GUJARAT TECHNOLOGICAL UNIVERSITY

(Established Under Gujarat Act. No. 20 of 2007)



Request for Proposal No.31/2023-24 ERP solution for "Student Lifecycle Management System At Gujarat Technological University"

Gujarat Technological University

Nr. Vishwakarma Government Engineering College Nr. Visat Three Roads, Visat - Gandhinagar Highway Chandkheda, Ahmedabad - 382424 - Gujarat

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SCHEDULE

Bidder can download the Bid Document from n-procure website	From 15/03/2024 (04: 00 PM) onwards	
Last Date & Time of Online Submission of Financial Bid	04/04/2024 (06: 00 PM)	
Last Date of Physical Submission of Tender at GTU,		
Chandkheda through Speed Post/Reg. A.D./courier	08/04/2024 (06: 00 PM)	
only		
Date of Opening of Tender (Technical Bid only)	Will be communicated afterwards	
Tender shall be valid up to	180 days	
Place of Opening of Tenders	GTU, Chandkheda, Ahmedabad	
	The Registrar,	
	Gujarat Technological University,	
	Nr. VGEC, Nr. Visat Three Roads, Visat –	
Address for Communication	Gandhinagar Highway, Chandkheda,	
	Ahmedabad – 382424, Gujarat	
Phone Number	(079) 23267540/535/628,	
	FAX (079) 23267580	
Email	purchase@gtu.edu.in	
For Technical Query contact	Mr. Mahesh Panchal	
	Section Head-IT	
	9099064032, <u>head.it@gtu.edu.in</u>	

• Intending tenderers or their authorized representatives will be at liberty to be present at the time of opening of Technical bid

Request for Proposal No.31/2023-24 For ERP solution for

"Student Lifecycle Management System At Gujarat Technological University"

Tender fee: Rs. 17,700/-

EMD: 4,50,000/-

Security Deposit/- 5% of order/contract value

Gujarat Technological University invites Request for Proposal for ERP solution for "Student Lifecycle Management At Gujarat Technological University" System from reputed/experienced/technically sound service provider. Interested parties/firms who wish to participate in tenders can submit filled intender in all respect i.e. EMD, Tender Fee, and other essential documents for quoted service as per the schedule mentioned in this RFP to Gujarat Technological University, Chandkheda, Ahmedabad-382424 through Speed Post / Reg. A.D./ Courier only. Tender documents sent through Fax/e-mail/in person/etc. will NOT be accepted. The corresponding sealed envelope should be titled as ERP solution for "Student Lifecycle Management System At Gujarat Technological University" and the bid must reach on or before the last date & time as per the schedule mentioned in this tender. Bids received or submitted after the specified last date & time of receipt will be rejected and no intimation will be sent in this regard. The tender fee is non-refundable, non-adjustable and non-transferable. While, EMD is refundable. Both should be payable through a demand draft on any nationalized bank drawn in favour of the "Gujarat Technological University" payable at Ahmedabad.

INTRODUCTION: SECTION – 1

The Gujarat Technological University (GTU) is a premier academic and research institution which has driven new ways of thinking since its 2007 founding, established by the Government of Gujarat vide Gujarat Act No. 20 of 2007. GTU is a State University with many affiliated colleges in its fold operating across the state of Gujarat through its SIX zones at Ahmedabad, Gandhinagar, Vallabh Vidyanagar, Rajkot, Surat and Bhuj. The GTU caters to the fields of Engineering, Architecture, Management, Pharmacy and Computer Science. The University has the students enrolled in a large number of Diploma, Under Graduate, Post Graduate programs along with the robust Doctoral program.

GTU invites request for proposal for "ERP Solution for Student Lifecycle Management System". Through this service, GTU wishes to achieve transparency and excellence in the processes pertaining to all the stakeholders of university. The university feels that through this initiative the university can work towards error free and accelerated processes by reducing the redundant laborious activities.

Gujarat Technological University invites the request for the proposal for above said task.

Only short listed parties will be eligible to take part in the tender procedure.

General Instructions:

- 1. The company should be registered under Companies Registration act 1956 (& subsequent relevant amendments) OR Limited Liability Partnership Firm under Limited Liability Partnership Firm Act 2008 OR Proprietorship firm AND The company must be operational minimum for 5(five) years.
- 2. The company should have average annual turnover of Rs 2.00 crores during the last three financial years.
- 3. The company should submit declaration on Rs. 300/- Stamp Paper stating that his/her firm is not black listed by any Government organization/institution.
- 4. The bidder should be registered with appropriate tax authorities such as GST, Income tax, etc and should submit valid certificates of registration with these authorities.
- 5. The company should have experience of supplying/customizing ERP Solution for Student Lifecycle Management System in minimum 2 number of hybrid (campus and affiliating) universities (among which 1 must have at least 50,000 students of enrolment per year in single State University). Experience of supplying such ERP in technological university is preferred.
- 6. The company has to submit the "Satisfactory Completion/Ongoing Work" letter from the university where such ERP system already provided by it.
- 7. The company must be ISO 27001:2013 and ISO 9001:2015 certified.
- 8. The company shall have minimum Technical manpower strength of 50 persons on

its rolls at least for six months before the last date of submission of RFP.
9. The company shall not assign, transfer or sublet or attempt to assign, transfer or sublet, whether wholly or in part, any portion of the work to any other entity.
10. The interested parties must provide estimated cost of work with all detailing.

SECTION - 2

SCOPE OF WORK

(a) Primary Study

The interested parties are advised to go through the existing Gujarat Technological University processes in order to have an idea about the magnitude and diversity of work to be carried out. They need to suggest hardware/software requirements based on their development tools and platform. The interested party is also advised to propose the functionalities that they would be able to provide in all the modules of proposed ERP, apart from those which are specifically mentioned below.

(b) Requirement Study:

The vendor is expected to do a requirement study for the proposed ERP, which when agreed upon by the Gujarat Technological University, will form part of the Agreement to be signed with Gujarat Technological University. The desired flow within modules, between modules will be discussed with the successful Bidder prior to start of work. In this context, the University will also be open to design & development suggestions from the successful Bidder

(c) Information Collection:

The vendor will have to depute their concerned staff for understanding the ongoing processes, modules, portals used by different sections in Gujarat Technological University.

(d) Compatibility

The proposed ERP must be cross-browser and cross-OS compatible up to the most recent browser / OS versions. Support for three platforms: Desktop/Tablet or Notebook and Mobile form factors will be required.

(e) Functionalities Required:

The scope of ERP Solution for Student Lifecycle Management System would be for all the programs/courses in which the students are enrolled at Gujarat Technological University. The system will be developed based on prevailing norms and will be deployed for verification by Gujarat Technological University as per agreed timeline. Moreover, the data & applications must be deployed at the place decided by Gujarat Technological University and privacy & confidentiality of the data & application must be maintained. The proposed system would be confined to the following points and programs as per the current structural / functional flow listed in this document.

Ongoing Processes in GTU that are Required to Understand for Developing the ERP

- 1. Institute Affiliation
- 2. Academic Inspection
- 3. Enrolment/PG Registration/PhD Registration
- 4. Admission Cancellation
- 5. Student Services
- 6. Branch/Institute/University Transfer
- 7. Stakeholders Management System with Role-based Access
- 8. Examination Panel
- 9. Zonal Activities
- 10. Question Paper Receiving System (QPRS)
- 11. Question Paper Delivery System (QPDS)
- 12. Pre-examination including Special Cases Examination
- 13. Mark Entry Module (Online/Offline)
- 14. DES (Digital Evaluation System)
- 15. Post-examination including Special Cases Examination
- 16. Recheck & Reassessment
- 17. UFM Management
- 18. Degree Certificate (Provisional & Final) Preparation, Award, Rank Certificate, Gold Medal Data
- 19. Enrolment Revoke Management
- 20. 100 Activity Point
- 21. PG Dissertation Title Registration and Thesis Upload
- 22. Multiple Entry, Multiple Exit
- 23. Multidisciplinary & Interdisciplinary Learning
- 24. Student Internship
- 25. Student & Faculty Member Research Work
- 26. Admin Panel with full functionality for all stockholders
- 27. Outcome based Education (OBE)
- 28. Accreditation Data Management
- 29. Ranking Framework
- 30. International Experience Program, Student Exchange Program

For all of the above, start to end paperless & user oriented process development is to be done with CURD operation and latest technology and possible compatibility with future technology.

There must be provision of generating organization unit wise dynamic & need base reports with full functionality (Import & Export from & to Excel Data with proper formatting).

Stakeholders

- Applicants
- Institutes
- Institute Principal & Staff
- Students
- Teaching Faculty Members
- Trusty
- Deans & Associate Deans
- Chairmans-Board of Studies
- Parents
- University Authorities (VC/Registrar/BoG Members etc.)
- University Admin
- University Sections
- University Officers
- University Staff (Peon to Registrar all post)
- Zonal Offices

Features for Stakeholders

- Stakeholder wise Dashboard and Content Management System
- Responsiveness
- Mobile Application for Every Stakeholder

Following minimum requirements mentioned in points from (1) to (11) are to be fulfilled in the ERP.

Configuration of Masters and Administration

- **Manage User wise rights:** Admin can assign the menu, forms, Activities based rights depend on the role of the user.
- Year, term and batch Configuration: Administrator can define year and term for the exam.
- **Program Structure and semester Entry:** Masters to define Program Structure. **Scheduling Configuration:** Masters to schedule pre-defined activities.
- **Subjects and Heads:** Subjects and Subject type management with flexible heads. Admin can manage Special subject, compulsory subject, elective subject and assign to students. Also can define unique codes for subjects.
- **General Information master:** Manage ABC (Academic Bank of Credit) IDs, Education details, Nationality, Religion, Category, Address, City, answering language etc.
- **Exam Eligibility:** Eligibility criteria define and check also manage student information based on the criteria.
- **Fee Configuration:** Fees Configuration masters to define Fees for pre-defined activities.
- **General Configuration:** Masters to define general configurations for Academic Year & Batch
- **Institute Structure Configuration:** Masters to define Colleges, affiliated Programs, Yearly intake and College Program Subject mapping. Center Allocation to the institute. Institute password reset and send. Institute Name and Address Module with effective data must be develop.
- **Exam Configuration:** Masters to define Exam related configurations.
- **Gracing Rule Configuration:** Masters to define gracing rules templates.
- **Result Configuration:** Masters to define result related configuration and Gracing rules (R1 and R2), backlog for regular and remedial exams.
 - o All result rules pre-defined in system.
 - o All detention rules pre-defined in system.
 - User can create template from those rules and can apply on multiple programs.
- Rechecking / Reassessment Configuration: Masters to define Rechecking / Reassessment Configuration.
- **Degree Configuration:** Masters to define Degree Configurations.
- **Program / Term Related Configurations:** Following configurations can be made per program/term/duration/months etc.
 - o Class Allotment in term
 - o Backlog Allotment in term
 - o Degree Term
 - o Internship Required
 - o Gracing rule template
 - o Maximum allowed time to complete program
 - o Other conditions whichever is apply.
- **Audit Configuration:** University can configure events for audit from pre-defined events for which university want to view audit log on screen.

- **Institute Level User Configuration:** Institute can make user level rights management for college level activities.
- **Certificate Configuration:** Various certificate configuration and generation like Migration, NOC, Provisional Degree Certificate, Passing Certificate, Language Certificate etc. that are related to student services.
- **Grade sheet configuration:** Master to define Grade sheet configuration.
- **Student Level user configuration:** For student activities like to fill the exam form, download the hall ticket etc.

Institute Affiliation Module

- Online application by institute for following services:
 - o setting up new technical institutions
 - o extension of affiliation
 - o change of site/location
 - o closer of institute/ program/course
 - o increase in intake/additional course
 - o change in name of the course
 - o reduction in intake
 - o change in name of institution
- Details like institute name, address, staff details, result, infrastructure etc. are to be entered in affiliation module by institute.
- Institute submit its application for affiliation with necessary payments and documents.
- Institute can generate deficiency report, submit compliance report and generate affiliation letter.
- E-mail alerts to the institute about deficiency report generation, dean review committee recommendation and affiliation letter generation.
- Faculty deficiency count should be displayed to the institute with percentage.
- Institutes which fall in category of Academic Inspection should be calculated automatically.
- E-mail alerts to the Section about submission of Compliance report.
- Online payment gateway. When institute apply in affiliation portal, all applicable fees should be shown in portal and institute has to mandatorily pay the shown amount. (system calculated)
- Application of NOC should be online and issued NOC online to the institute.
- Scrutiny form, faculty norms and endorsement circular should be added add in VC Nominee functionality and should be sent in the email to the institute.
- Observation of committee members from Academic Inspection module should be fetched from there and should be viewed on this Affiliation module.
- Observation of Dean Review committee members should be fetched from Academic Inspection module and should be viewed on this Affiliation module.
- Endorsement letter and Not Qualified letter should be generated online.
- Institute should submit compliance online after receiving observation of Dean Review committee.

All above functionalities as well as the functionalities that are required as per prevailing norms of GTU are to be incorporated to maintain the integrity of ERP system.

Academic Inspection Module

• Committee members of Academic Inspection/Local Inspection should able to fill necessary details like faculties, results, infrastructure etc and some details are fetched

- from Affiliation module.
- Committee members check all details of institute and should be able to generate the Academic Inspection Committee (AIC) report online through this module with their observation and recommendations.
- The Scrutiny Report should be generated through this module.
- There should be provision of Online Dean Review Process.
- Dashboard page should be different for New Institute & Existing Institute.
- The approved intake by Dean Review Committee should be shown to the institute.
- The TA/DA form should be added alongwith the details of Academic Inspection Committee members and Dean Review Committee Members.
- The order to the AIC should be generated and email should be sent to the concerned members.

Enrolment Module

- The admitted student data (available with GTU or received from ACPC/ACPDC) are to be uploaded in enrolment module.
- The enrolment forms containing enrolment number (as per the given pattern by GTU), student name, contact number, email id, institute name, program name, branch name, admitted category, student category etc. are to be generated from the module.
- The same enrolment should be downable by respective institute with provision of filtering by programs, branches.
- The institute should be able to confirm the student's enrolment who pays the enrolment fees within given schedule by GTU.
- The institute should be able to transfer single amount of enrolment fees to GTU by payment gateway.
- Those students who are not able to confirm their enrolment within given time by GTU, should be able to do that with penalty amount decided by GTU in given schedule that is also decided by GTU.
- The schedules of enrolment (including penalty) of different programs may be overlapping or may be in sequence.
- The institute should be able to generate the reports (overall and branchwise) of admitted students, enrolled students filtered by dates of enrolment.

All above functionalities as well as the functionalities that are required as per prevailing norms of GTU are to be incorporated to maintain the integrity of ERP system.

Admission Cancellation Module

- The institute should be able to submit the student's application for cancellation of admission through its admin panel by providing the required information and uploading the required documents.
- The successfully submitted application by institute should be viewed in the admin panel of concerned section in GTU (i.e. Diploma, BE etc.).
- In the case of non fulfilling the requirement of admission cancellation, the online application is sent back with remarks to the institute and it has to fulfil the necessary requirements.
- The completed applications are to be processed further by the concerned section in GTU and on the approval of it, a notification is sent in the institute admin panel.
- The admission cancellation letter should be generated through this module and should be available in institute admin panel.

Student Services Module

- Through this module, student can access his/her all academic records and can avail different services like request for certificates, rechecking, reassessment, answer-book view etc.
- After successful login, a dashboard having following details of student,
 - o Enrolment number, Full name, ABC ID and Aadhar number
 - o Date of birth, Gender, Mobile number, Email ID, Address
 - o Institute name, Program name, Branch name
 - o Last appeared exam, CPI, CGPA, final semester, term end
- The student can make the request for,
 - Final Degree/ Diploma Certificate Student can apply directly from the portal
 Ahmedabad Zone Only
 - Transcript (soft copy), Transcript (Hard copy), Migration, Language, Backlog/Attempt, Rank and Percentage Conversion Certificate – Student can apply directly from the portal and facility provided to all three zones (Ahmedabad, Rajkot, Surat).
 - Duplicate Grade sheet Student can apply directly from the portal -Ahmedabad Zone Only
 - Name correction and miscellaneous Grade card Presently request added by the concern section (BE, Diploma, etc.) directly as per the application received from the student through Hard copy.
 - Duplicate Degree/ Diploma Certificates Student can apply directly from the portal - Ahmedabad Zone Only
 - Verification of WES/ GES/ NCEES/ IQAS/ ICAS/ other Credential Evaluation
 Form Student can apply directly from the portal Ahmedabad Zone Only
 - Authentication of Original Degree Certificates Offline process by the Student Application Form
 - Other Certificate as per the students request for all courses offered by GTU -Offline process by the Student Handwritten Application
- Student first login in this module, apply online for required service as mentioned in above point, enter postal address, pay fees online and will get the certificates by post.
- The staff members in GTU student section should verify the uploaded documents, approve, generate and dispatch to the student by Indian post to the address mentioned by the students.
- At each step, the student should be able to see the status of his/her application and estimated number of days to receive the requested document(s).
- The functionality of Document Attestation/ Verification as required from Institutes should be available in this module.
- The mentioned student services are for all the students like Pass out, Non-Pass out (Bonafide), enrolment cancelled and others as per their eligibility decided by GTU.
- Integrated courses students they should be able to apply for Graduate and as well as for Post graduate courses.
- Student should be able to make request for correction in his/her name and HoD/Principal verifies the request and send from their institute admin panel and exam section will do accordingly in its admin panel.

All above functionalities as well as the functionalities that are required as per prevailing norms of GTU are to be incorporated to maintain the integrity of ERP system.

Institute/University Transfer Module

- The student can apply online for the institute/university transfer by uploading the required documents.
- The successfully submitted application should be viewed in the admin panel of concerned section in GTU.
- The concerned section of GTU verifies the complete application and in the case of non fulfilling the requirement, the online application is sent back with remarks to the concerned student with notification.
- The completed applications are to be processed further by the concerned section in GTU and on the approval of it, a notification is sent to the student.
- The reports showing the details of transferred students are to be generated by the concerned section.

Examination Module comprising of Question Paper Receiving System (QPRS), Question Paper Delivery System (QPDS), Pre-examination, Mark Entry (Online/Offline), DES (Digital Evaluation System), Post-examination, Recheck & Reassessment, UFM Management, Degree Certificate (Provisional & Final) Preparation and Award, Zonal Activities

• Exam Form Configuration Module

- ✓ University can create examination for particular Program Term along with Exam Types (Regular/Remedial/etc.) Who can fill examination forms, and list of Ordinances which can be applied for the students appearing in the examination.
- ✓ University can define below mentioned Exam Form Configurations :
- A. **Semester to Semester Promotion Configuration:** For appearing in an Examination, below mentioned promotional rules can be applied on specific semester basis or cumulative basis:
 - Allow without Criteria
 - No. of Fail Subject Allowed
 - No of Fully Pass Semesters Allowed
 - No of Fail Passing Heads Allowed
 - Must not Fail in Specific Subject
 - Must not Fail in Specific Subject Component
 - Time Since Enrolment Effective Date (As defined in Enrolment Batch)
 - Must Pass in Specific Semester etc.
 - No of Pass subjects in semester (Multiple Semester)
 These Promotional Rules can be configured to apply on Pre Fill Validation /Post Fill Validation basis. Pre Fill Validation rules would be applied before filling up examination forms. Post Fill Validation rules would be applied after filling up examination forms.
- B. **Carry Forward/Exemption Configuration:** For backlog students Examination forms, carry forward / exemption can be configured by University and can be applied at Examination form entry level.
- C. Different conditions like if not get PRC/Convocation Fees then exam form not filled, if Not auto fetched without solution exam form not filled will configurable.
- ✓ University can inherit these rules on template basis and can apply to multiple programs
- ✓ University can perform Extension / Debar and its solution related activity:
- ✓ Multiple Students Maximum Term Form
- ✓ Maximum Half Extension With Multiple Program
- ✓ Student Maximum Half Extension
- ✓ Student Debar and Solution

• Exam Form Entry

- ✓ University can define fees and schedule Exam Form access to Student/Colleges with alert facility to stack holders etc.
- ✓ Subject Selection by Colleges for their students.
- ✓ Exam Forms will be generated by colleges for their students and that form will be displayed in college and student portal
- ✓ If configured for Students, Students and college can login to the system and pay fees for pre-generated exam form.
- ✓ Otherwise, Colleges can login, fill and verify and approved Exam Forms received by them.
- ✓ Student can fill the form with late fees or penalty fees or specific fees.
- ✓ Exam Form should fetch student's personal details on entering Enrolment Number.
- ✓ Exam Form can be filled for Whole / Part / Backlog students as configured for the exam.
- ✓ For some cases, University can define Exam Form Fees specific for a particular Exam form of a student.
- ✓ If configured for Students, Students can login to the system and make payment for their Exam Form.
- ✓ Otherwise, Colleges can make payment for the entered forms and submit them to University.
- ✓ University can make Payment Collection Entry.
- ✓ University can define Exam Form Queries through Exam Form Query Master and Assign / Un-assign Query to the Exam Form.
- ✓ University can Cancel Exam Form.
- ✓ Department / College can Cancel Exam form due to term non-granting or any reason.
- ✓ Based on Exam form entry, center allocation, Answer sheet and exam center material distribution and receiving module are integrated.

• Pre-examination Activity

- ✓ University can apply Post Fill Validation Rules as configured for the Exam and Verify the forms received.
- ✓ University can define Cluster for conducting examination. The cluster may consist of all the colleges / Center from which examination forms are filled / students would appear in examination.
- ✓ University can generate Seat Number for the Exam Forms which is verified by them. Seat Number generation can be done on two ways [1] Separate Sequence Number as Seat Number [2] Enrolment Number as Seat Number with auto center allocation or without allocation.
- ✓ University can allocate Exam Center to the students on the basis of their Seat Number Allotment can be done to their own college / separate college within Cluster/ center wise allocation etc.
- ✓ University can change Exam Center Allocation of students multiple or specific student. University can change exam center from one to another center with all students or few students.
- ✓ University can generate Barcode and ID Stickers for different Marks Entry Components.
- ✓ University can generate Emergency barcode and ID Stickers if required.
- ✓ Page count of Question papers, lot info for manual assessment, Parking Teaching scheme.

Subject Change

- ✓ Student can approach to his/her college for subject change in his/her examination form.
- ✓ College can apply for subject change for his/her student through their login based on their available subjects.
- ✓ University can approve and make subject change.

✓ Colleges and students can view latest subject in examination form.

• Timetable Creation for Theory & Practical Exams

- ✓ University can define Time Table for different Theory / Practical subjects for exam conduction.
- ✓ University can define College wise / Student wise / Subject wise / Date and time wise / Mark Entry Component wise Practical Exam time table for exam conduction.
- ✓ Batch allocation for practical exam with exam center.
- ✓ University can publish Time Table for colleges / students.
- ✓ Colleges / students can view Time Table for the examination.
- ✓ Day set module.

Hall Ticket with QR Code

- ✓ Regular and remedial hall tickets generation.
- ✓ Separate hall tickets for Theory & Practical Examination
- ✓ University can publish Hall Tickets for access to Colleges and Students.
- ✓ Colleges / Students can download their Hall Tickets from their login and websites.
- ✓ Hall Ticket report should consist of QR Code which shall show them Subject Selection Details, Photo and all hall ticket details of the student.
- ✓ Exam Center Location QR code will be provided on hall ticket
- ✓ University can enter exam wise instruction to be printed on hall ticket through exam master configuration with any language (like Gujarati, Hindi, English)

• Zonal Activities

✓ Different types of activities which are carried out by zones as decided by University.

• Internal Marks Entry

- ✓ University level users can schedule the duration for Internal Marks Entry.
- ✓ University can configure marks entry mode from subject wise students / student wise subjects for marks entry.
- ✓ College Level users can make Mid exam and Internal (Viva) marks entry for the students who have filled examination forms and have to appear in the Internal Marks Entry Component.
- ✓ Marks Entry Edit.
- ✓ College level internal marks release mechanism will be provided
- ✓ College user will receive notification for last internal marks entry date by web/mob app.
- ✓ College level users can download the report after their marks entry is done.
- ✓ The GTU Examination section (or other concerned subsection under it) can view Pending mark status institute wise as well as component wise for each semester
- ✓ The GTU Examination section (or other concerned subsection under it) can view marks entered by institute
- ✓ The GTU Examination section (or other concerned subsection under it) can Check mid/internal/viva missing

• Practical Marks Entry

- ✓ University can configure exam wise practical marks entry mode from 1. Examiner Wise and 2. College Wise / University Wise
- ✓ Examiners for whom order has been issued for conduction of Practical Examination, can make marks entry for Practical examination for the students for which they have conducted examination with authentication.
- ✓ University can schedule the duration for Practical Template/ Antecedence sheet/ Hall ticket and Practical Marks Entry.
- ✓ Examiners can login to the system during the schedule and perform marks entry from their own user.
- ✓ Examiners can view/modify marks entry.

- ✓ Examiner/GTU Coordinator/College can download the report after the marks entry is done.
- ✓ For PG Dissertation marks entry,
 - Registration of Examiner Hall Wise
 - User ID and Password for Examiners
 - Hall Wise Student Allocation as per viva schedule
 - Attendance Sheet download.
 - Marks Entry and Present Absent
 - Pre lock report
 - Lock hall after marks entry
 - After Lock, the final report of entered marks is downloaded.
 - Online review card for each student
 - Permanently store(online) review card
 - Dissertation scheduling to be done directly through a portal.

• Absent Entry and UFM Entry

- ✓ Exam Center/College Level Users can make absent entry/copy case entry for the students who have been assigned exam center at their college.
- ✓ College/University Level users can download the report once their entry is done.

• Theory Exam Marks Entry

- ✓ Barcode and ID Sticker based online/offline Marks Entry for Theory Exam.
- ✓ Seat Number Wise/Subject wise/Date wise Marks Entry form for University.
- ✓ Sub Component Marks Delete functionality for University.
- ✓ Excel based marks upload facility for theory/Practical exam marks.
- ✓ All rules & regulation required for entry module.

• Result Process

- ✓ University can process Result, Generate Grace Analysis Report, apply Grace and Ordinance as per rule set.
- ✓ Different Type of Graces may be applicable as configured for the examination.
 - Different type of Ordinance may be applicable as configured for the examination.
 - Other rules whenever university authority define.
- ✓ University can optionally define Class and apply to students as configured.
 - University can process Assembly for Verification and Final Result with Grace and Ordinance for publish.
- ✓ University can Lock / Unlock Result Process.
- ✓ Correction Assembly Lock/Unlock functionality for University level users.
- ✓ Withheld Result Process Form for University through separate form.
- ✓ University can configure Detail level grace mapping in exam wise manner with passing head
- ✓ University can make reserved student punishment duration automatically against reserved student entry.

Notification

- ✓ University can generate notification after final result is processed.
- ✓ Notification Report can be generated with list of students and their Result Category, Class (As defined in term master).
- ✓ University can upload Notification, Re-Assessment Scheduling, Result Display Scheduling for Applicant, Colleges and society through separate form.
- ✓ University can also download notification wise reports from separate report form
- ✓ University can publish notification for access of Colleges, Students.
- ✓ Colleges and Students can view notification report.

Grade card with QR Code

- ✓ Once notification is published, grade cards generate automatically for the students.
- ✓ Grade cards can be generated for the selected categories i.e. Pass, Fail etc.
- ✓ Grade cards would have QR Code which may consist of link to view Result.
- ✓ Result might be displayed with Student's personal details and other details as shown in grade cards.
- ✓ University also make grade card template as per requirement.

Rechecking and Reassessment

- ✓ University can define Rechecking/Reassessment Application fees and schedule for Students/Colleges to apply for Rechecking/Reassessment.
- ✓ University can define Term wise Is Rechecking Allowed, Is Reassessment Allowed, and Max. No. of Subjects allowed.
- ✓ Student/Colleges can login to the system and apply for the rechecking/reassessment of subjects for which the student want to appear in the examination.
- ✓ Students/Colleges can make Online Payment for Rechecking / Reassessment Fees.
- ✓ University can view the applications and make marks entry for Rechecking/Reassessment/ Re-Reassessment.
- ✓ University can filter student to assign Re-Reassessment for students based on Various conditions based on marks difference.
- ✓ Only Final Marks would be consider in the system at the time of Re-Re- Assessment Marks Entry.
- ✓ University can partially process result of the students who have applied for Rechecking/Reassessment and Publish notification for such students.
- ✓ Colleges / Students can view their results.
- ✓ Rechecking and Reassessment separate processes.
 - Same Semester can apply for both
 - Same Subject cannot apply for both
 - Result both result combined at one time only
 - Marks Entry separate for Rechecking and Reassessment
 - Rechecking any positive change accepted. Negative change original marks retained.
 - Reassessment positive changes with difference as per notification Ref. No: GTU/Acad/Reassessment/W2019/13985 Date: 23/12/2019 to be considered. Original marks retained.
 - Barcode based Reassessment entry.

• Degree with Photo & QR Code

- ✓ University can define Degree Fees for Degree Term Examination along with Examination Form Fees.
- ✓ Student's applying as Whole would be required to pay degree fees also as defined by university. However, student appearing in PART / Backlog examination may not have to pay Degree Fees again.
- ✓ University can define degree senate and freeze degree data on the basis of Examination Forms filled.
- ✓ University can generate checklist for verification and cancel any of the freeze degree.
- \checkmark University can generate Degree Certificate and provide to the students through convocation.
- ✓ Students can apply for Duplicate Degree Certificate and Correction Degree Certificate.
- ✓ University can make necessary correction/generate duplicate degree certificate and provide to student.
- ✓ Student can change degree receiving address through the student services module.

- ✓ Student can select degree receive mode (in person / in absent).
- ✓ Student can apply for Provisional degree/duplicate degree/correction degree with payment through student services module.
- ✓ University also make Degree template as per requirement.

• Verification Module

- ✓ Grade card verification application with payment from student or employer.
- ✓ Degree verification application with payment from student or employer.

• SMS/Email Module

- ✓ University shall define various SMS/Email templates for pre-defined activities.
- ✓ University can filter recipients of their choice and send SMS/ Email by choosing respective template for the activity.
- ✓ SMS/Email can be sent to Students, Colleges, College Principals, Zonal Officers and On duty persons to whom duty allotted.
- ✓ Different Activities covered for sending SMS/Email are as below:
 - Enrolment Schedule Published
 - Enrolment Number Generated
 - Enrolment Query Assigned
 - Enrolment Form Cancelled
 - Enrolment Number Cancelled
 - Exam Form Schedule Published
 - Exam Form Verified
 - Hall Ticket Schedule Published
 - Hall Ticket Published
 - Result Published
 - Reassessment Form Schedule Published
 - Reassessment Form Data
 - Reassessment Result
 - Degree Notification
 - General SMS/Email to GTU Employees/Colleges/Students.
 - All Type of Student Application on Application Payment and Application Status Changed.

Reports

- ✓ Various Statistical Reports as per the requirement.
- ✓ Pre-Exam Report
- ✓ Ansbook Summary Report
- ✓ Pre Lab Summary Report
- ✓ Subject Summary Report
- ✓ Subject Summary (zone Wise) Report
- ✓ Agency Summary Report
- ✓ AnsBook Status Report
- ✓ User Wise Count Report
- ✓ Lock Absent Data Report
- ✓ Add OMR ZERO Zone Report
- ✓ Change Examiner Lot Report
- ✓ Subject wise student list and count Report
- ✓ Exam End Report
- ✓ Subject wise head configuration report
- ✓ Exam Center Allocation report
- ✓ Date Wise Exam Wise Schedule
- ✓ Date Wise Subject Wise Schedule
- ✓ Date Wise Block Count
- ✓ Center Subject Data for Material Verification
- ✓ Date Wise Exam Center List
- ✓ Barcode Sent to Print
- ✓ Time Table All
- ✓ DaySet

- ✓ Exam Start-End Date
- ✓ Theory Center List
- ✓ Subject wise marks report
- ✓ Result process history report
- ✓ Top student list
- ✓ Condonation and gracing reports
- ✓ Result Analysis Report etc.
- ✓ Subject / Student wise Grade Report (Theory / Practical Grade)
- ✓ Report query generation module
- ✓ Convocation Related reports
- ✓ As per university requirement in general

100 Activity Point Module

- For B.E and B.Pharm Program, student can add activity (under 100 activity point) as per predefined modules and accordingly examiner can evaluate and award point to each students.
- The functionalities of Student registration, HoD registration, Faculty registration are to be provided.
- Add Activity by student as per predefined module.
- Examiner will evaluate by physical verification of document.
- Student ,HoD, Principal can view Consolidate report of activity point.
- There should be functionality to upload certificate.

All above functionalities as well as the functionalities that are required as per prevailing norms of GTU are to be incorporated to maintain the integrity of ERP system.

PG Dissertation Title Registration and Thesis Upload

- Student wise Thesis title registration and Guide registration.
- Dissertation Phase-1 title registration is done by institute.
- Institute can register the title as per theme/topic of the research.
- These titles and data are used to schedule dissertation.
- Student-wise thesis is to be uploaded by Guide or Institute.
- Each thesis is verified by concerned GTU section. It can Accept/Reject/ask to Resubmit.
- In case of resubmit, the remarks are to be written so as to be understood by student/institute.
- Institute can refer the message of the section and can resubmit it again.
- Submitted thesis is again verified by the section and Accepted/Rejected or again informed to institute to resubmit it with required corrections.
- Approved thesis list is considered for Dissertation planning.
- There should be linkage between Title Registration, Thesis upload and PG Dissertation exam schedule and marks entry.
- Title change process can be done through this portal.

All above functionalities as well as the functionalities that are required as per prevailing norms of GTU are to be incorporated to maintain the integrity of ERP system.

Admin Panel to GTU Examination Sections with full functionality

The admin panel to exam related section should be provided given functionalities:

- Electives Upload
- Exam form data Upload
- Enrolment Cancellation
- Recheck/Reassessment/answersheet viewing data download
- Hall ticket view and approval
- Printing of Provisional certificate
- Name Correction
- View student details—contact, student login & password
- Elective Dashboard to view filled and pending count by institutes
- Session Wise Recheck/Reassessment/answersheet viewing data download—late recheck/reassess data download
- Add/Gun/allow exam form
- Download dayset
- Verification and release of theory as well as practical hall tickets
- Reports—Exam wise gunning status, Reject summary, Overall subject count, practical subject gun count
- Faculty & student data download
- Provisional Degree Certificate (PDC) data download
- View grade card printing data sent to agency
- Upload answersheet for viewing
- View college login
- Add gradecard if any for name correction or grade change or missing request received
- If any institute has uploaded an endorsed director/principal letter, it can be viewed by section
- If elective/specialization is pending for any institute, it can be emailed through an email option
- To check clash for exam dates
- Functionality to upload name correction, term grant and writer applications to be uploaded by institute and section can verify
- Add penalty in exam form if late exam form allowed
- Approve emergency Hall ticket
- In tab of result analysis at Institute login, theory grade and practical grade of all students should be display in pdf format.
- In Institute login's there should be functionality of emergency absent student entry.
- In Institute login's there should be provision for writer application.
- Functionality for term grant application
- UFM History of student should display

All above functionalities as well as the functionalities that are required as per prevailing norms of GTU are to be incorporated to maintain the integrity of ERP system.

(f) Security:

The proposed ERP should allow secured socket layer. The ERP shall be security audited according to OWASP (Open Web application Security Project) application security verification standard.

(g) Maintenance of the Website and De-bugging.

Vendor has to do the maintenance of the ERP for a period of five years after completion of the project, which will include de-bugging of all the modules on their own as well as when reported. This maintenance will be considered part of the implementation process. On successful completion of the said five year period, the Vendor may be awarded the Annual Maintenance Contract for the ERP on payment basis, for which, the Vendor is expected to quote the rates separately in the Financial Bid.

(h) Scalability:

The ERP shall be capable of incorporating the new modules that will be developed as per the need of any section/department/university or as per NEP or as per the new processes/rules/regulations from apex bodies.

(i) Training:

Extensive training should be undertaken for users at Gujarat Technological University to handle data/processes related to their section. Additionally a separate training should be done for GTU-IT staff.

(j) Documentation:

Complete documentation on the ERP, User Manual and Technical Manual has to be provided.

SECTION - 3

Performa for Submission of Request for proposal

(In accordance to the annexure mentioned)

- 1) Name of the Company
- 2) Address of the Company
- 3) Date of Inception of the Company
- 4) Project Methodology pertaining to development of ERP(*Annexure A*).
- 5) Technologies to be used for developing ERP, programming, database, control panel etc.(*Annexure A*)
- 6) Expertise in developing ERP for university specifically affiliating & technological (*Annexure B*)
- 7) Number of similar work successfully undertaken in the past along with their cost (*Annexure B*)
- 8) Details of previous experience
- 9) Details of Hardware, Software and technical personnel in the Company with the experience (*Annexure C*)
- 10) Details of Annual Turnover (*Annexure D*)
- 11) Affidavit from the bidder to the effect that the firm has not been blacklisted by any Government body/ Semi-government body/ PSU/Central or State Autonomous body during the past 5 years (*Annexure E*)
- 12) The bidder will be required to make a presentation before a Committee appointed by the Gujarat Technological University. The presentation shall contain details of the conception of the bidder about the work, the project methodology, the technologies proposed to be used in the work, some ERPs developed by the bidder containing modules similar to that required by Gujarat Technological University.

Annexure-A

Project Methodology

Describe how the agency conceptualizes the project and proposes to implement it includes the equipment, technology, methodology, flow of work, activity, time schedule and management.

(Please attach additional sheets, if required)

Technology to be Used:

Provide a comprehensive list of technologies to be used by the Agency for each component of the project like programming, database, control panel etc. (Please attach additional sheets, if required

Annexure-B

Α	Clients Details where development of ERPs have been undertaken			
	Name& Address of Client			
В	Type of Client			
C	Place(s) of Service			
D	Duration			
E	Total Number of manpower Deployed			
F	Quantity of work (in no. of modules & digital data)			
G	Cost of the project			
Н	Approximate value of Service (in IndianRupees)			
I	Details of Hardware/ Software/Technology used			
J	Any special features of the project which the Agency may like to specify			
K	Name, title and Contact details of the contact at Client location			
L	Agency Signature, Name, Designation & Company Seal			

Note:

- 1. Separate sheets for each client to be enclosed
- 2 Letter from the client on the project executed to be enclosed.

Annexure-C

DETAILS OF THE HARDWARE, SOFTWARE AND MANPOWER

1.	Name of Company and Address	:
2.	Details of Hardware Equipments (Computers / Servers specification and make)	:
3.	Details of Software	:
4.	Details of Manpower	:

Signature of the Agency

Date

Place

Company Seal

Note: Separate sheets may be attached as required. Please enclose one page CV of all Technical Manpower of the Company.

Annexure-D

Turnover Certificate

Date: DD/MM/YYYY

			(On the Letter Head of CA)	
This is to certify that M/s			has achieved fo) registered at llowing total turnover & turnover year 2022-23, 2021-22 and 2020-21.
	·		_	
	Sr. No.	Financial Year	Total Turnover (In Rs.)	Turnover related to(In Rs.)
	1	2022-23		
	2	2021-22		
	3	2020-21		
	certificate		n the basis of documents and	records provided to us.
Date	e:- DD/MM	/YYYY		
			Seal	and Signature of CA with stamp.
			UDII	N:

Annexure-E (Declaration on Rs. 300/- Stamp Paper)

Undertaking by the Bidder

at
proprietor/Partner of/Director of(Name of company/ firm) Registered at(Regd. Address)
I do hereby swear that, the tender documents submitted for the work of
agency am/is not blacklisted by any organization in India from participating in any project/s, either individually or as member of a consortium. There have been no criminal proceedings / conviction against the bidder at any point of time. In case the documents pertaining to the tender submitted by me are found to be incorrect or false, I shall be liable for action under the relevant provision of Indian Penal Code and other relevant laws. I further undertake that if above declaration proves to be wrong/incorrect or misleading, tender/contract stands to be cancelled/terminated immediately. If work is allocated to our company/firm than outmost care will be taken and if we fail in any part than GTU can demand for financial loss, impose penalty, forfeiture of Security Deposit and also can take legal action against our company/firm. We are not involved in any litigation that may have an impact of affecting or compromising the delivery of services as required under this assignment. I/We am/are not a relative/blood relation of any key managerial person of GTU, Ahmedabad. We are not a firm in which any key personnel of GTU Ahmedabad or his/her relative is a partner. I/We am/are not a partner in a firm in which any key managerial person of GTU, Ahmedabad or his/her relative is a partner.
We further confirm that we are aware that our Gujarat Technological Universities bid with reference(Tender number with subject) would be liable for rejection or any
appropriate action as GTU may deem fit, in case any material misrepresentation is made or discovered with regard to the requirements of tender mentioned above during stage of short-listing/selection process.
Signature:
Name:
Business Address:
Place: Date: