Request for Proposal (RFP)

Campus Management Solution (CMS)

For

Sindh Madressatul Islam University
Karachi

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Last Date for Submission: 18/3/2014

Tender Opening Date: 18/3/2014

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Table of Contents

Detail of specifications, quantities required and the terms & conditions of the tender

Following are the detail of the specifications, quantities required and the terms & conditions of the tender notice published in the newspapers on ==Sunday March 1, 2014.==

1 Introduction

The Sindh Madressatul Islam University (SMIU) intends to obtain an off-the-shelf Campus Management Solution to be customized and implemented, in its main Campus in Karachi.

For this purpose, sealed bids are invited from well reputed IT companies. The sealed bid comprising of **Technical as well as Financial proposal (both separately)** are to be submitted on or before the due date for submission of bid.

Prior to customization, the vendor will be required to compile Software Requirement Specification (SRS) to be examine by SMIU IT Department, prepare prototype and get endorsed functional working model giving time bound schedule for implementing the system.

2 Functional Requirements

2.1 *Organizational Structure*

The proposed solution,

⇒ Incorporates sophisticated Organizational unit's functionality enabling user definition of terminology (e.g. Faculty; Department, Registration, Division, Section etc)

⇒ Maintains locations within Organizational units.

⇒ Supports both numeric / alpha numeric coding schema

⇒ Maintains Organizational unit types e.g. institutions, colleges, departments, center of excellences, research centers, sponsors, international agencies, external Organizations, benefactors, third party debtors, etc.

⇒ Can differentiate between academic and non-academic Organizational units

⇒ Can differentiate between internal and external Organizational unit

⇒ Maintains status codes e.g. planned, current, inactive, with start and end dates

⇒ Allows for multiple address types to be stored against Organizational units

⇒ Possesses the ability to designate one address instance as the address to which system generated correspondence is directed for an Organizational unit

⇒ Allows for multiple address types to be stored against locations

⇒ Possessed the ability to designate one address instance as the address to which system generated correspondence is directed for a location

⇒ Allows that Users are assigned to Organization units

2.2 *Recruiting & Admissions*

This process identifies, track and monitor the admission workflow, from student application until the acceptance/ confirmation process.

2.2.1 Recruiter Information

The solution,

⇒ Maintain recruiter information

⇒ Monitors recruiter activities and events

⇒ Plans and coordinates independent recruitment programs

⇒ Matches a recruiter to a prospective student based on region or interest

⇒ Maintain prospect information in the system

⇒ Allows institutional partners (e.g. agencies and agents) to record and maintain admission applications on behalf of international students. With appropriate security/role based access agents would be represented in the 'Recruiters'. Agents will also be able to record extensive recruiting and education information. Details such as application referral source and date (e.g. Open Day, Web Site), recruiting centre (foreign Agency) and recruiting categories (International Student) can be captured. By allowing agents to enter this information, the institution is able to create a recruiting history for the institution.

⇒ Enables the allocation of multiple agencies and/or agents (i.e. agents being staff of an agency) to an application instance both simultaneously and over time

⇒ Records and maintains the country, city and other pertinent geographical unit which is the agency's principal place of business

⇒ Records and maintains the agency and agent with whom the applicant initially submitted the application

⇒ Records and maintains the responsible agency and agent when an application outcome was finalized (offer/reject/request more info)

⇒ Records and maintains the agency and agent with whom the applicant completed the application

⇒ Records and maintains the agency and agent who is currently responsible for the application instance

⇒ Records and maintains details regarding whether the agency/agent is to be forwarded admission correspondence directly on behalf of the applicant

⇒ Enables agencies/agents to produce offers on behalf of the institution for specified applicants/courses based upon an appropriate security and role mechanism.

⇒ Records and maintains the details of correspondence that has been forwarded to the agency/agent on behalf of the applicant

⇒ Records and maintains information:
  a. about when an applicant changes agency/agent
  b. of the applicants request and consent to change agency/agent within the overall communications features of the solution

⇒ Records and maintains information related to agencies and their staff (agents) e.g. name, address, multiple contact details and address types

⇒ Enables applicants/agencies/agents to view and update application details and search/enquire on the current status of their applications via a portal with appropriate security / role mechanism.

⇒ Applicants and agents should also be able to download copies of application outcome correspondence and associated documentation directly via the portal with appropriate security/role mechanism.

⇒ Enables agents to view (via a portal), in tabular and graphical formats aggregated historical data related to the agency/agent application totals, outcomes, course demographics, conversion ratios, commission payments and performance

⇒ Enables applicants/agencies/agents to contact (via a portal) appropriate institution staff about an individual application instance via email/electronic workflow event. The details of the communication and the staff response should be stored in the database against the application instance

⇒ Allows portal access for agencies and agents to maintain their own details to allow self service / updating with appropriate security/role mechanism.

2.2.2   Prospect/ Applicant Information

The proposed Solution,

⇒ Maintains applicant information in the system

⇒ Automatically evaluates applicants based on user-defined criteria

⇒ Coordinates concurrent prospect and application records

⇒ Provides facilities for applicants/students to apply and register on multiple programmes

⇒ Enables to have admission period flexibility to invite applications from new applicants/ students before each semester or academic year starts.

⇒ Enables applicants to apply through different means such as mailing of an application form, online through the Internet, etc

⇒ During the non-admission period, applicants/students should be able to indicate their interest and to reserve a seat for a course in the next semester. The solution should be able to make a record of the reservation either by mail or through Internet for tracking information for follow-up action. These will include sending the necessary information and debit note to applicants/students who have reserved a seat in a course for registration when the admission for the next semester begins.

⇒ Enable to record the receipt date and the details of the applicants on an individual basis and/or by a batch process for setting up the records in the database. Details of the applicants will include personal data such as name, address, and contact phone no. etc.

⇒ Provides a course table be created/ maintained to include the necessary attributes of courses on offer in each semester. This will be the basis for verification of the courses applied for and generation of debit notes for course registration by payment of tuition fee. This will also be the basis for the generation of transcripts.

⇒ Provides a program table be created/ maintained to include the necessary attributes of programmes offered. This will be the basis for verification of the programme applied for and the printing of transcripts/graduation certificate

⇒ Performs screening/validity check according to a set of pre-defined criteria such as pre-requisite requirements to ensure that the students/applicants are eligible to register on the courses/ programme

⇒ Allows students to change their course/ programme choices, and applicants to change their personal information as well. Relevant validity checking will be done on the new course/ programme choices.

⇒ Apart from running the recruitment process in a "first round, second round" concept, the system should provide flexibility to process in other ways and/or at

different times of the year and/or different set of criteria for prioritization of applicants. For example, some applicants/students will need to apply/enroll on a programme basis instead of on a course basis, e.g. full-time associate degree programmes with limited course choices; research degree programmes consisting of a mixture of course and research elements. Applicants' public examination results and programme choices may also be taken into consideration in prioritization of applicants for selection and admission

⇒ Each course has a limit on its enrolment number and therefore each will have its own quota. A course place will be offered to a student/applicant on a first-come, first-served basis at the end of the application period, by issuing a debit note for the course. The applicant/student can decide to take up the offer for each individual course; the quota will then be taken up. Students/applicants who do not pay the fees by a stipulated deadline will have its quota released back to the system. A second exercise will be conducted to recruit students for the remaining quota

⇒ Applicants/students who have not met the requirements at the time of application but who are likely meet them in due course, may be put into the 'waiting list' pool. These applicants/students should be able to register as normal. The system should be able to alert users at the end of the admission exercise to double check these students' eligibility and take appropriate follow up actions

⇒ Students/applicants, who have not met the requirements at the time of application but will likely meet them in due course, may be given a conditional offer. These students/ applicants should be able to register as normal. System will be able to alert users at the end of the admission exercise to double check these students' eligibility and take appropriate follow up actions

⇒ Allows users to skip the normal procedures to register students directly subject to verifications such as no double registration on the same course

⇒ Integrates with the finance system (if available and operational at university) in relation to the students' payment of tuition fees

⇒ Allows various entry points such as area of interests, level of study, education background, etc. and display the relevant University programmes for the applicants to consider

⇒ Provides facilities to let students transfer, defer and withdraw from programmes/ courses

⇒ Records the receipt date and the details of the applicants on an individual basis and/or by a batch process for setting up the records in the database. Details of the applicants will include personal data such as name, address, and contact phone number and so on

⇒ Performs screening/validity check according to a set of pre-defined criteria such as pre-requisite requirements to ensure that the students/applicants are eligible to register on the programmes/courses

⇒ Maintains different status for students i.e. Active or Non Active, Special Leave, Postpone Semester

⇒ Provides services relating to Reporting and Analysis

⇒ Is capable of to Enable or Disable any of the services/ features as mentioned in this RFP.

2.3 Curriculum Management

This module supports the university's course and unit development, approval and publication business processes.

$\Rightarrow$ The Academic Management function is supported by:

a. version control of curriculum items
b. the extensive use of user-defined workflows that provide decision points for nominated users
c. user-defined mandatory fields
d. user-defined optional fields
e. user-defined decision rules as workflow on which a curriculum item should progress through
f. the ability to reconfigure the system to support future changes in business processes
g. automatic e-mail notification to people or groups at user-defined steps in workflows
h. an audit trail of all changes to a curriculum item through all versions

$\Rightarrow$ The solution holds information on courses, study areas and units as follows:

a. objectives
b. entry requirements
c. career opportunities
d. description
e. completion rules
f. fees and charges
g. information details in the Curriculum Section

2.3.1 Curriculum (Courses, Study Areas and Units)

The Curriculum subsystem is used to define information relating to the academic offerings of the University including courses, study areas (majors, minors etc), units, classes, their activities (lectures, tutorials etc) and their awards. The proposed Solution,

$\Rightarrow$ Caters for institution's policy for students in combined degrees (2 or more). These students are enrolled in a single course code to which all unit attempts are linked, but graduate with multiple parchments, 1 for each of the component course. Students may attend 1 or all of the domestic ceremonies for the component courses. Students receive honours and with distinction classifications for each component course based sometimes on the classification rules against the combined degree and sometimes based on the classification rules of the individual courses. Students in double degrees can have multiple GPA's, 1 for the double degree course and 1 each for the component courses based on the units linked to those component courses.

$\Rightarrow$ Links courses, study areas and units to security roles based on Organizational unit e.g. Faculty of Business staff can view all courses, study areas and units, but can only update courses, study areas and units 'owned' by the Faculty of Business.

$\Rightarrow$ Defines and maintains the following, but not limited to, rules in a manner that can be applied automatically by the appropriate functions within the system:

a. admission
b. enrolment
c. progression (probation/exclusion)
d. completion

$\Rightarrow$ The solution provides quota management functionality including, but not limited to, enrolment quota, reserved places, buffers, dedicated/designated assignment of places, wait listing.

$\Rightarrow$ The solution stores course, study area and unit information in such a way that can be used to display on the web and be extracted in a format appropriate for preparation of handbooks, brochures and other publications.

$\Rightarrow$ This function is supported by:

   a. workflow

   b. Extensive use of management and operational reports.

$\Rightarrow$ The information listed below is:

   a. Dynamically maintained from the Academic Management function above.

   b. Stored in the same tables as the data maintained by the Academic Management function above

2.3.2 Maintain Course Details

Maintain details of the structure of all courses (award and non-award), including majors/disciplines and units (prescribed and elective). The proposed Solution,

$\Rightarrow$ Defines and maintains the following, but not limited to, rules in a form that can be applied automatically by the appropriate functions within the system:

   a. admission

   b. enrolment

   c. progression (probation/exclusion)

   d. completion

$\Rightarrow$ Defines offerings of a course version that allows different course structures at different teaching locations.

$\Rightarrow$ Provides the ability to put in a future start date and only accept commencing students after that date

$\Rightarrow$ Provides the ability to put in a future discontinued/expiry date and still accept commencing students into the course version

$\Rightarrow$ Allows courses to be linked to one or more awards

$\Rightarrow$ Allows students to take alternative exits from a course

$\Rightarrow$ Rolls course versions to a future teaching period/academic year

$\Rightarrow$ Allows easy grouping of all course that lead to the same award

2.3.3 Maintain Unit Details

$\Rightarrow$ The solution captures and stores unit related information including, but not restricted to:

   a. start, end, expiry dates

   b. unit credit points enrolled and achieved when completed

   c. an indicator that specifies whether it is possible to override the enrolled and/or achieved credit points at the student unit attempt level

   d. total unit contact hours, broken down by components

   e. unit version activities (seminars, tutorials etc)

   f. record and maintain timetable information for unit versions, their modules (if any) and activities including, but not limited to:

      i. primary lecture and quota

  ii. linked secondary activities (tutorial, laboratory etc) and their quotas

  iii. mode of delivery for each activity

  iv. location / venue

  v. time slot and duration

  vi. contact person for each activity

g. whether or not the unit is assessed

h. assessment items

i. grading schemas

j. unit category code(s)

k. unit reference code(s)

l. campuses offered

m. classes offered

n. unit rules (pre-requisites, co-requisites, translations, incompatibles, quotas etc)

⇒ Rolls unit versions to a future teaching period/academic year

⇒ Provides the facility to store comments/notes

2.3.4 *Maintain Study Area*

⇒ The solution records and maintains study area related information including, but not limited to:

a. start, expiry, end dates

b. status codes, e.g. planned, current, closed

c. linked to course versions

d. linked to course version offerings

e. study area structure(s)

f. entry requirements for a specific study area

g. linked to teaching periods

h. 'Type' i.e. Major, Minor etc.; whether administrative or academic

i. credit points for study area

j. an indicator to show whether or not a study area is printed on the students;

  vii. testament/ parchment

  viii. official academic transcript

k. discipline code(s) or fields of education

l. record and maintain relationships between study areas

m. record and maintain study area rules, including:

  ix. Co-requisites

  x. Incompatibles

  xi. Pre-requisites

  xii. Equivalents

  xiii. Completion

n. institutional defined fields

⇒ The solution incorporates rules for calculating a student's study area GPA

⇒ The solution supports multiple study areas in a single degree course

$\Rightarrow$ The solution supports multiple study areas in a multiple degree course, with the study area linked to the component courses

2.3.5 Course Plans

A course plan should be a "road-map" of what units/subjects a student must complete in order to attain the award into which they are enrolled. It should show units/subjects passed, enrolled, credited/advance standing and those yet-to-be completed and be ordered in a coherent, student friendly, flexible structure. The proposed Solution,

$\Rightarrow$ Provides for personalized student course plans to be dynamically generated at time of offer/acceptance

$\Rightarrow$ Provides a student-friendly solution for managing student self-managed choice.

$\Rightarrow$ Delivers the ability for students to manage his/her course of studies by performing what-if analysis against other degree plans that he/she may be considering. Where appropriate staff intervention is supported e.g. changing a major.

$\Rightarrow$ Once a student has been offered a place and admitted to the course, they can be pre-enrolled in classes also by using a number of features: mass enrolment of prescribed units; quick selection of units by a staff member or the student self service. Any student self-service actions will be cross-validated against their academic progression rules.

$\Rightarrow$ The solution enables students to view/modify their course plan via the self-service portal.

$\Rightarrow$ The system incorporates enrolment checks against a student course plan e.g. restrict the set of unit attempts that the student can select from those that are part of a personalized student course plan or which otherwise can contribute to the satisfaction of course requirements

$\Rightarrow$ Record and maintain details of course plans at the course offering level, including, but not limited to:

   a. Course plan coordinator

   b. Course plan status (e.g. approved for enrolment, approved for graduation)

   c. Course components (Majors, Minors etc) associated with course plan

   d. Units of study within course components

   e. Units of study within years of course

   f. Other study options within years of course.

$\Rightarrow$ The solution provides a student-friendly solution for managing student self-managed choices (e.g. selecting units from a list of options)

$\Rightarrow$ The solution incorporates checking of academic progress against a student course plan.

2.4 Calendars

The proposed Solution,

$\Rightarrow$ Incorporates a calendar enabling user definition of all significant periods of time (e.g. teaching periods, fee periods)

$\Rightarrow$ Incorporates calendar contingent issues including, but not limited to, timing of fees invoices, monitoring for course completion, identifying students eligible for probation, and the web interface providing information regarding enrolment deadlines for adding and withdrawing units, etc.

$\Rightarrow$ Provides the ability to link calendars via relationships e.g. teaching periods within an academic year

⇒ Allows Calendars to support spanning years.

⇒ Provides a flexible calendaring facility, enabling institution definition of all significant periods of time including, but not limited to, definitions of:

I. Academic periods
II. Enrolment periods
III. Teaching periods
IV. Fee assessment periods
V. Examination periods
VI. Academic progression periods
VII. Graduation periods

⇒ Electronically rolls calendars into the following 'year'.

⇒ Incorporates a number of dates recorded within the academic calendar. These dates are user definable and determine admission and enrolment periods, grading, discontinuation and withdrawals etc.

⇒ Workflow rules can be built, enforced and associated with calendars. In addition several have leveraged the ad hoc workflow function to notify interested parties about a calendar change, directly from the application, without having to open an email client software. The ad hoc workflow includes a link directly to the page from which it was created as well as a reference to the data item in question.

2.5 *Class Timetabling*

⇒ The solution is can be configured to import a generated class timetable from an external package.

⇒ The solution provides a web-based facility for enquiries on the published class timetable.

⇒ The solution uses a "shopping basket" concept, where students can select a variety of classes and do what-if looks at their resultant timetable options to inform their enrolment choices.

2.6 *Correspondence*

⇒ The solution generates correspondence to students maintained in the database.

⇒ The solution generates correspondence to members of staff, sponsors and other persons maintained in the database.

⇒ The solution provides the following, but not limited to, system correspondence types:

I. Application acknowledgement
II. Request for further information
III. Application outcomes
IV. Admission application package offers
V. Admission acceptance acknowledgement
VI. Course articulation
VII. Intermission
VIII. Termination
IX. Discontinuation
X. Probation and exclusion

XI. Deferment

XII. Withdrawal without academic penalty approved and not-approved

XIII. Withdrawal without financial penalty approved and not-approved

XIV. Statement of Account

XV. Reminder Statement of Account

XVI. Sponsor Statement of Account

XVII. Ceremony Invitation

⇒ Communication records can be created, tracked, and tied to external Organizations.

⇒ The solution enables user definition of correspondence types.

⇒ The solution allows generated correspondence to be printed, emailed or delivered via the student self-service facility.

⇒ The preferred method of communication is tracked and can be maintained for each student.

⇒ The solution provides the facility to identify and target a student cohort for correspondence e.g. international students

⇒ Ability to merge information relating to different issues, into the one letter e.g. international student offer letter includes academic credit information

2.7 *Student Records*

The proposed Solution,

⇒ Provides a 'search by alternate id' facility

⇒ Provides services for date effective address details, including:

I. Home address

II. Preferred address for the receipt of official correspondence

III. Preferred billing address

IV. Emergency contact details

V. Work details

VI. Other address types (e.g. email)

VII. Other contact data (e.g. telephone, personal web page, mobile number and a separate SMS phone number)

⇒ Maintains user definable titles e.g. Mr., Ms, Dr etc

⇒ Records and maintains award types

⇒ Records and maintains text notes that apply at the person level with user definable levels of security governing who can access what notes

⇒ Records and maintains the following information about students and other persons as a single model.

I. name (title, surname; first, second, and other given names)

II. awards/honours

III. preferred name (for use in most system related applications)

IV. official name (for academic record and graduation purposes)

V. designate field (e.g. PhD, MS, MBA, MPhil, etc)

VI. date of birth

VII. gender (including a value of 'undisclosed' or similar)

VIII. a staff indicator

IX. a student indicator

X. special requirements, e.g. first aid etc.

$\Rightarrow$ The solution should be based upon a flexible model enabling all persons of interest to the institution to be modeled as a single individual with multiple distinguishing roles over time.

$\Rightarrow$ The solution maintains a history of name changes

$\Rightarrow$ Depending on the module, advanced search capabilities include Search by: Student ID, Campus ID, Student ID, CNIC, Career, Term, Last Name, First Name, etc. Search also includes a variety of usages to expand Search capability including operands such as 'begins with', ' = ' , 'contains', 'not =', plus others.

$\Rightarrow$ In addition, search records can be easily modified to include Previous Name as search criteria.

2.8 *Student's Academic History*

The proposed Solution,

$\Rightarrow$ Records and maintains the date of permanent residency

$\Rightarrow$ Records and maintains a person's secondary education details, e.g. school, subjects, grades achieved, year achieved, aggregate scores etc

$\Rightarrow$ Records and maintains a person's tertiary education studies undertaken at other institutions, including course title, level, year/s undertaken, progression status, aggregate scores (e.g. GPA) and individual subject marks and grades, exclusion details

$\Rightarrow$ Records and maintains a person's overseas secondary education details e.g. schools, subjects, grades achieved, year, aggregate scores, etc.

$\Rightarrow$ Records and maintains a person's tertiary education studies undertaken at overseas institutions, including course title, level, year(s) undertaken, progression status, aggregate scores (e.g. Division, Grade, GPA and CGPA) and individual subject marks and grades, exclusion details, etc.

$\Rightarrow$ Records and maintains work experience

$\Rightarrow$ Records details and outcomes of tests and other qualifications (e.g. English Proficiency Tests, GMAT, GRE Local and International etc.), including scores on individual sub-tests

$\Rightarrow$ Enables users to record assessment details, rankings and other decisions/outcomes both in the context of individual qualification assessments and admission application instances.

$\Rightarrow$ Enables users to indicate the applicant's education details - test results, previous studies such as degrees, diplomas and subject details - and use these as a basis of the applicant's basis of admission. Using this information, users can manually weight or rank these qualifications, add feedback and order in priority.

$\Rightarrow$ Enables users to assign "to do" items grouped by checklist to individuals, organizations, or events

$\Rightarrow$ Maintains private or public comments of each student

$\Rightarrow$ Maintains incoming and out-coming communication between the university and the student, i.e. through phone, email, etc

$\Rightarrow$ Defines person-to-person relationships and send one communication to both parties

$\Rightarrow$ Personalizes communication with salutations

$\Rightarrow$ Assigns levels of service such as positive and negative indicators

     I. Positive indicators can be used to provide preferential levels of service

     II. Negative indicators can be used to withhold service

⇒ Reports enrollment, graduation or demographic statistics

⇒ Provides summaries of student statistics, facility occupancy and class section availability

⇒ Maintains grading information

⇒ Alerts applicants on the course choices if there are any associated compulsory/advisory pre-requisites

⇒ Once a record has been created, the activities taken place subsequently for the student including award of any advanced standing (credit transfer), financial assistance, course and programme information, intended programme of award, progress on the course and programme, course result grade, top student award on a course basis, award granted, misconduct, disciplinary action, etc. will become part of the student record

⇒ Provides flexibility to maintain a complete, accurate and updated record for a student to include his/her study in the university offered in different modes, e.g. in distance learning and/or full-time study, etc

⇒ The University provides possibly flexibility for applicants including: an applicant may apply for more than one type of advanced standing (General Credit Transfer, Specific Credit Transfer and/or Block Credit Transfer), may apply for more than once prior to graduation, may request for change in the application programme prior to graduation, or to revert to the original programme. There should also be an appeal mechanism. The system should be flexible for handling these matters and to be able to keep track of the application history as some awards may be time specific

⇒ A set of criteria used to determine the number of tutorial groups and their capacity for each course should be available to set up in the system to include courses on offer, enrolment number, permissible number of students in a tutorial group, etc. Based on the criteria, tutorial groups led by tutors for each course shall be created

⇒ Students who are going to re-sit in the examination shall be assigned to the appropriate tutorial groups by the Course Coordinator concerned

⇒ Allow changes of tutorial groups as requested by students because of various reasons

⇒ Based on the tutorial groups assigned/chosen by students, each student shall have his/her own tutor to contact for telephone tutoring and for the marking of assignments for the course he/she has registered

⇒ Upon the resignation of a tutor, the system should allow user to reallocate the students led by the resigned tutor to another tutorial group or to redistribute the students across the tutorial groups of the same course

⇒ Provides facility to create, define and update the codes for the various categories and sub-categories of disciplinary offence and the disciplinary actions to be taken into the system

⇒ Allows for the recording of details of each disciplinary case during the processing of assignment/examination records

⇒ Provides facilities to take appropriate follow-up action if there are any sanctions imposed on the students to include such as suspension of study, withholding conferment of academic awards, etc.

$\Rightarrow$ Provides users to set up and maintain the codes/flags to be adopted for different prizes, awards, language proficiency test result before a semester starts

$\Rightarrow$ When the offer of prizes, awards or language proficiency test result are confirmed, the tracking information to include the student ID, course or program concerned, department, year and semester, whether certificate is to be issued, date of confirmed offer, date of ceremony/conferment, etc. shall be captured into the system;

$\Rightarrow$ The facility should also enable the information on records of student, award to be included for printing on testimonials, transcripts, etc.

$\Rightarrow$ To provide facilities for maintaining a student record to trace the complete academic history for the pursuit of study within the Institute, whether they have attended full-time or part-time program/courses

$\Rightarrow$ To record all the counseling activities which are accessible to the counselor with online retrieval to personal student records

2.9 *Academic Advisement*

The proposed Solution,

$\Rightarrow$ Analyzes degree progress and provide recommendation for working towards achieving the degree

$\Rightarrow$ Evaluates transfer credit from recognized program – universities/ institutions

$\Rightarrow$ Tailors academic program for each student

$\Rightarrow$ Alerts students to good news / bad news

$\Rightarrow$ Enables to advise that if the program(s) has any specific entry requirements and allow the applicant to choose the courses for enrollment from the program curriculum in order to compile a study plan for graduation. The system shall also perform validity checking to ensure that on successful completion of the courses chosen under the Study Plan, it will enable the applicant/student to meet the requirements for award of degree for that particular program

$\Rightarrow$ Provides flexibility to handle examination result process, which may include program progression according to the specified program rules as maintained in the system. The system shall provide facility to handle examination results of students on different mode of study or program

$\Rightarrow$ To help students with their study plan for graduation, the system shall match the requirements for an award against the progress made so far by the student (including any advanced standing granted and topping-up list approved) and identify the courses and options/alternatives that the student is required to complete for the award

$\Rightarrow$ Each program of study has its own set of criteria for graduation, which shall stipulate the number of credits, level of credits and the specific courses to complete, and the language of instruction of the program. These criteria will need to be set up into the system as the necessary parameters governing graduation. For the degree with honours, each program will have a set of criteria for the classification of the degree

2.10 *Gradebook*

The proposed Solution,

$\Rightarrow$ Provides facility, i.e. when a course starts to run at the beginning of a semester, the assessment parameters will be set up in the system to define the

criteria for the calculation of the assignment marks and the overall continuous assessment score

$\Rightarrow$ Provides for data capture of the attendance of day department/ laboratory and assignment marks including those from other sources

$\Rightarrow$ Generates letters to inform students about their attendance, computer marked assignments scores, change of assignments scores due to error in marking, rejection of late assignment, etc

$\Rightarrow$ At the end of the presentation of the course and before the course final examination takes place, the overall continuous assessment score of a course will be calculated by the system based on the assessment parameters maintained in the system

$\Rightarrow$ Provides flexibility to handle the assignment process for students on different mode of study with a different timetable

$\Rightarrow$ Before the semester starts, the permissible range of course score, overall examination score, overall continuous assessment score governing the determination of course result grade will be set up and maintained in the system

$\Rightarrow$ Before the final examination of a course starts, the parameters will be set up in the system to define the criteria for the calculation of the overall examination marks based on component scores, if any, and the final course score based on the continuous assessment and examination scores

$\Rightarrow$ Enables to create/maintain/amend/transfer assessment parameters, scores and records for students on each programme/course in the system from the existing or from the previous presentation according to the criteria set by the user

$\Rightarrow$ Allows to enquire/check the assignments scores by users/students via Learner Self Service

2.11 *Campus Self Service*

2.11.1 *Learner Self Service*

The proposed Solution should be,

$\Rightarrow$ Able to access information via Student Center

$\Rightarrow$ Able to view personal information such as addresses, contact numbers, emails, emergency contacts, extracurricular activities, work experiences, honors and awards online

$\Rightarrow$ Able to update personal information

$\Rightarrow$ Able to view announcements and open enrollment periods

$\Rightarrow$ Able to view program advisor that has been assigned

$\Rightarrow$ Able to view course schedule in a list view or calendar view

$\Rightarrow$ Able to view lecturer, venue, date, time information for each class

$\Rightarrow$ Able to have date range and day range to view calendar view

$\Rightarrow$ Able to perform search for available courses / subjects and view information of each course

$\Rightarrow$ Able to add classes to a shopping cart before checking out

$\Rightarrow$ Able to drop classes from enrolled classes

$\Rightarrow$ Able to add classes to wish list (pre registration)

$\Rightarrow$ Able to view grade (current and history) online

$\Rightarrow$ Able to view assignment information such as due date online

- ⇒ Able to view degree progress report to check progress towards completion of program
- ⇒ Able to request for official and unofficial transcript
- ⇒ Able to provide flexibility of payment through debit or credit card and maintain the payment profile for future use
- ⇒ Able to apply for graduation
- ⇒ Able to view outstanding payment amount details and payment history
- ⇒ Able to communicate with program advisors online

2.11.2 Faculty Self Service

The proposed Solution should be,
- ⇒ Able to access information via Faculty Center
- ⇒ Able to view personal information online
- ⇒ Able to view teaching schedule online
- ⇒ Able to access class roster to view student who have enrolled, dropped, waitlisted
- ⇒ Able to access grade roster to view, add, update final grades
- ⇒ Able to access grade book to view and grade assignments
- ⇒ Able to import grades from Excel
- ⇒ Able to have access to student information such as personal information, degree progress report and view service indicators
- ⇒ Able to communicate with students online (selected students, all students)

2.12 Student Financials

The proposed Solution,
- ⇒ Calculates tuition based on student enrollment or other criteria
- ⇒ Bills and manage student and third party receivables
- ⇒ Processes and control credit card payments
- ⇒ Posts financial aid disbursements
- ⇒ Age accounts and manage collections
- ⇒ The system will generate debit notes for students to register on those courses/ programs which they are eligible
- ⇒ The system should allow for de-registering students from courses that have been refunded or the tuition fee being deferred for a specified period and calculate the amount of refund due
- ⇒ When an application is accepted, application information including claim details, personal data and payment details will be captured into the system.
- ⇒ The system should also provide facilities to maintain students' repayment records and repayments status and generate reminders according to the normal repayment schedule and to link with the defaulter and deferment subsystem as appropriate for the appropriate follow-up actions
- ⇒ The system should also provide facilities for a defaulter subsystem to maintain the students' records, calculate surcharge and penalty charge and initiate actions on hold for some University processes, e.g. withholding students' final course results, withholding student graduation, etc. for students who fail to repay the loan or installment according to a defined schedule.

2.13 *Campus Community*

2.13.1 *Biographic / Demographic Management*

⇒ Ability to create and maintain data about people and organizations, both internal and external to institution

⇒ Ability to store numerous types (home, business, campus, billing, etc.) of contact data (addresses, phones, email)

⇒ Ability to store numerous types of names (primary, legal, preferred)

2.13.2 *Event Management*

⇒ Ability to create and maintain data about institutional events and committees

⇒ Organizes information about events and committees

⇒ Provides ability to record event attendees

⇒ Provides ability to create reusable committee templates

⇒ Provides ability to allocate committee resources

2.13.3 *Community Directory*

⇒ Ability to view contact information for students, employees and alumni on-line

2.14 *Contributor Relations*

⇒ Alumni membership registration

⇒ Alumni membership renewal

⇒ Alumni members directory and enquires

⇒ Alumni members info update

⇒ Membership registration can be link to graduation database.

2.15 *Online Learning*

⇒ The solution is can be configured to interface with a 3rd party accommodation system such as Moodle, Blackboard and WebCT

3   Non-Functional Requirements

3.1 *Training*

A user level training explaining the functionality and day to day usage of application must be carried out for the end users of all the modules and for all department users. A technical level training of the IT staff must be carried out for the smooth functioning of the applications after the implementation of the project. This will include embedding of 4-6 members of the IT team in the successful bidder's implementation teams. Proper mentoring of these embedded members of the IT team will be the responsibility of the successful bidder's implementation teams.

3.2 *User Manuals*

A detailed user level manual covering each and every module individually should be provided. It should cover in detail every aspect of effectively and efficiently using the modules. It should be written in simple English avoiding technical jargons where possible. It should not be totally text based and must contain screen shots of actual module for proper elaboration of the system.

3.3 *Disaster Recovery*

Licensing, services and hardware infrastructure specific to the bidder's solution in terms of appropriate setup for the solution in disaster recovery centre must be mentioned in the technical proposal. Cost of the Licensing, services and hardware infrastructure specific to be bidder's solution in terms of appropriate setup for the application in disaster recovery centre must be mentioned as a separate item in the financial proposal.

3.4 *Hardware Requirement*

The supply of hardware for the project is not a part of the tender. However, it is required that the minimum hardware specifications for the successful implementation and deployment of the system should be specified as part of the technical proposal.

3.5 *Implementation Plan*

The technical proposal should include the implementation plan for the project, including the deliverables for each milestone, such as Requirement Analysis and SRS preparation, Sign off of the SRS, Preparation of Functional Specifications and Prototypes, Design/ Development, Implementation, Deployment, and User Acceptance.

3.6 *Warranty*

The details of the warranty are to be provided. Also there should be a provision of at least One (01) year software maintenance contract after the acceptance of the implementation by SMIU.

4 Eligible Companies

Sealed bids are invited from well reputed IT companies. The sealed bid comprising of **Technical as well as Financial proposal (both separately)** are to be submitted.

$\Rightarrow$ Tendering for the project is open to all companies fulfilling the following criteria:
  I. Company should have three (03) years audit statement
  II. Company should have total turn-over 150 million per annum
  III. Company should offer a nationally and internationally recognized off-the-shelf Campus Management Solution (CMS) capable of meeting the requirements of SMIU.
  IV. The offered solution must have at least five (05) major implementations nationally and internationally

$\Rightarrow$ The bidding companies must also provide the following information:
  I. Name
  II. Address
  III. Registered in Pakistan or represented through a Local Partner
  IV. For Companies registered in Pakistan the following information has to be provided:
  V. Number of years established in Pakistan
  VI. Total number of employees in Pakistan
  VII. Number of functional employees
  VIII. Number of years established globally
  IX. Total number of employees globally

     X. NTN number

    XI. GST number

   XII. Company Registration number

⇒ For companies represented through a local partner. In addition to the above information about the local partner, the following information about the local partner should also be provided:

    I. Name

   II. Address

  III. Number of years established in Pakistan

  IV. Total number of employees in Pakistan

   V. CMM Level of the Solution Principal (CMM Level 3 Preferable)

⇒ Solution Offered:

    I. Please specify the database and the software development platform on which the application is based upon.

⇒ Information about each module of the Campus Management Solution (CMS) required by SMIU:

    I. Total number of off-the-shelf software implementations in Pakistan

   II. Total number of CMS implementations internationally

⇒ Please, provide the following information for each project to cover your experience in Software/ Solution deployment and integration highlighting those closely related to the requirements of this RFP:

    I. Name of Client

   II. Sector of client

  III. Location of client (City, Country)

  IV. Duration of the project, including start and end dates

   V. Scope of the project

  VI. Value of project in Pakistan Rupees

 VII. Number of client end users

VIII. Software/ Solution implemented

⇒ If any other vendors were involved in the project, please, provide following details for each of them:

    I. Vendor Name

   II. Details of involvement in the project

⇒ Please provide the following information about the client contact for reference purposes:

    I. Name

   II. Title

  III. Address

  IV. e-mail address

   V. Office phone/ Fax number

  VI. Company/ Organization

⇒ Please provide the following details of the employees who will be working on the implementation of the solution at SMIU:

    I. Resumes of employees of your company who will form the implementation team for the project at SMIU (in case of successful bid). Highlight the projects in which the employee worked on and successfully implemented

similar software solutions. Also, specify whether experience on implementation of software solutions was obtained while being with the bidding company or some other company (in case of different company, specify name).

II. In case any member of the implementation team specified in the proposal is not a part of the team at the actual time of implementation, the successful bidder will be required to give the reason in writing, and also provide a written guarantee that the absence of the specific resource would not affect the project in any way. Alternatively the bidder will be required to introduce another skilled professional of similar caliber as member of the implementation team and will also provide the resume of the same.

5 Criteria for Evaluation

The criteria for evaluation will include:

5.1 *General Evaluation (Technical)*

⇒ Business Evaluation

⇒ Functional Evaluation

⇒ Risk Evaluation

⇒ Reference Evaluation

5.2 *Financial Evaluation*

⇒ Financial Evaluation

6 Financial Proposal

The financial proposal should include all costs to be incurred by SMIU for the project. The costs should include:

6.1 *Solution Cost*

The cost consists of actual start-up cost of purchasing the software and its licenses (separately).

6.2 *Implementation Cost*

This is the cost of the implementation of the off-the-shelf solution to meet the requirements of SMIU.

6.3 *Maintenance Cost*

The annual maintenance/ support cost based on the annual maintenance and support contract should also be specified. Mode of support in terms of Service Level Agreement (SLA) must also be mentioned. If the cost of the maintenance of the configuration/ customization and the off-the-shelf solution is separate this should be clearly specified and the separate costs should be mentioned in the financial proposal. Maintenance shall be provided free of cost for the period of 1 year after completion of the project and acceptance from SMIU. Maintenance agreement shall be executed with successful bidder.

6.4 *Total Cost of Ownership*

During the process of providing detailed analysis of the cost, the firms must also mention total cost of ownership of their application/ solution over a period of five

(05) years. This will enable SMIU to come up with a detailed cost-benefit analysis of the solutions offered

Note: All costs must be inclusive of all applicable taxes of Government of Pakistan.

7   Technical Proposal

7.1 *Introduction*

7.1.1 *Purpose of Document*

This document is to provide the Technical Design for Campus Management Solution (CMS). All specifications mentioned in this document will be used for deployment of actual solution.

This document provides in detail the functionality for the CMS as per the modules described in clause 2 earlier.

The document also provides the technical design required to develop the application. Following sections are covered in this document:

Technical Architecture:	Client/Server/other environment configuration required to run the CMS properly. It should also provide the hardware requirements for optimal performance. Environment in which the application is built needs to be specified.
Process Specification:	Form Name, Inputs, Outputs, Checks and Functionalities to be explained here. Pseudo-code for the application is to be provided as well.
Structural Flow:	Block diagrams and flow charts of each section are to be provided in this section. This section should provide the logical diagrammatic representation of each module. Screen shots of at least 5 forms/ output/ reports per workflow module should be given with explanation of inputs/ output, etc.
Data Storage:	Database is to be described in this section. The description should be done through Data Dictionary and Entity Relationship Diagram. Database understanding is very important for understanding the above two sections. Also ERD is required to understand process specification section. The provision of Database Connectivity with the legacy system should also be provided.

7.1.2 *Technical Architecture*

$\Rightarrow$ Introduction
  I. The purpose of this Technical Architecture is to describe the technological infrastructure upon which the Campus Management Solution (CMS) is to be developed.

$\Rightarrow$ Environment
  I. Development Environment:
   I.   Client
   II. Database Server

  III. Application Server

  IV. Web Server

 II. User Environment

  I. Client

  II. Browsers

  III. Database Server

  IV. Web Server

  V. Plug-ins

$\Rightarrow$ Support and Integration

  I. Support multiple databases such as Oracle, SQL, DB2

7.1.3 *Process Specification*

Module wise specification of each Module is to be given.

8 General Terms and Conditions

$\Rightarrow$ The proposal and price shall remain valid for a period of not less than 90 days from the closing date of the submission of the proposal.

$\Rightarrow$ The technical and financial proposals should be delivered in separate sealed envelopes. At the top left of the envelopes it should be clearly stated "Tender for Campus Management Solution for SMIU", and it should be clearly stated on the envelope, whether it contains the technical or the financial proposal. The technical proposal will be opened on Tuesday March 18, 2014 at 14:00 pm in the presence of the authorized representatives of the bidders who may wish to attend. The financial proposals of only the technically viable/ short listed bidders will be opened on a date to be specified later.

$\Rightarrow$ Tenders must be accompanied with bid security/earnest money (refundable) for an amount of 2% of bid value in shape of pay order/ bank draft in favor of Sindh Madressatul Islam University, Karachi, Pakistan. The earnest money should be included in the sealed financial proposal. Tenders without earnest money or less than 2% of the bid value will not be entertained and rejected straightaway.

$\Rightarrow$ Tenders which do not meet the stipulation in section 4 of the RFP will be rejected straightaway.

$\Rightarrow$ The SMIU reserves the right to accept or reject any or all tenders at any stage without assigning any reason thereof.

$\Rightarrow$ At any time prior to the deadline for submission of bids, SMIU may, for any reason, amend this RFP, whether at its own initiative or in response to a clarification requested by a prospective bidder. The SMIU will not be responsible for informing the prospective bidders in any other manner. In order to afford prospective bidders reasonable time in which to take the amendment into account in preparing their bids, the SMIU may, at its discretion, extend the deadline for the submission of bids.

$\Rightarrow$ In case of delay in the execution of the contract, the SMIU reserves the right to impose penalty not exceeding 10 % of the total amount of the contract.

⇒ If the progress of work is not to the satisfaction of the Director Finance, SMIU, the work will be awarded to second lowest bidder at the risk and cost of the bidder. In such an eventuality, if any excess amount is to be paid by SMIU, it will be recovered from the bidder.

⇒ All government taxes will be deducted at source as per Finance Act 2013.

⇒ SMIU has the rights to add, enhance or remove any functionality not disturbing the major scope of work.

⇒ SMIU will not bear any expense incurred in the preparation of proposals in response to this RFP.

⇒ All responses to this RFP shall become the property of SMIU.

⇒ Proposals sent to SMIU by Fax or Email will not be accepted.

⇒ Proposals submitted after due date and time will be rejected.

⇒ An effort by any firm(s) to influence SMIU, "directly or indirectly through unfair means", in SMIU proposal evaluation, proposal comparison or contract award decisions, to meet or discuss with any SMIU official unless desired by the SMIU may result in the rejection of bidder's proposal.

⇒ Terms of Payment

    c. Payment will be made by SMIU on successful deployment/completion of the Campus Management Solution as per contract. Milestone payments can be considered based on deliverables. SMIU will deduct 10% performance security retention money on all payments to be released after successful completion of warranty, provided the solution complies with the agreed specifications and working satisfactorily.

9 Selection Criteria

The evaluation composition will be as under:

The technical proposal will be evaluated first and financial proposals of the short-listed and technically qualified firms will be opened in second stage.

Clarifications about the requirements and the pre-bid meeting can be obtained from:

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