   2. Copies of original documents defining the legal status, place of registration and principal places of business.

3. Names and title of Directors and Officers who shall be concerned with the work, with designation of individuals authorized to act for the organization.
4. Information on any litigation in which the applicant was involved during the last five years, including any current litigation.
5. Authorization for employer to seek detailed references.
6. Number of technical and administrative employees in parent company and/or subsidiary company and how these employees will be involved in this work.

3.10 Bank guarantee
The successful tenderer (seller) shall establish an irrevocable Performance Guarantee Bond in favor of **Registrar, Indian Institute of Technology, Kanpur** in the form of Bank Guarantee 10% (Ten percent) of the Total Implementation Cost (TIC) discussed in Sec. 4.1, and valid till 2 years from the date of order issue, and Performance Guarantee Bond may be submitted within 15 calendar days from the date of Acceptance as a successful bidder.

The performance guarantee is intended to secure the implementation and performance of the entire IITK automation software and services by the bidder. The Performance guarantee will be returned to the successful bidder at the end of the period of 2 years, or at the successful implementation of the automation software, whichever is earlier.

3.11 Waiver
In case of delay in execution of work as per time schedule mentioned in tender, penalty of 0.5% (point five) per week or part thereof up to 10% (Ten) of total cost of the implementation (TIC) shall be imposed which will be recovered from contractor from any money which shall become due or which becomes due to him from this office. However, IITK may waive off the penalty on its discretion and extend the duration of works to be carried out.

3.12 Validity
The bidder shall keep the bid valid for a period of nine months from the last date for submission of bids.

3.13 Rejection of Bid
The bid is liable to be rejected if,
  a) It is not in conformity with the instructions mentioned in this tender document.
  b) It is not properly/ duly signed.
  c) It is received via email
  d) It is received after expiry of the due date and time.
  e) It is incomplete including non furnishing and required documents
  f) It is evasive or contains falsified information.

4. Tendering process
For our institute we will follow the fixed price model, which is one of the standard models used in industry. It includes a fixed fee for design, development, and implementation, followed by maintenance/support in specified number of years. We require five years of maintenance and support after go-live of the entire system. We also would require the company to implement "major changes" in the processes at an additional cost (see Section 5.1, and the document on Financial Offer).

4.1 Payment schedule

IITK will make payments to the selected vendor based on completion of tasks as stated in the Table below. Total Contract Value (TCV) will mean the sum of Total Implementation Cost (TIC), the Total Maintenance Cost (TMC) for the next five years, Total Miscellaneous Software Cost (TMSC), and Total Miscellaneous Software Maintenance Cost (TMSMC). See the following for a breakup of payment schedule. The final breakup of payment schedule will be decided during a negotiation with the selected company keeping the mutual interest of both the parties (IITK and the company).

Stage	Component	Fees Payable
1.	Advance after signing contract and providing bank guarantee	15% TIC + TMSC
2.	On Phase-I Go-live and user acceptance/training to in house staff/ hand over of source codes	25% TIC
3.	On Phase-II Go-live and user acceptance/ training to in house staff/ hand over of source codes	20% TIC
4.	On Phase-III, Final Go-live, and user acceptance/ training to in house staff/ hand over of source codes	20% TIC
5.	Final payment of TIC after certification of the software and security issues, and third party certification/ completion of training to in house staff/ handover of all source codes.	20% TIC
6	AMC for a period of 5 years after the final Go-live	TMC + TMSMC divided in 60 equal monthly installments (EMI's) payable on a 6 monthly basis

Go-live means: Complete customization of all the processes described in Annexure-1, data migration, User acceptance Test (include both functional and technical training) to designated users of each modules, training to in house staff, handover of source codes and certification by third party assigned by IITK on the functionality of the module developed.

After each module, company will issue a performance Guarantee certificate. Any bugs encountered after that must be attended by the company within 6 hours, and must be fixed within 3 days.

The definition of project includes implementation phase (up to final Go-live) plus 5 years of Maintenance/Service period.

AMC will start after the final Go-live of all the phases, user acceptance test (UAT), and training.

The security certificate for both application and servers are required before going for Go_live.

Handover of software includes SRS, SFS , business analysis documents, detailed design documents for Database and Application, complete source code, Technical manual, User Manual, Implementation and Maintenance documents ,proper training to in-house IITK team and End-user training etc.

Note: During the maintenance/service period the performance of the vendor will be reviewed annually and will be evaluated as excellent, satisfactory, or non-satisfactory.

4.2 RFP PROCESS

RFP PROCESS CALENDAR
The RFP process will have the following detailed steps and timelines:

Activity	Date of completion
Release of RFP by IITK	27th July 2021
Questions submitted over one consolidated email by each bidder	2nd August 2021
Answers to consolidated questions provided to all bidders by IITK	6th August 2021
Submission of RFP responses (technical and financial) by bidders: INDICATE ON EACH ENVELOPE AS **TECHNICAL BID/ FINANCIAL BID SEPARATELY**	20th August 2021
Opening of technical bid at the Computer Centre, IITK	23rd August 2021
Evaluation of technical bid	24th August 2021
Opening of financial bid at the Computer Centre, IITK	27th August 2021

4.3 QUESTIONS ON RFP
In the tender document we have attempted to be as unambiguous as possible. However, if there are questions or clarifications required, please email them to ddia@iitk.ac.in before the due date mentioned above. We will make a consolidate reply to all participants as per the RFP Process Calendar.

4.4 OPENING OF BIDS -TECHNICAL OFFER
IITK shall convene the bid opening session on duly notified date. IITK will consider only those bids which are duly submitted and not withdrawn. If the bidders so desire, they may depute (at their own expense) their authorized representative (one person per bidder) to be present during the opening of the Technical Offer. The Technical Offers will then be passed on to an Expert Committee duly constituted by IITK.

4.5. OPENING OF BIDS – FINANCIAL OFFER
Financial offers of only those bidders whose technical offers meet the requirements will be opened in the presence of the authorized representative of bidders (one person per bidder) on a duly notified date and time. The financial offers will then be passed on to an Expert Committee duly constituted by IITK.

4.6. BID EVALUATION
Bids will be evaluated on a scale of 100. The technical offer will have a maximum score of 70, and the financial offer a maximum score of 30. The minimum cut-off score for the technical bid is 40. Bidders whose score is above 40 in the technical bid will be shortlisted, and only their financial offers will be opened.

The lowest TCV shall be given a financial score (FS) of 30 points. The financial score (FS) of

other proposals will be determined using the formula: FS = 30xFP/F, where FP is the lowest financial bid, and F is the financial bid of the particular bidder. Scores obtained on financial offer will be added to scores obtained on technical offer to get a consolidated score. Bidder with the highest consolidated score will be selected. If there is a tie in the overall score, the vendor with the higher score on the financial offer will be selected. If there is further tie on financial offer score, the vendor with the lowest TIC will be selected.

4.7. AWARD OF CONTRACT
The bidder securing the highest consolidated score will be invited for negotiation, if necessary, with IITK. Upon successful negotiation, the work will be awarded to the bidder. If negotiations fail, IITK reserves the right to call the next bidder in succession for negotiation. Director, IITK shall be the competent authority in this regard, whose decision shall be final and binding.
IITK shall reserve the right to:
- Accept or reject any or all of the bids without assigning any reason;
- Call for additional information from bidders;
- Keep one or two bidders on the wait-list who may be engaged by IITK if the performance of the selected bidder is not found to be satisfactory during any stage of implementation post award of contract.

4.8. PROJECT IMPLEMENTATION
IITK will provide a detailed Software Requirement Specification (SRS) prepared for all the processes of the institute. We would require the selected company to study these processes and make appropriate modifications if required. These modifications need to be approved by the Institute Automation Committee. After this, the company can proceed to implement the process.

Once a particular module is implemented, it will be tested by the Institute Automation Augmentation Committee, and then by the users. At this stage, some changes may be required (see Sec. 4.12). The module can go-Live after user testing, and software and security testing. All the modules specified in the summary document needs to be implemented.

Five year annual maintenance contract would start after the final go-Live.

4.9 HELP DESK AND MAINTENANCE:
Company will help IITK to setup a help desk for resolving issues faced by user during the testing and implementation.
- This help desk will be jointly maintained by the company and IITK.
- Company will provide appropriate technical resources to manage the help desk, and IITK will deploy 2-3 persons for assistance if any.
- Company will deploy a help desk software which will enable user to log their queries and seek resolution 24x7.
- Help desk personnel should be available on normal working hours. On certain critical times, e.g., registration, grade submission, convocation, etc., they should be available 24x7.
- Issue will be considered resolved only after receiving consent from the user/user committee.
- Company will maintain service level agreement (SLA) for such issues and report to committee.

4.10 DEBUGGING TEAM

The company should constitute a separate debugging team as an independent body; it will facilitate seamless implementation of the developed module during testing and after Go-live.

The debugging team will maintain a debugging tracker system.

4.11 PROJECT MANAGEMENT OFFICE

Company will deploy a project manager and staff who will be stationed at IITK to oversee the progress of project, and report to the Institute Automation Augmentation Committee on a weekly/monthly basis.

4.12 PROJECT PHASES & IMPLEMENTATION SCHEDULE

The bidder should implement the automation system as per the schedule given in the table below. Please note that all modules/sub-modules mentioned in the Summarized Automation Requirements (attached) in IIT Kanpur are to be implemented within 18 months. The detailed plans of the schedule of implementation can be decided during the signing of the project with the final company.

We require that 20% change be acceptable in the processes given in the SRS document. The final process flow should be in accordance with the SRS document, but tweaking of the processes is acceptable for ease of implementation and smoothening of processes. All the changes in the process flows should be discussed and approved by the automation committee of IIT Kanpur.

Phase	Modules to be implemented	Time after award of contract	
		Start	**Go-Live**
I	Database structuring, DOAA, DOSA, Administration	Immediate	6 months
II	DOFA, DORA,	6 months or before	12 months
III & Final	The Remaining modules	12 months or before	18 months

Phases I, II and III are described in detail in Annexure 1
The priority of implementation of the modules can be altered somewhat during the signing of the contract. A detailed schedule of the implementation need to be submitted during the signing of the contract with the selected company.

5. Technical solution

5.1 Technical Details

Please provide plans or solution for each of the following items. Each plan or solution must start from a fresh page, and each page must be numbered. The plans must not exceed the page limit. The plans must be written in font size of 10pt on separate A4 single spaced pages, with all margins equal to 25 mm each page must be signed and endorsed with the seal and signature of the applicant(s) along with the date of submission.

1. **Summary of solution** proposed for all the items in the Institute Automation Requirement document. (Maximum of two pages)
2. If the applicant opts for **system integration with third-party software e.g. KOHA for library automation system**, then mention the names of potential vendors and respective software applications they propose to utilize from those vendors. Please

include clearly the license fees for the software (first-time as well as yearly). Also see Sec. 5.2. (Maximum of one page)

3. Plans on implementation of the automation system. Provide the following information (no page limit)
   a) Detail project plan (Gantt or MS Project)
   b) Approach and methodology
   c) Design development/customization and implementation plan for each phase and their detail description for every module

4. Plans on the training of the users of IIT Kanpur. (Maximum of two pages)

End-User Acceptability, Training and Documentation
- Institute shall expect the company to bring innovative methods and techniques to seamlessly imbibe change in end-user mindset and acceptability for new product.
- Institute shall expect the company to run module usage awareness and training sessions for end-users. Company shall upload user guide for users to access online.
- Institute shall expect the company to run end-user acceptability tests, during and post implementation phase.

Training & Development of Institute Automation Team
- Institute shall expect the company to present training and development plan for the institute automation team during and post implementation of the product.
- Institute shall expect the company to conduct training sessions for the institute automation team during and post implementation of the product.
- Institute shall expect the company to establish a continuous program of learning and development for the institute automation team.
- Institute shall expect the company to hand over detailed manuals as to the functioning of the software and to make changes when required.

5. Plans on the help desk for the users of IIT Kanpur. Please specify how many personnel would be from your company, and how many from IIT Kanpur? Also, when should this helpdesk be setup after the order? (Maximum of one page)
6. Proposed project team in phase wise and module wise; their profession experience and qualification in the respective modules.
7. Plans for porting the existing and legacy databases to the new system phase wise their implementation time plan and module wise when it will be start.
8. Data migration strategy plan before go live of each phase. Migration of data running in existing applications of last 20 years.
   - Un-digitized data will have to be digitized related to student, faculty and staff for all the applications. The data related to events, BOG related items and that of senates.
   - At present, DORD module is running on INGRES 9.2 on HP UX server and other application like payroll, student, finance etc. are running on ORACLE 10g on SOLARIS and Linux platform.
   - The units where there is no automation software data can be migrated in txt, csv, xls formats.
9. Plans for the maintenance of services over the period of 5 years from go-live. (Maximum of one page)
10. Backup & Recovery: Data backup on a mirror server and remote server through automatic back up scheduler. (Maximum of one page)

- Backup shall be in external devices/tape libraries/remote servers.
- The frequency of backup shall depend on the criticality of the services (e.g. Financial and admission etc.)
- A backup policy shall be designed to meet the requirement of all the applications.

- There shall zero data loss and zero server downtime policy.
- Server shall be configured in parallel mode so that in case of one server failure, the alternate parallel server can be activated automatically with minimum downtime.
- Structure shall be prepared to handle untoward incidents with a Business Continuity Plan (BCP) in place for data recovery and restoration.
11. Hardware required for (testing and production environment) and application and data base server include adequate backup facility and load balancing.
    - All the applications should have acceptable response and throughput.
    - During peak load (EX. Online admission) there should be automatic load balancing and optimization between servers to cater to the peak load.

Hardware will be provided by the institute, but the company must provide complete details of the required hardware for their implementation.

12. Plans for scalability / upgradability of the system to manage a student strength of 12,000 over the 5 years; Include plans for two scenarios: the student strength becomes
    (a) 12000 (b) 16000. Also, include any issues you may face if the faculty strength reaches 650.
13. Plans for recovery from system failures; troubleshooting bug reports and crashes. (Maximum of one page)
14. Portability from current physical location to another location (inside IIT and outside IIT) (Maximum of one page)
15. Pricing model on licensing (per person or usage). Elaborate it. (Maximum of one page)
16. Plans on data security. (Maximum of two pages)
    - Secured system for crucial transactions.
    - Transaction logging and Monitoring.
    - Audit trail.
    - Alert in case of security violation.
    - Data encryption wherever necessary.
    - Role based Authentication/Access.
    - Form, block and field level security wherever applicable.
    - User Log-in page to be secured
17. Plans for services on hand-held devices. Describe the platforms and services you will support. (Maximum of one page)
18. If you are going to use third-party application, how will you integrate it with the automation system (Maximum of one page)
19. Which part of codes and database of your implementation would you share with IIT Kanpur? Describe this issue in detail. (Maximum of one page)
20. Comment on the limits of simultaneous queries would be possible in your system? What is the required network speed for our requirements? (Maximum of one page)
21. Change Management Process
    - Institute shall expect the company to suggest a change management process subject to conditions mentioned in Section 4.12.
    - Institute shall expect the company to route the change management request to the

Chairperson of the Automation Committee for approval before implementation.

- The company shall create a detailed work plan with effort estimation for change management and present to the Chairman of the Institute Automation Augmentation Committee for discussion and approval.

- The company shall quote man-hour/man-day cost at the time of bidding for change management.

5.2 Third Party Solution
The applicant should provide the following details regarding the Third party software:

Module in which third party software will be used	Process name within the module	Proposed Third Party Software	Justification for the proposed third party software	Proposed Integration Methodology	License Cost	AMC Cost

5.3 Test module - We require the companies to implement the two test modules:

1. Issue of Travel Advance,
2. Course Approval by Instructor. These modules should be implemented and demonstrated duly.

6. General Conditions:

6.1 Termination
Either Party may forthwith terminate this Agreement or part thereof by providing written notice to the other Party, if the other Party:-

a) Is in breach of any warranty, terms and conditions of this Agreement and such breach is incapable of being remedied or where capable of remedy, is not remedied within thirty (30) days of receipt of notice in writing by the non defaulting Party specifying the nature of the breach; or

b) An order is made or an effective resolution is passed for the amalgamation of the other Party under Part VIII of the Companies Act No. 07 of 2007 or any other similar action or proceeding under any other law and the order or resolution is not withdrawn, revoked or annulled within a period of sixty (60) days from the date of the order or resolution; or

c) An order is made or an effective resolution is passed for winding up or dissolution of

the other Party and the order or resolution is not withdrawn, revoked or annulled within a period of sixty (60) days from the date of the order or resolution; or

6.1.1 Specific Rights of Termination

Notwithstanding Clause 6.1, IITK shall have the right to immediately terminate this Agreement where the following has occurred:
a) The Company failed to meet timelines for any phase beyond 3 months.
b) IITK has issued a further written notice for the Company to rectify;
    1. The non-compliance of any of its obligations under this agreement; or
    2. The problems with regard to the customization of the solution as stipulated in the technical specifications and/or SRS document.

6.1.2 Effects of Termination

a) The decision of the IITK about the failure on the part of the Contractor shall be final and binding on the Contractor.
b) The termination or expiry of this Agreement, in whole or in part, does not operate as a waiver of any breach by a Party of any of its provisions and is without prejudice to any rights, liabilities or obligations of any Party which have accrued up to the date of termination or expiry including the right of indemnity.
c) The Company shall upon termination or this Agreement:
    i. Cease providing the Services;
    ii. Cease using any Intellectual Property Rights of IITK and/or any other systems, processes or infrastructure of IITK to which the Company has access; and
    iii. Return all Confidential Information and all other materials, documents and information belonging to IITK and shall not keep or possess any of the same.
d) In the event of any failure on the part of the Contractor, IITK shall have the right without any prejudice to get the work done through any other alternate agency at the risk and cost of vendor. The additional cost including loss, if any, incurred by IITK will be recovered from the vendor

6.2 Arbitration

In the event of any dispute arising between the parties hereafter as IITK and contractor in respect of or connected with this contract, General & Special terms & conditions of tender, then the same shall be referred to Arbitration and arbitrator will be nominated by the IITK, whose decision shall be final and binding on both the parties. The provisions of Arbitration and Conciliation Act, 1996 or any statutory modification and re-enactment thereof will apply to such arbitration provided however, in all matters the venue of proceedings will be Kanpur and only Kanpur or appropriate Courts will have jurisdiction over the same.

6.3 Force Majeure

If at any time, during the continuance of this contact, the performance in whole or in part by either party or any obligation under this contract shall be prevented or delayed by reason of any war, or hostility, acts of the public enemy, civil commotion sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes, lock-outs, or act of God, provided notice happenings of any such eventuality is given by either party to the other within21 days from the date of occurrence thereof, neither party shall by any reason of such even be entitled to terminate this contract not shall either party have any such claim for damages against the other in respect of such non-performance or delay in performance, and deliveries under the contract shall be resumed as soon as practicable after such event may come to an end or cease to exist, decision of the IITK as to whether the delivery have been so resumed or not shall be final and conclusive, provided further that if the performance, in whole or part of any obligation under this contract is prevented or delayed by reason of any such event for a period

exceeding 60 days either party may at this option terminate the contract. The event of delay caused shall not be counted towards the time schedule.

6.4 Intellectual Property Rights

a) Each Party shall retain any and all rights (including but not limited to all Intellectual Property Rights) to its own software, know-how, technology, processes, material and/or developments (collectively "Rights") that existed prior to this Agreement, together with any Rights created separately from and independent of its activities related to this Agreement, and any modifications or adaptations to such Rights. Except as specifically set forth in this engagement, neither Party shall obtain any interest in or to the other Party's Rights solely by access to or use of the same related to this engagement.

b) **The Rights of the software developed under this agreement either by IITK or company shall belong to IITK. If an automation module is built on already existing platform, then the IITK has Rights only for the customization layer. The source code developed under this agreement needs to be shared with IITK. These issues need to be clearly spelt out during the signing of the contract with the successful bidder.**

c) If the company wishes to use the software developed under this agreement elsewhere (other than IITK), then it should seek written permission/agreement from IITK.

d) The Company hereby grants to IITK and its extension units in India or outside India a non-exclusive royalty free license to use any Rights that the Company develops during or for this Agreement and IITK shall be entitled to use the subject matter of the Rights for its internal use only.

e) All Rights which IITK makes available to the Company (whether or not owned by IITK) in connection with this Agreement will be deemed to be licensed to the Company on a non-exclusive royalty free basis solely for the use of the Company in performing the services and solely for the Term of this Agreement.

f) Neither Party shall during or after the expiry or termination of this Agreement, without the prior written consent of the other Party, use or adopt any trademarks, trade name, service name, trading style or commercial designation that include or is similar to or may be mistaken for the whole or part of the Marks used by the owner Party subject to the applicable terms of this Agreement.

g) All Intellectual Property Rights or derivatives of existing Intellectual Property Rights created by the Company or its group of companies or any employee, agent or subcontractor of the Company:

  i. In the course of performing the Services; or

  ii. Exclusively for the purpose of performing the Services, shall vest in the Company. The Company agrees to grant IITK and its Related extensions in India and outside India a non-exclusive royalty free license only to enable its Related extensions to receive and use the Services or deliverables or derivatives created or developed pursuant to this Agreement but such license shall not permit IITK or its Related Companies to create or develop similar deliverables or perform similar services through the use of such Intellectual Property Rights owned by the Company.

6.5 Intellectual Property Rights Infringement
6.5.1 IPR Indemnity by the Company

a. Without prejudice to IITKs other rights and remedies under this Agreement or at law, the Company will indemnify and hold harmless IITK against any claim or action by a third party that the normal operation and/or use of the Service and/or use of any of the Company's Intellectual Property Rights in accordance with the terms of this Agreement infringes the Intellectual Property Rights of any third party provided that

IITK:
 i. Shall not have done, permitted or suffered to be done anything which may have been or become an infringement of Intellectual Property Rights;
 ii. Has given written notice to the Company of any IP Infringement upon becoming aware of the same detailing where possible the nature of the alleged infringement;
iii. Allows the Company to conduct all negotiations and proceedings and have sole control of the defense provided that any matter, decision, action or settlement which:
  A. Has a cost implication on IITK;
  B. Which affects IITK's rights and remedies; and/or
  C. Which would involve or result in IITK admitting a breach, infringement or guilt, the Company shall first obtain the written consent of IITK; and
iv. Provide the Company with such reasonable assistance as is required by the Company, at the Company's cost and expense.
b. Where the Company is prevented from providing the Services or part thereof as a result of any IP infringement or any IP infringement claim, the Company shall modify and replace all of the infringing parts of the Services provided always that such modification or replace shall not result in a degradation of the Service or in the loss of features and functionalities of the Service.

6.5.2. IPR Indemnity by IITK
a. Without prejudice to the Company's other rights and remedies under this Agreement or at law, IITK will indemnify and hold harmless the Company against any claim or action by a third party that the use of any IITK's Intellectual Property Rights granted by IITK to the Company in accordance with the terms of this Agreement infringes the Intellectual Property Rights of any third party provided that the Company:
 i. Shall not have done, permitted or suffered to be done anything which may have been or become an infringement of Intellectual Property Rights;
 ii. Has given written notice to IITK of any IP Infringement upon becoming aware of the same detailing where possible the nature of the alleged infringement;
iii. Allows IITK to conduct all negotiations and proceedings and have sole control of the defense provided that any matter, decision, action or settlement which:
  A. Has a cost implication on the Company;
  B. Which affects the Company's rights and remedies; and/or
  C. Which would involve or result in the Company admitting a breach, infringement or guilt, IITK shall first obtain the written consent of the Company; and
iv. Provide IITK with such reasonable assistance as is required by IITK, at IITK's cost and expense.
b. Where the Company is prevented from using IITK's Intellectual Property Rights or part thereof as a result of any IP infringement or any IP infringement claim, IITK may:
 i. Modify or replace the infringing parts; or
ii. Instruct the Company to cease using the said Intellectual Property Rights.

6.6 REPRESENTATIONS AND WARRANTIES
6.6.1   Mutual Representations and Warranties
Each Party hereby represents and warrants that:
a. It is duly incorporated and organized and validly existing under the laws of Govt. of India and has all the necessary power, authority and capacity and approvals to enter into and perform the transaction contemplated in this Agreement and does not do so in breach of any existing obligations under any contractual arrangements to which the Party is a party to or applicable laws or regulations of any jurisdiction or in breach of its articles of association and does not require to seek the consent of any third party;

b. It is solvent and there are no Bankruptcy Action taken against it; and

c. This Agreement constitutes valid and binding obligations of the Party in accordance with its terms.

6.6.2 Company's Representations and Warranties

The Company further represents and warrants that for the duration of this Agreement:

a. The Services does not and will not infringe any Intellectual Property Rights;

b. All necessary regulatory approvals and licenses for the operation of the business of the Company have been obtained and there are no likely reason for any of them to be suspended, cancelled, or revoked or not renewed; and

c. The Company will perform all its obligations under this Agreement in compliance will all applicable laws and regulations including but not limited to any privacy and data protection laws relating to the collection, storage, use, processing or possession of personal information.

6.6.3 IITK's Representations and Warranties

IITK represents and warrants that for the duration of this Agreement (unless otherwise stated below):

a. IITK shall provide all reasonable support and assistance as required by the Company to enable the Company to perform its obligations in accordance with this Agreement;

b. All data, information and material of any nature that it provides to the Company under this Agreement is to the best of IITK's knowledge and belief accurate as at the time of provision;

c. IITK shall obtain, maintain and comply with all relevant and applicable laws for the receipt and use of the Service;

d. IITK has to the best of its knowledge and belief disclosed all material and relevant facts pertaining to the Services which are in IITK's possession as at the date of this Agreement;

6.7 CONFIDENTIALITY

6.7.1 All Confidential Information disclosed or communicated by IITK to the Company or obtained by the Company from IITK in connection with this Agreement including but not limited to the operations of IITK and the terms of this Agreement shall be treated as Confidential Information unless the information:-

a. Is or becomes publicly available through no fault of the Company;

b. Which the Company can prove was in its possession or known to it prior to its receipt from IITK;

c. Is or was rightfully received by the Company from a third party without a duty of confidentiality being owed by the Company to the third party, except where the Company has knowledge that the third party has obtained that information either directly or indirectly as a result of a breach of any duty of confidence owed to IITK; or

d. Independently developed by the Company without the use of the Confidential Information.

6.7.2 IITK's Confidential Information shall be held in strict confidence by the Company, using no lesser security measures and degree of care as it uses to protect its own Confidential Information. In any event, the security measures and the degree of care it uses shall, as a minimum, comply with the standards imposed by the applicable laws. The Company shall further ensure that the Confidential Information is secured from unauthorized access from internal and external parties and that all Confidential Information used, stored and/or processed shall be free from virus, malware or other malicious codes.

6.7.3 The Company shall also neither publicize nor announce the execution of this Agreement except where its disclosure becomes mandatory pursuant to any laws or any acts of authority or rules of any stock exchange, or is for the purposes of arbitration or court proceedings.

6.7.4 The Confidential Information shall not be used, copied, reproduced, distributed or disclosed by the Company for any purpose except that:

a. It may be disclosed to its employees or agents strictly on a need to know basis to implement or perform this Agreement only provided its employees and agents is subject to and maintains the confidentiality obligation under this Agreement; and/or

b. Its disclosure becomes mandatory pursuant to any laws or any acts of authority or rules of any stock exchange, or is for the purposes of arbitration or court proceedings.

6.7.5 Where the Company is required to disclose any Confidential Information pursuant to any laws or any acts of authority or rules of any stock exchange, or is for the purposes of arbitration or court proceedings, the Company:

a. Shall where practicable and lawful give twenty four (24) hours notice to IITK that it is required to disclose the Confidential Information so that IITK has an opportunity to protect the confidentiality of its Confidential Information; and

b. Provides IITK with a copy of the Confidential Information that the Company is to disclose.

6.7.6 Upon the expiry of termination of this Agreement, the Company shall promptly return to IITK or, where instructed, destroy Confidential Information of IITK and immediately cease using all Confidential Information. Where required by IITK, the Company shall provide IITK a written undertaking confirming that it has fully complied with the requirements of this Clause and that it is not in possession or control of any of IITK.s Confidential Information.

6.7.7 The Company shall ensure that each of its personnel strictly complies with the obligations under this Clause 5.

6.7.8 The obligations of the Company in this Clause shall survive three (3) years after the termination or expiry of this Agreement.

6.8 **Third party software and Subcontract**
Third party software and license should be clearly indicated as per table 5.2 and NO part of the contract may be subcontracted to a third party without the written consent of IITK.

7. Contacts from IIT Kanpur
The following will be the contacts for the vendors for this RFP

Prof. Ashish Dutta
Dean of Digital Infrastructure and Automation
Computer Centre, Room 105
Indian Institute of Technology Kanpur
Kanpur– 208016
email: ddia@iitk.ac.in

Tel: +91-512-6797252

8. Attached documents of importance
   a) Financial Offer
   b) Summarized Automation Requirements
   c) Pre-bid Tender
   d) Issue of Travel Advance
   e) Course Approval by Instructor

Financial Offer for
Augmentation of Institute Automation System

This part should mention the cost up to go-live :

Cost Breakup: (Please specify amount in INR)	
Phase 1 Fixed Implementation cost (A)	
Phase 2 Fixed Implementation cost (B)	
Phase 3 Fixed Implementation cost (C)	
Data migration cost (D)	
Total Fixed Implementation Cost (TFIC) = (A + B + C + D)	
Fixed Annual Maintenance Cost for First Year (E)	
Fixed Annual Maintenance Cost for Second Year (F)	
Fixed Annual Maintenance Cost for Third Year (G)	
Fixed Annual Maintenance Cost for Fourth Year (H)	
Fixed Annual Maintenance Cost for Fifth Year (I)	
Total Fixed Maintenance Cost (TFMC) = (E+F+G+H+I)	
Total Contract Value (TCV = TFIC + TFMC)	

Additional Information
(Not to be included in TCV; Recommended to provide vendors details)

Operating System cost (J)	
Operating System AMC cost for Five year (K)	
Total Data base cost (L)	
Total data base AMC cost for five year (M)	
Total Hardware cost (N)	
Total Hardware AMC cost for five year (O)	
License fees for the third party software (P)	
AMC for maintaining the third party software (Q) (Not to be included in TCV; Recommended to provide vendors details)	

NOTE:

1. TCV should include licensing costs for the all the softwares for the whole period (implementation + 5 years of maintenance). Please make your estimate based on 10000 students, 500 faculty members, and 3000 permanent, contractual, and project staff.
2. TCV should include the porting of existing data into the new automation system if required you can state it separately in addition to parts of (A, B, C).
3. The company should specify the licensing cost per year beyond 6 years and 8 months of contract. This will, however not be part of the TCV. If the automation system is required to interfaced with the existing software of IITK (e.g., library software project management module, health Centre), describe your model for cost reduction to IIT Kanpur.
4. We require that 20% changes be acceptable in the processes given in the SRS document. The final process flow should be in accordance with the SRS document, but tweaking of the

processes is acceptable for ease of implementation and smoothening of processes. All the changes in the process flows should be discussed and approved by the automation committee of IIT Kanpur.

5. Please state the charges for implementing a new process change in the automation system. State the man days cost.

6. IIT Kanpur will provide the hardware specified by you. Please get quotations for the specified hardware. This is not part of the financial quotation, but this solution will be evaluated in the technical solution.

7. The company must ensure that payment of minimum wage and other labour laws are strictly followed for all their employees for those who were working in this project.

From: Date:

To,
The Director
Indian Institute of Technology Kanpur
Kanpur – 208016

Subject: - Declaration of pre-qualification EOI application for the augmentation of automation of IITK

Sir,

     Regarding the application for the augmentation of automation system implementation submitted by us,we declare the following:

I/We hereby certify that all the statements made and information supplied in the TECHNICAL and FINANCIAL APPLICATIONS are true to the best of our knowledge.

I/We agree with the terms and conditions, tender process, as well as the evaluation process described in the tender document.

Date of submission: Seal of applicant

                                                   Signature(s) of Applicant(s)

Annexure 1 : Tentative sequence for development.

P1	Database Structuring & Creation
P1	Admin – Directors office, Deputy Directors office, Registrar office,
P1	DOAA
P1	DOSA
P2	DOFA
P2	DORA
P2	F & A/c
P3	DORD
P3	Central Store
P3	Individual Department
P3	ID Cell
P3	VH
P3	CDTE
P3	IWD
P3	Estate Office
P3	Security Office
P3	Legal & RTI
P3	Director & Deputy Dir,
P3	Placement
P3	Counseling Service
P3	Library
P3	Health Centre
P3	Student Gymkhana