Request for Proposal (RFP)

Campus Management Solution & Enterprise Resource Planning Solution for University of Peshawar

Last date for Submission: **Jan 11, 2016 at 11:00 AM**

Bid opening Date: **Jan 11, 2016 at 11:30 AM**

UNIVERSITY OF PESHAWAR

1 Table of Contents

2 Definitions

RFP:	Request for Proposals
Account Manager:	Project or Task Manager; who has the prime responsibility of the project/ task execution
Bidder:	Firm who submit the proposal(s)
BOC:	Bill of Costs
BOQ:	Bill of Quantities
CMS:	Campus Management Solution
ERP:	Enterprise Resource Planning
FAC:	Final Acceptance Certificate
First Party:	University of Peshawar
FY:	Financial Year
LoI:	Letter of Intent
Prospective bidder:	Bidder who intend to participate in the tender process
Region:	Geographical Business domain of Principal to which Pakistan belongs.
Second Party:	Selected Bidder
Selected Bidder:	Bidder selected for the award of tender
Service Level: Agreement	The level of service which University of Peshawar requires from Selected Bidder in respect of the services required--
Total Bid Value:	Cost of CMS/ ERP as per BOC (including Optional/ Options) Cost of Extended Warranty, Cost of Services, Cost of one (01) year O&M, one (01) year Principal Support as per BOC and one (01) year data entry
UAT:	User Acceptance Testing
UoP:	University of Peshawar

3 Introduction

The University of Peshawar, as a mother educational institution of Khyber Pakhtunkhwa is an outcome of the dream of the father of the nation and was created as the first ever University after independence. It is vigorously working with its full zeal and spirit, truly serving the sacred cause of education altogether.

The University of Peshawar is not only catering for the academic needs of Peshawar but also of the whole province and Federally Administered Tribal Areas (FATA). The highly qualified and trained faculty, student friendly and supportive administration, modern curricula, conductive academic environment and excellent infrastructure are the hallmarks of the University. Its role in political, industrial and government leadership is recognized. The University has an over whelming contribution in bringing positive changes in the society.

- **Expected System Users**

  - Number of Students: 10,000
  - Finance Users: 10
  - Procurement Users: 10
  - Inventory/Stores: 10
  - Financial Aid: 5

4 Background

University of Peshawar has a high performance optical network and Internet connection with 136 Mbps speed. More than 70 Optical Fiber switches are deployed in a radius of 4KM that connects all the University departments, administration block, colleges, schools, hostels, University residential area centralized Data Center. Managed Intranet network between departments using virtual local area network VLAN adds efficiency and ensure maximum output on the existing servers. Network monitoring servers NMS are deployed to achieve maximum with 24/7 uptime.

5 Bid timings

Pre-Bid Conference:	29-Dec-2015 at 3:00 pm
Last Date for submission of bids:	11-Jan-2016 at 11:00 am
Date & time of opening of bids:	11-Jan-2016 at 11:30 am

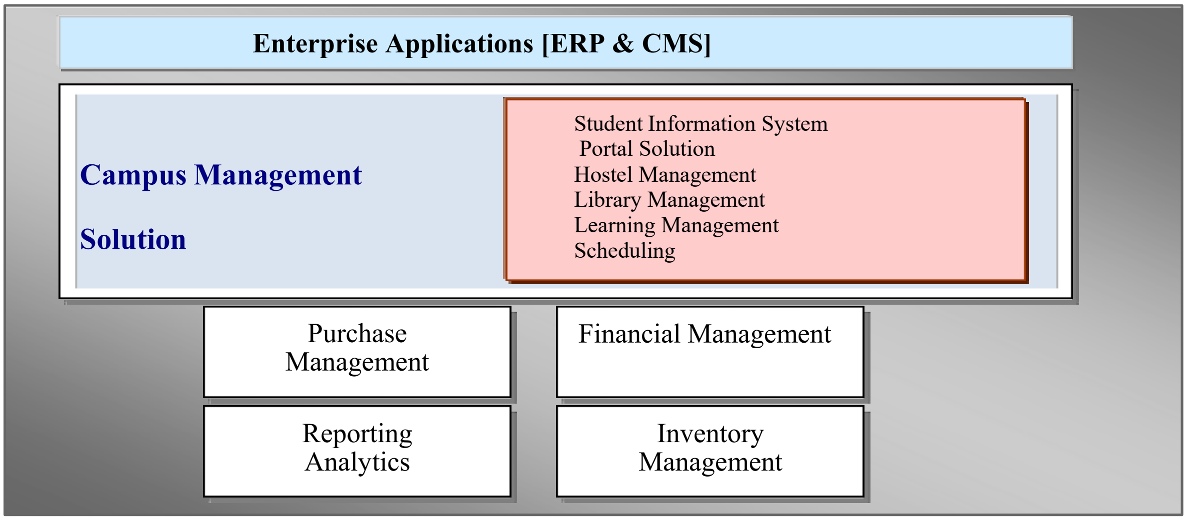
Prices quoted in the tender shall remain valid for 90 days after opening date.

Only those queries shall be addressed in the pre-bid meeting which are submitted to UoP in writing at treasurer@upesh.edu.pk by Dec 26, 2015.

6 Purpose of this Document

The purpose of this document is to share/ present the macroscopic view of the project objectives and requirements while giving its background. Vision & Objectives, Scope of Work, Project Methodology as per University of Peshawar requirements, Bids Submission requirements, Selection Procedure and Criteria, General Terms & Conditions, Special Terms & Conditions, Payments Terms, and Warranty Support/ Services are also elaborated in this document to provide necessary information about this tender for potential bidders.

7 Vision and Objectives



Strategic Benefits

Following are the few significant benefits envisaged and being expected as an outcome of this project implementation;

i. Operational Automation
ii. More Time to focus on Strategic Tasks
iii. Campus Management Automation
iv. Incorporate global best practices and streamline processes for efficiency
v. Improve institution's world ranking
vi. Anywhere Availability – Internet or Intranet with Automatic Synchronization
vii. 360-degree-view of prospect, applicant, student, alumni, contributors, faculty from a single source
viii. Improve adaptability to educational changes, supported by a robust and flexible system
ix. Cost-effective one point solution for management
x. To reduce expenses and control costs. University faces increasing demands to compete effectively by upgrading administrative infrastructure to better manage key business processes. Campus Management System coupled with Enterprise Resource Planning System will assist to achieve targets well in time and in the defined budget.

Benefits to Management

Administration can reap several benefits from Campus Management and Enterprise Resource Planning System some of which are:

i. Entire campus management
ii. Effective communication between teachers, parents and students
iii. Centrally stored information with zero redundancy
iv. Best possible resource optimization
v. Availability of microscopic as well as macroscopic views
vi. Delivering accurate, accessible information to students
vii. Ensuring maximum system availability and reliability.
viii. Integrated, streamlined business processes using advanced functionality with the elimination of creation of shadow redundant systems

Among these “soft” benefits are business process improvements in operational management and the delivery of services to students and staff, such as:

i. An increase in admissions productivity with more inquiries and applications processed by fewer staff through web-based online admission system
ii. An increase in financial aid productivity with more financial aid applications processed with fewer staff and in less time
iii. An optimization of course scheduling that allows more classes and events to be scheduled with a smaller inventory of classrooms
iv. A shift to web-based financial aid systems that allow students to submit applications, view and accept or decline awards, and view transaction balances online
v. A shift to web-based course registration that allows all course enrollments to be transacted and all course grades to be posted online
vi. Increased productivity in following areas, while ensuring policies are upheld:-
    - Admissions processing
    - Course registrations
    - Academic advisement & Grade release
    - Fees calculation and payment
    - Communication via post to online email / pdf / sms
    - Collaboration between student / advisor

8 Scope of Work

The CMS/ERP implementation is believed to have following major components, viz.

i. Off-the-Shelf software along with licenses,
ii. Solution Implementation including Configuration / Customization
iii. Data Entry for complete CMS/ERP for initial One Year
iv. Post Production Support for one year after final acceptance (license and software services)
v. Propose Hardware Sizing to implement the solution.

Each of these components are further comprised of various modules and their sub-modules. UoP intends to address all the business processes of the University in order to automate for increased efficiency, productivity and facilitation to the prime beneficiaries of this project, i.e. students, faculty, researchers, staff, and university in general. The required hardware shall be acquired through a separate tender. However, the bidders in this tender are expected to propose hardware sizing.

Detailed Scope of Work is defined at Annexure VI for compliance.

9 Project Methodology

The firms qualified in the tender process will be required to implement the solution for the University of Peshawar. The solution being sought will primarily be off-the-shelf enterprise level solution in which the core components of both ERP and CMS shall be only configured as per the requirements, however in order to meet the complete requirements as laid out in this RFP and as required by the UoP, selected bidder may be allowed for limited customization and/ or development. Other than the core components of CMS/ERP, selected bidder is encouraged to propose Free-and-Open-Source modules/ applications which is fully integrated with the core CMS/ERP while taking all the responsibility of integration services. Selected bidder is expected to meet the following, but not limited to;

i. Agree project governance plan for the implementation of CMS/ERP at the University of Peshawar
ii. Start-up information/ knowledge sessions to share thoughts/ information on the project execution at UoP.
iv. Study of the existing processes at UoP and produce the requirements specification document.
v. Perform gap analysis with the comparison of the standard processes available and the best practices keeping in view the requirements of the UoP.
vi. Design document of system as per the requirements and gaps identified along with the wire frames of applications/ systems to develop.
vii. Configure/ customize / build (where required as permissible), test and commission the implemented solution before delivering the system to the users/ stakeholders.
viii. User acceptance document, final solution delivery will be considered after defect/ issues resolution as identified in the UAT phase.
ix. Requirement analysis, design, build and deployment phases will/ can continue in parallel.
x. Provide complete documentation of the implementation (which includes but not limited to the documentation of each phase/ process, hardware configuration, maintenance and management, the system installation/configuration guides/ manuals, user manuals, administration manuals, etc.) and get it verified/ signed-off as per the agreed project plan from the functional resources and the module sponsor.
xi. Provide onsite technical, functional, end-user and administration level training of the implemented solution.
xi. Change Management: Change request in the developed application, will be considered as change after three months of UAT phase sign-off. Any modifications suggested within three months shall not be considered as Change request. Alternately, FAT/ FAC of UoP shall be issued after successful expiry of three months post-UAT period. Furthermore, Change management after FAT phase will be addressed mutually.
xii. Acceptance procedure:
    1. Implementation Acceptance: Implementation acceptance means testing of the system (which includes the software) successful installation and configuration as required for the application deployment.
    2. User Acceptance Test: This test covers the user acceptance test, and the resolution/ fixing of the issues/ defects as identified in the UAT phase by the users. This test will be conducted as per the agreed project plan with respect to each application development cycle.
    3. Final Acceptance: This test will be done after the UAT and the minimum time to perform this test is after the Soak time of three months.
xiii. Data Entry: Data Entry for the initial One Year after ‘Go Live’ of the entire CMS/ERP.

10 Deliverables

In addition to the actual deployment/ implementation of the Student Information System solution at the University of Peshawar, following deliverables are expected from this project:

i. Project Governance including a project plan for the project execution
ii. Requirements Specification Document(s) and their sign-offs
iii. Gap identification document(s) and their sign-offs
iv. Design Document(s) based on Requirements Specification and Gap Analysis and their sign-offs
v. User Guides and Training Manuals as per business processes designed for UoP
vi. License keys of the software solution and all its components as to meet all the functional requirements
vii. Installation, configuration, customization, and integration covering the scope of the project
viii. Test Scripts and Procedures for User Acceptance Test(s) and Final Acceptance Test(s) which is required for the issuance of FAC.
ix. System's documentation in the form of installation and configuration guides, end-users and administration manuals etc.
x. Data Entry for the entire CMS/ERP for the initial One Year.

11 Bids Submission Requirements

The objective of bid submission requirement is to provide bidders with the information to submit their bid in response of this RFP according to the specifications and format defined in this RFP and in order/ sequence as set forth in this document. Bidders must follow below requirements while preparing their proposals/ bids proposal and submission.

i. For this tender PPRA's Rule number 36(b) 'Single stage - Two Envelope' procedure of open competitive bidding shall be adopted
ii. Bids shall comprise of single envelope containing two separate envelopes, i.e. Technical and Financial Proposals, and clearly marked Technical and Financial proposals on the respective envelopes. Envelopes must also be labelled with the name, address and contact number of the bidding company, and also the Title of the Tender for which the bid is being submitted.
iii. Bidders shall submit two (02) copies of Technical Proposal and one copy of Financial Proposal. Soft copy of only the technical proposal should also be submitted on the CD/DVD along with the bid
iv. Bidders shall submit a signed letter with Official stamp affixed on it as per the format given in Annex I as a cover letter to the Bid/ Proposal enclosed in the Technical proposal envelope. Bid/ Proposal submitted without this cover letter will not be accepted and bids may likely to be rejected straightaway.
v. Bidders are required to get the authorization from the Principal for their participation in this tender.
vi. Technical proposals shall contain Company profile, Authorization & relationship with principal firms, location of branch offices, company experience in related field, technical staff details (branch-vise), project completed, major clients' list as per the format given in Annex II "Firm's References", equipment's technical details (brochures, etc.) mentioning compliance and properly highlighted all the compliance specification as requested in Form I "Annex-VI Scope of work -

vii. Bidders are required to follow professional way of submission of both Technical and Financial Proposals, for example, pagination of overall Technical proposal, tagging of various sections aligned with BoQ headings, strictly following the format defined in the RFP as to follow, table of contents, etc.

viii. Bidders are required to fill and sign the Annex-VI "Scope of Work – Student Information System Deployment", as provided in this RFP and must submit it along with Technical Proposal.

ix. Bidders shall provide all the information in context as well as in sequence as set forth in "Annex IV - Technical Evaluation Criteria". Bidders must provide filled Technical Evaluation Criteria as for self-assessment (not binding on University of Peshawar) and provide page number references of the proposal for the claims of scores. Bids not following the format and sequence defined in this RFP is likely to be rejected.

x. The bidder must provide Project Execution Plan, Design Proposal with layouts, diagrams, etc. along with Technical Proposal.

xi. Bidders are required to fill and sign all pages of the Annex VI "Bill of Quantity(ies)" while following the format given, and submit it as Financial Proposal. Financial Proposals not following the given format may lead to the rejection of bid.

xii. Bidders are required to submit their financial proposals in PAK Rupees (Rs.).

xiii. No variation in change in Forex rates shall be permissible to any of the components/ modules during the course of Term.

xiv. A bank draft equal to 2% of the bid Cost of Campus Management/Enterprise Resource Planning System must accompany the bid as part of financial proposal as earnest money drawn in favor of **Treasurer University of Peshawar**. The bid shall not be considered without earnest money or less than the 2% value.

xv. Bidder must quote for complete solution as given in the Annex-VI Scope of work. Any item(s) if missed out and not quoted may lead to rejection of bid.

xvi. Software Product Warranty & Support Services, Post-Production Support and Data Entry must be quoted as per project requirements.

12 Selection Procedure

The objective of this section is to define the steps and procedure which shall be followed during the course of tender process and till the tender is awarded to Selected Bidder. Following are the steps/ procedures which will be followed for the Selection of successful bidder.

i. In first stage, only Technical proposals will be opened in the presence of bidder's representatives who choose to attend.

ii. Technical evaluation of the firms shall be based on information provided in Technical Proposals.

iii. As a part of technical evaluation, bidders will be asked to conduct Presentation/ Demonstration/ Proof of Concept.

iv. On the basis of technical evaluation, the financial proposal of only technically responsive bidders (qualified bidders) will be opened in the presence of their representatives who choose to attend.

v. For this tender weightage of Technical and Financial proposals shall be 80% and 20% respectively.

vi. For qualifying in Technical responsiveness, bidders must fulfil all the requirements as laid out in Section 8. Special Terms & Conditions and Part A "Mandatory Requirements" of Technical Evaluation Criteria as defined in Annexure IV.

vii. If any of the mandatory requirements is not met by the bidder, the bid will be cancelled straightaway and no further consideration will be given. Moreover, bidders will have to secure 60% score in each part (i.e. Part B, Part C, Part D, Part E, Part F) totaling to at least 70% of the overall weightage assigned to Technical Evaluation, i.e. 56 points at minimum.

viii. Financial proposals of bids found technically non-responsive shall be returned un-opened.

ix. The bid found lowest evaluated bid or highest scorer for the cumulative value of both Technical and financial scores, will be accepted for the award of tender.

x. After the approval of tender award, a Contract on the stamp paper (the worth of stamp paper shall be determined as per the rules defined) shall be executed by the University of Peshawar with selected bidder within 15 days from the date of issuance of Letter of Intent (LoI).

xi. For ordering purpose the price evaluation will be done against complete/ whole items including optional items of the bid.

13 Terms of Payment

i. No payment shall be made in advance to the Contractor as mobilization advance.

ii. Payments against the Software Licenses and Implementation Services shall be treated separately.

iii. The Deployment Cost shall be paid-off against the milestones defined for successful implementation of Student Information System at UOP.

iv. Bidders are required to define the Deployment milestones and the weightage or magnitude of work involved against each milestone which will become the basis of payments against the Deployment cost.

v. Payments against the Product Warranty Support shall be paid after expiry of first year Product Warranty Support which shall be applicable from the date of UAT.

vi. Payments against initial One Year Data Entry shall be paid on monthly basis at the time of Data Entry.

vii. Post-Production Support payments shall be paid after six (06) months support extended to UOP from the date of issuance of FAC.

viii. Eight Percent (8%) of the payable amount against each invoice/ payment will be retained as security/ retention money and will be released after six (06) months from the date of issuance of FAC. However, payment against Data Entry will be released three months after the completion of the Data Entry period (i.e. initial One Year). Bidders may however provide a Bank Guarantee of equal amount valid for at least six (06) months if they wish not have the 8% security/ retention money retained from each invoiced amount.

ix. Invoices will be cleared as soon as possible not exceeding 30 working days upon receiving the invoice and complete supporting documents.

x. All payments shall be made through cross cheque in the Pakistan Rupees (PKR).

xi. Taxes including Income Tax, Sales Tax, Stamp Duty, Professional Tax etc. will be deducted at source as per Federal and Provincial government rules at the time of payment.

xii. The earnest money of the successful bidder will be released three months after the completion of the Data Entry period (i.e. initial One Year). Bidders may however provide a Bank Guarantee of equal amount valid for at least three (03) years if they wish not have the 2% earnest money retained.

14 Liquidated Damages

i. In case of delay in the go live date, University of Peshawar reserves the right to impose a penalty not exceeding 10% of the total amount of the contract at the rate of 1% of the bill for each week of delay.

ii. If the work is not executed according to the satisfaction; UOP reserves the right to reject it altogether or impose a penalty not exceeding 10% of the amount contract.

iii. If the progress of the work is not to the satisfaction of the UOP, it has the right to cancel the order, get the work done from third party selected accordance with the PPRA rules subject to the condition that if the first party has to pay any amount in excess of the agreed amount, the difference will be recovered from the second party.

15 General Terms and Conditions

Following general terms & conditions apply to this RFP

i. Only authorized dealer, registered reseller & partner, can participate (documentary proof is mandatory).

ii. The bidder must be registered with Securities and Exchange Commission of Pakistan, Sales Tax and Income Tax Department.

iii. An affidavit to the effect that the firm has not been blacklisted by any Government/ Semi Government organization.

iv. The Commission reserves the right to accept/ reject wholly or partially any tender at any stage of the tender process.

v. Validity period of the bids shall be 3 months (90 days).

vi. The decisions of University of Peshawar will be binding on all concerned and will in no case be challengeable at any forum or any court of law.

vii. Bids are liable to be rejected if; they are not conforming the terms, conditions and specifications stipulated in this RFP.

viii. During the examination, evaluation and comparison of the bids, the University of Peshawar at its sole discretion may ask the bidder for clarifications of its bid.

ix. The request for clarification and the response shall be in writing/email. However, no change in the price or substance of the bid shall be sought, offered or permitted after bid submission.

x. Total Bid Value (Cost of software solution as per BOC (including Optional/ Options), Cost of Implementation Services, Product Warranty Support, Post- production Support, Data Entry Cost, Additional Components (if any)) shall account for financial evaluation and so shall be included in Total Bid Value.

xi. The amount submitted as Earnest Money shall be refunded to the unsuccessful bidders after the decision of for the award of said tender.

xii. If there is a discrepancy between unit price and total price in the submitted bid which is obtained by multiplying the unit price and quantity, the unit price shall prevail and total price shall be corrected. If there is a discrepancy between the words and figures, the amount in words shall prevail. If there is a mistake in addition/ totaling, that shall be corrected. If the bidder does not accept the corrected amount of bid, his bid shall be rejected and his bid security forfeited.

xiii. Incomplete and conditional BIDs will not be entertained.

xiv. For this tender, all updates/changes shall be communicated through email/ Writing.

xv. In case of any dispute between the two parties of any matter arising out of after signing the contract agreement, the case shall be referred to the Vice Chancellor, University of Peshawar whose decision shall be final and binding on both parties.

xvi. Bids submitted via email or fax will not be entertained.

16 Special Terms and Conditions

i. Principal shall fully train human resources available at the UoP, so that they may take over seamlessly the operations after one year.

ii. License prices or the discount quoted in the bid shall remain available for additional licenses to UoP under this project for the Term of Agreement and beyond.

iii. License prices or the discount as offered in the bid shall remain valid and available to UoP throughout the Term of Agreement.

17 Meet or Exceed Specifications

The specifications provided in this RFP are the minimum requirements of University of Peshawar. The vendors must meet or may exceed these specifications to meet the actual requirements of this Project and its successful practical implementation. But in such a case additionally proposed or altered specifications must clearly be highlighted to enable University of Peshawar to clearly identify modified specifications.

18 Clarifications

Queries regarding this RFP shall be submitted in writing to:

Treasurer University of Peshawar	Dr. Yorid Ahsan Zia treasurer@upesh.edu.pk
Tel: +92-91 9216474	

Annex I: Proposal Submission Form

(To be submitted as Cover Letter of the Bid)

The Treasurer,
University of Peshawar,
Peshawar

Sir

We, the undersigned, offer to provide the solution along with required services for "Student Information System" in accordance with your Request for Proposal dated ____________, and our Proposal enclosed herewith. We are hereby submitting our Proposal, which includes both two (02) sets (1 Original and 1 copy) of technical proposal containing all Forms I – V of Annexure VII duly filled as per the defined format, and a financial proposal sealed under separate envelopes.
We understand that you are not bound to accept any Proposal you receive and reserves the right to accept or reject any offer, and/ or to annul the bidding process and reject all proposals without assigning any reason or having to owe any explanation whatsoever.
The decision of evaluating committee shall be final and cannot be challenged on any ground at any forum and the evaluating committee will not be liable for any loss or damage to any party acting in reliance thereon.

We remain,

Yours' Sincerely
Authorized Signature:
Name and Title of Signatory: Name of Firm:
Address:

Annex II: Firm's References

(To be filled by the bidder as part of technical proposal)

Relevant Services Carried Out in the Last Five (05) Years That Best Illustrate Qualifications

Using the format below, provide information on each reference assignment for which your firm/entity, either individually as a corporate entity or as one of the major companies within an association, was legally contracted. Please attach copy of completion certificate/work order issued by the referenced organization, without which the reference claim may not be considered.

<table>
<tr><td colspan="2">Assignment Name:</td><td>Country:</td></tr>
<tr><td colspan="2">Location within Country:</td><td>Modules Implemented:</td></tr>
<tr><td colspan="2">Name of Client:</td><td>Duration of assignment:</td></tr>
<tr><td>Start Date

(Month/Year):</td><td>Completion Date

(Month/Year):</td><td>Approx. Value of the contract</td></tr>
<tr><td colspan="3">Narrative Description of Project:</td></tr>
<tr><td colspan="3"></td></tr>
</table>

Firm's Name: ____________________________

Annex III: Technical Compliance certificates/Compliance Undertaking

(To be filled by the bidder as part of technical proposal)

I, (Name); (CNIC#); (Designation), (Company Name) have gone through the Terms/Conditions of this RFP and have found the document in whole as non-biased to any particular vendor or product/ brand. I hereby undertake and firmly bound myself to abide by / comply all sections of this RFP except for those items noted below.

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Annex IV: Technical Evaluation Criteria

S. No.	Attributes	Reference Page# for Documentary
Part A) Mandatory		
1.	Private limited Firms with Income Tax Certificate / GST Certificate and SECP registered	
2.	Affidavit that the firm has not been blacklisted by the federal or any provincial Govt.	
3.	At least Five years of relevant experience in Sale , Service , Implementation of Commercial Off the Shelf (COTS) ERP / CMS (Proof of company being in operation for at least 5 years in Pakistan in relevant business)	
4.	Partner Organizations with major Enterprise Application Platforms in Pakistan (Microsoft, Oracle, IBM and SAP) since last five year.	
5.	Firm Must be Gold /Tier 1 Partner for application since last Three (03) years in Pakistan.	
6.	Location of Offices (Islamabad/Rawalpindi, Lahore, Karachi)	
7.	Successful Implementation of the proposed solution at least three (3) similar projects (with deployment of COTS ERP / CMS in Pakistan).	
8.	Experienced Implementation partner with at least three (3) or more implementations of the Commercial Off the Shelf (COTS) ERP / CMS in the Region (local and foreign implementations)	
9.	Technical Compliance Sheet (Annex VI: Scope of Work Form i-vi) (clause by clause compliance of RFP with Component Level part numbers and reference brochures)	
10.	Principal authorization Certificate specific for this project (Original letter from Principal (1) vetting/Verifying the quoted solution, (2) completeness of Licenses as per BOQ. (3) certifying Company Competency for implementation)	
11.	Completely filled BoC (as part of Financial Bid)	
12.	Project Execution Plan (Time Lines, Resources, dedicated Staff, Shared Staff, etc.)	
13.	BOQ (Component Level part numbers and reference brochures)	
14.	Firm must have more than Rs. 200 million annual revenue for Software off the self-solution and Services (Last Two year documentary proof required)	
15.	Firm Must have at least one Certified Project Management Specialist	

S. No.	Attributes	Max. Score	Weightage	Criteria	Reference Page# Documentary Proof
Part B) General Evaluation - Corporate Profile					
		16. Corporate Profile			
17.	Location of Offices	10	10	Offices in all specified cities (Lahore, Karachi, Islamabad)	
			7	Offices in two specified cities (Lahore, Karachi, Islamabad,)	
			3	Offices in one specified cities (Lahore/ Karachi/	
18.	Financial Strength (last Two years)	10	10	Turnover of Bidder in consideration / Maximum Turnover amongst all the Bidders * 10	
19.	Company in Operations in relevant field (No. of years)	10	10	No. of year of Bid in consideration / Maximum Year amongst all of the Bids * 10	
20.	Company Association with Product Principal	10	10	No. of year of Bid in consideration / Maximum Year amongst all the Bids * 10	
	Relevant Technical Staff				
21.	Certified resources in Financials module of quoted product (Documentary proof and Certification Copy required)	10	10	No. of Certified Resources of Bid in consideration/ Highest No. of Certified Resources amongst all bids * 10	
22.	Certified resources in student administration system modules of quoted product (Documentary proof and Certification Copy required)	10	10	No. of Certified Resources of Bid in consideration/ Highest No. of Certified Resources amongst all bids * 10	
23.	Quoted Product Commercial Off the Shelf (COTS) ERP / CMS Certified Database Engineer (Documentary proof and Certification Copy required)	10	10	No. of Certified Resources of Bid in consideration / Highest No. of Certified Resources amongst all bids * 10	

	Relevant projects				
24.	Firm has **completed Similar Projects** in Pakistan (based on deployment of COTS ERP / CMS (Documentary proof and references required)	10	10	No. of Projects of Bid in consideration/ Highest No. Projects amongst all bids * 10	
	Firm has **completed Similar Projects** internationally (based on deployment of COTS ERP / CMS (Documentary proof and references required)	10	10	No. of Projects of Bid in consideration/ Highest No. Projects amongst all bids * 10	
25.	Firm has **completed COTS Enterprise Resource Planning Project of same proposed product** in Pakistan (Documentary proof and references required)	10	10	No. of Projects of Bid in consideration/ Highest No. Projects amongst all bids * 10	
26.	Firm has **completed COTS Enterprise Resource Planning Project of same proposed product** Internationally (Documentary proof and references required)	10	10	No. of Projects of Bid in consideration/ Highest No. Projects amongst all bids * 10	
27.	Firm has COTS **CMS/ERP Projects In hand** Internationally (based on quoted product, with deployment of Campus Management Solution). (Documentary proof and references required)	10	10	No. of Projects of Bid in consideration/ Highest No. Projects amongst all bids * 10	
28.	Firm has COTS **CMS Projects In hand** internationally (based on quoted product, with deployment of Campus Management Solution). (Documentary proof and references required)	10	10	No. of Projects of Bid in consideration/ Highest No. Projects amongst all bids * 10	

29.	Firm has COTS **Projects In hand** **(**Maintenance Contract for development / maintenance of Campus Management Solution). (Documentary proof and references	10	10	No. of Projects of Bid in consideration/ Highest No. Projects amongst all bids * 10	
Subtotal		**230**			
Weight of the Part (B) in Technical Evaluation is 10% and firm's Score will be calculated using following formula **Firm's Score = Marks Obtained by Firm in Part B/ Total Max. Marks of Part B * 15**		**15**			
Part C) Product Technical Strength					
	Product Market Share and Market Resources				
30.	Principal Financial Strength in Region (No. Quoted CMS product of Licenses sold for last Five years)	10	10	Sales turnout value of Bid in consideration/ Highest Sales turnout for last two years value amongst all Bids * 10	
31.	Principal Human Resource Strength in Pakistan	10	10	Group total Number of employees of Bid in consideration/ Highest Group total Number of employees value amongst all Bids * 10	
32.	Principal Human Resource Strength in APAC	10	10	Group total Number of employees of Bid in consideration/ Highest Group total Number of employees value amongst all Bids * 10	
33.	Quoted Product **(CMS) based Projects in Academia (APAC Region** (Documentary proof and references required)	10	10	No. of Projects of Bid in consideration/ Highest No. Projects of all the Bids * 10	
34.	Quoted Product **(CMS) based Projects in Pakistan** (Documentary proof and references required)	10	10	No. of Projects of Bid in consideration/ Highest No. Projects of all the Bids * 10	
35.	Quoted Product **ERP Projects completed in Academia (APAC Region)** (Documentary proof and references required)	10	10	No. of Projects of Bid in consideration/ Highest No. Projects of all the Bids * 10	

36.	Quoted Product **ERP Projects completed in Academia (Pakistan Region)** (Documentary proof and references required)	10	10	No. of Projects of Bid in consideration/ Highest No. Projects of all the Bids * 10	
37.	Number of Off-the-Shelf Enterprise Products of Principal (List of products is required)	10	10	No. of Projects of Bid in consideration/ Highest No. Projects amongst all the Bids * 10	
	Product Third Party Rating				
	Principal Contribution Research and Education				
38.	Innovation Centers in collaboration with Academia projects Report from independent source required	10	10	No. of Centers of Bidder in consideration/ Highest No. of Centers amongst of all Bidders * 10	
39.	Research Centers in collaboration with Academia projects Report from independent source required	10	10	No. of Centers of Bidder in consideration/ Highest No. of Centers amongst of all Bidders * 10	
40.	Principal **R&D annual Spending** International Report from independent source required	10	10	Last year R&D Spending of Bidder in consideration/ Highest last year spending amongst of all Bidders * 10	
41.	Principal **R&D annual Spending** National Report from independent source required	10	10	Last year R&D Spending of Bidder in consideration/ Highest last year spending amongst of all Bidders * 10	
42.	Approved **Training Academies / Testing Centers in APAC of the principal (offering certification of quoted products)**	10	10	No. of academies of brand of Bid in consideration/ Highest No. of Academies amongst all the Bids * 10	
43.	Approved **Training Academies / Testing Centers of the principal internationally (offering certification of quoted products)** (Documentary proof and References)	10	10	No. of academies of brand of Bid in consideration/ Highest No. of Academies amongst all the Bids * 10	

	Product Features Rating				
44.	Web Interface Completeness in quoted solution	40	40	Complete Web Interface for all function (Administrator, Designer, End User, Public User)	
			20	Complete Web Interface for (Designer, End User, Public User) and for Administrator GUI based	
			10	Complete Web Interface for (End User, Public User) & for Administrator and Designer GUI based application	
45.	Task-oriented navigation	20	20	A task-oriented Graphical navigation to allow users to use business process based navigation to complete tasks	
46.	Navigation configurability	20	20	Web base creation/ customization of personalized navigation pages and Selection of NEW pages in addition to, or instead of, the default navigation pages that are provided out of the box	
47.	Web Customization and Migration tasks	20	20	Online Customization and Editor to Customize dynamic layouts/ CSS Sheets	
			10	GUI Based WEB Customization Tool for Dynamic layouts/ CSS sheets	
			5	Manual CSS Sheet/ Reports Editing and Offline customization with separate tool	
48.	No. of Products/ Components Quoted in Bid to comply Scope	20	20	Min No. Products quoted amongst in Bid in consideration / Highest No. of Resources amongst all the Bids * 10	
49.	Compliance to the Features desired in this RFP (off the self)	30		No. of Features complied/ Total No. of Features listed in Annex VI * 30	
Subtotal		**400**			
Weight of the Part (C) in Technical Evaluation is 25% and firm's Score will be calculated using following formula **Firm's Score = Marks Obtained by Firm in Part (C) / Total Max. Marks of Part (C) * 20**		**20**			

S. No.	Attributes	Max. Score	Weight age	Criteria	Reference Page#
Part D) Operation and Maintenance					
		Corporate Profile			
50.	Dedicated Resources deputed to run O&M	10	10	Min. No. of resources among all bids/ No. of resources of bid in consideration * 10	
51.	Principal Support	10	10	Principal Direct Involvement in Project	
			7	Principal Involvement in escalation/ Premium	
			3	Principal TechNet / remote Support	
52.	Call-Out Interval	10	10	Min. time for all fault severity levels from all bids in consideration/ Time for all fault severity levels of the bid in consideration * 10	
53.	Resolution Time	10	10	Min. time for all fault severity levels from all bids in consideration/ Time for all fault severity levels of the bid in consideration * 10	
54.	HR dedicated for the O&M (Consultants)	10	10	No. of HR of Bidder in consideration/ Highest No. of HR amongst of all Bidders * 10	
55.	HR dedicated for the O&M (Engineers)	10	10	No. of HR of Bidder in consideration/ Highest No. of HR amongst of all Bidders * 10	
56.	Resolution Time	10	10	Min. time for all fault severity levels from all bids in consideration/ Time for all fault severity levels of the bid in consideration * 10	
57.	Operations Plan (Responsibility area matrix, Standard Operating Procedures (SOP), etc.)	10	10	[Responsibilities (Rows) x No. of Parties (Columns) + No. of processes in the SOP of the bid in consideration]/ Highest Value from all the bids in	
Subtotal		**80**			
Weight of the Part (D) in Technical Evaluation is 5% and firm's Score will be calculated using following formula Firm's Score = Marks Obtained by Firm in Part (D) / Total Max. Marks of Part (D) * 5		**5**			

Part E) Project Execution					
58.	Project Execution Plan	10	10	(Project Execution time (days) of the bid in consideration) ≈ Mean (Project Execution time (days) of all the bids in consideration)	
			7	> Min. (Project Execution time (days) of the bids in consideration) OR <Max. (Project Execution time (days) of the bids in consideration)	
			3	Min. (Project Execution time (days) of the bids in consideration) OR Max. (Project Execution time (days) of the bids in consideration)	
59.	HR dedicated for the project	10	10	(Dedicated Personnel of the bid in consideration) ≈ Mean (Dedicated Personnel of all the bids in	
			7	> Min. (Dedicated Personnel of the bids in consideration) OR < Max. (Dedicated Personnel of the bids in consideration)	
			3	Min. (Dedicated Personnel of the bids in consideration) OR Max. (Dedicated Personnel of the	
60.	No. of Days required to install and commissioning the Base product ERP for UoP	10	10	Min. (time for all from all bids in consideration)/ (Time for all of the bid in consideration) * 10	
61.	No. of Days required to install and commissioning the Base product CMS for UoP	10	10	Min. (time for all from all bids in consideration)/ (Time for all of the bid in consideration) * 10	
62.	Project Execution (Responsibility area matrix, Standard Operating Procedures (SoP), etc.)	10	10	(Responsibilities (rows) x no. of parties (Columns)) + no. of processes in the SoP) of the bid in consideration/ (Highest Value from all the bids in consideration) * 10	
Sub Total		**80**			
Weight of the Part (E) in Technical Evaluation is 10% and firm's Score will be calculated using following Firm's Score = Marks Obtained by Firm in Part (E)/ Total Max. Marks of Part (E) * 10		**10**			

Part F) Presentation/POC					
63.	Distinguished Features of product	20		To be assigned by Technical Evaluation committee	
64.	Implementation Firm Value Added Features of project	20		To be assigned by Technical Evaluation committee	
65.	Project Roll out Methodology and Phasing	20		To be assigned by Technical Evaluation committee	
66.	Solution Design/ deployment Methodology	20		To be assigned by Technical Evaluation committee	
67.	Solution Security and High Viability Design / Methodology	20		To be assigned by Technical Evaluation committee	
		100			
Weight of the Part (F) 20% and firm's Score will be calculated using following Firm's Score = Marks Obtained by Firm in Part (F)/ Total Max. Marks of Part (F) * 20		**20**			
Firm's Total Score = Part (B:F)		**80**			

- For avoidance of any doubt only the technical competencies of lead bidder will be taken for evaluation
- No Score will be marked for the information without documentary proof.
- In case of Confidentiality of any documentary proof score will be considered subject to the availability of relevant Non-Disclosure Agreement (NDA) in the BID

Annex V: Financial Scoring Criteria

Weight of the financial scoring is 20% and Firm's Score will be calculated using following formula. Firm's

Score= (Minimum Bid Value / Bid in Consideration)* 20

Annex VI: Scope of work

This section lists all Forms listing Products' Technical/ Functional Requirements, Implementation and Integration Services, non-functional requirements and Hardware needed for Higher Education Management Information System (Student Information System) solution with Two (02) Options to selected the best suited for University of Peshawar:

Form-I. General Technical Requirements
Form-II. Minimum Products' Functional Requirements
Form-III. Student Information System Deployment Services
Form-IV. Bill of Quantities (Software Licenses and Implementation)
Form-V. Non-functional requirements
Form-VI. Hardware Requirement

Instructions

Status: ***Yes*** *– meets requirement out of the box;* ***C*** *– meets requirement with customization;* ***TP*** *–meets requirement with third-party product;* ***N*** *– does not meet requirement*

Compliance: Bidder must clearly identify the component/ module that quoted Product Comply to requested feature or not with only Option (Yes/ No).

Non Compliance to any requirement may lead to rejection of BID

Required Components: Name the software / hardware Component/ Module quoted which comply the desired feature.

Reference page #: Attach the component/ module reference document and highlight and/ or number the claimed feature on it and provide the reference

Annex VI: Form I – General Technical Requirements

(To be filled by the bidder as part of technical proposal)

Item #	Description		Status (Yes/C/TP/N)	Compliance (y/n)	Proposed Required Component(s)	Type of User License(s) required to meet the respective technical/ functional requirement(s)	Reference page # Schedule/ Highlight the feature
1	**Technical Features**						
	1.1 General Requirements	a. The solution allows users with security access to override rules where appropriate					
		b. The solution allows students cohorts to be identified and maintained e.g. tutorial group, class groups, assignment groups, international students, research students etc.					
		c. The solution supports version control of key data concepts, including, but not limited to, awards, courses, units and organizational units etc.					
		d. The solution incorporates extensive and powerful data import and export facilities					
		e. The solution incorporates a powerful, extensive and user definable set of data query tools.					
		f. The solution displays information graphically without the need for users to download data to a third party product e.g. system provides the facility to display charts of active courses by organizational unit, students by mode of study, student types etc. Respondents to detail fully the extent to which the solution meets this requirement.					
		g. The solution provides the infrastructure to allow screen, form and report field names to be changed to suit institution nomenclature					

		h. The solution provides the ability to view transactions for a student by term within each module. For example, the user can view all applications for admissions for a student on the Application Summary screen; the user can view all enrolment transactions for a student for a specific term using the Enrolment screen. Similar summary screens are available in Financial Aid, Student Finance, Correspondence, Event participation and to audit specific transactions such as name changes, grade changes, etc.					
		i. The solution delivers very robust Search/Match functionality. Everywhere that a new ID (student ID) can be created (manually, tape load, test score load, transcripts, etc.). The solution can be configured to automatically run Search/Match to ensure that the institution is not creating duplicates.					
		j. The solution provides users with the ability to restrict/encumber/sanction students so that they are stopped from accessing various functions or receiving certain services, e.g. block on academic transcripts, graduation, viewing exam results, online enrolment etc.					
		k. The solution records special requirements at a student, course attempt and unit attempt level e.g. Immunizations records etc. This information cannot be stored in free-text notes fields, but fields specifically designed with start and end dates, reference numbers etc.					
		l. The solutions supports standard browser cut and paste functionality.					
		m. The solution can be configured to automatically send an email to a student when a staff member exercises an override, indicating approval or otherwise. The contents of the email are user defined and customizable					

2	**Security and System Features**						
	2.1 Security/ System Administration	a. A fundamental requirement is that most if not all security functions can be maintained by the user system administrators without the need for institutional IT support. Respondents are to detail all areas of the solution where IT support is required. Following initial one-time IT-based setup of integration with LDAP, SSO, registration of digital certificates, on-going security functions are web-based and may be distributed across campuses.					
		b. The solution provides varying granularity for data level security. Respondents to explain fully the level of granularity and an overview of how the security system is structured - e.g. roles/groups/menu functions etc. Security should based around roles that collect users into logical groups. Roles are assigned permission lists, granting access to system objects such as menus, pages, background jobs, reports and row-level security provisions.					
		c. The solution ensures that at logon, users are required to enter a unique user ID and a password.					
		d. The solution allows for password ageing					
		e. The solution enforces password maintenance such as no of attempts allowed					
		f. The solution allows user system administrators users to maintain security at form, report, job level or data field for roles and/or users without the need for IT/DBA support					
		g. The solution provides the facility to link security roles to individual users					
		h. The solution allows for the creation of an unlimited number of security roles					
		i. The solution allows user system administrators to link menus, forms, reports etc. to security roles					

		j. The solution allows user system administrators to link multiple security roles to an individual user					
		k. The solution allows roles and/or users to be configured to have restricted update access for specific forms. E.g. User can only update course information for those courses for which the user is responsible.					
		l. The solution has the ability to limit data operations (insert, update, delete or query only) assigned to particular roles					
		m. The solution allows user system administrators the ability to re-set user passwords					
		n. The solution will provide appropriate security to restrict student access to their own details					
		o. The solution provides the facility to set up menus and sub-menus for classes of users					
		p. The solution allows selected security roles/users to override and/or waive rules e.g. a small number of 'super' users with access to most or all functions.					
		q. The solution allows user system administrators to immediately suspend individual user access privileges					
		r. The solution has an automatic timeout of connected but inactive users					
	2.2 Ease of Use	a. Shortcut navigation is provided via navigational collection portlets, favorites and hyperlinks.					
		b. The solution carries forward context values (at least student ID, course code, citizenship, gender, title) from one form to the next. Within a given page, basic context values are carried through on the top of all of the tabs (Student Name and ID and other relevant context values). In addition, Student ID and other data items appear in context for search when moving between screens.					
		c. The solution provides the facility to display multiple student indicators, displayed along with student personal details:					
		d. the indicators are user definable					

		e. the logic behind the indicators is user definable					
		f. indicators are linked to security role/s					
		g. examples of student indicators include but not limited to: international student lamp, graduate lamp, grandaunt lamp, potential graduand lamp, sanctioned lamp, sponsored, non-English speaking background, nationality, students under 18, articulating students, students at academic risk based on GPA etc. These may be displayed with a combination of service indicators and student attributes.					
		h. The solution allows users to create list of favorites of forms and reports					
		i. Ability to move directly from one form to another without the requirement to move up and down menu structures. In particular, the solution provides the ability for a user to create a user-defined list of links to access pages directly.					
		j. The solution inserts default values automatically where possible.					
		k. Intuitive form navigation across all modules, minimizing the need for special training.					
		l. The solution has consistent form design across all modules					
	2.3 On-line Help	a. The solution has a comprehensive electronic user manual for processes, configurations etc. and can be easily printed or exported					
		b. The solution has a context sensitive help on all screens and for all data elements					
		c. The solution provides comprehensive on-line technical documentation					
		d. The solution provides an on-line tutorial facility for staff					

	2.4 Workflow	a. The solution provides an integrated workflow engine enabling user definition and modification of business rules. It should include an inbuilt workflow engine, designed for intra-application workflow and integration with external notification mechanisms. The workflow should be based around the concepts of rules, roles and routings allowing work to be routed to individuals or pools of users, evaluated dynamically.					
		b. The workflow routes information and notifications via the institutes email solution using a protocol such as SMTP.					
		c. The solution allows workflow to be maintained by business administrators. Normal day-to-day administration of workflow is based on role membership and web-based administration pages. Only structural changes to workflow processes will exceed the scope of business administrators.					
		d. The solution provides staff with a list of current workflows/tasks awaiting action.					
	2.5 Data Integrity	a. The solution provides for comprehensive data validation at point of entry to the maximum extent possible					
		b. Data is cross-validated at point of entry against other data held within the solution to the maximum extent possible, ensuring data integrity at all times					
		c. Data is cross-validated at the database level against other data held within the solution to the maximum extent possible, ensuring data integrity at all times					
		d. The solution architecture provides for extensive and comprehensive implementation of business rules and constraints within the application logic tier.					
		e. The solution provides extensive validation reports for all batch data creation & update processes. Batch reports log their progress to a batch messages area. They may be viewed readily via the browser.					

		f. The solution adopts an open format interface that doesn't require proprietary tools					
		g. The solution will be able to input data item/objects from other sources efficiently and easily					
		h. The solution supports date effective data to the maximum degree possible, thereby enabling the maintenance of comprehensive data history					
	2.6 Audit	a. The solution includes a comprehensive audit trail functionality.					
		b. The solution provides a history of all on-line transactions especially in the self-service environment					
	2.7 Batch System	a. All reports/jobs to be able to be run on-line and in batch;					
		b. Ability to run any number of jobs/reports in a single batch request; jobs can be set to run in sequence or in any order.					
		c. Ability to send reports via email as an attachment - in user selectable formats e.g. pdf, csv etc.					
		d. The solution provides comprehensive and clear run logs including error reports					

Annex VI: Form II – Minimum Products' Functional Requirements

(To be filled by the bidder as part of technical proposal)

Item #	Description		Status (Yes/C/TP/N)	Compliance (y/n)	Proposed Required Component(s)	Type of User License(s) required to meet the respective technical/ functional requirement(s)	Reference page # Schedule/ Highlight the feature
A	Campus Management Solution						
1	Campus Community & Organizational Structure						
	1.1 Organizational Unit	a. Incorporates sophisticated Organizational unit's functionality enabling user definition of terminology (e.g. Campus, Faculty; Department, Division, Section etc.)					
		b. Maintains locations within Organizational units					
		c. Supports an alpha numeric coding schema					
		d. Maintains Organizational unit types e.g. institutions, colleges, departments, center of excellences, research centers, sponsors, international agencies, external Organizations, benefactors, third party debtors, etc.					
		e. Can differentiate between academic and non-academic Organizational units					
		f. Can differentiate between internal and external Organizational unit					
		g. Maintains status codes e.g. planned, current, inactive, with start and end dates					

		h. Allows for multiple address types to be stored against Organizational units					
		i. Possesses the ability to designate one address instance as the address to which system generated correspondence is directed for an Organizational unit					
		j. Allows for multiple address types to be stored against locations					
		k. Possessed the ability to designate one address instance as the address to which system generated correspondence is directed for a location					
		l. Allows that Users are assigned to Organization units					
		m. Ability to maintain different versions of the organizational unit over time based on effective date with ability to turn “on” or “off” the organization unit					
	1.2 Biographic / Demographic Management	a. Ability to create and maintain data about people and organizations, both internal and external to institution					
		b. Ability to store numerous types (home, business, campus, billing, etc.) of contact data (addresses, phones, email)					
		c. Ability to store numerous types of names (primary, legal, preferred)					
		d. Ability to store various information about a person such as relationship, emergency contact, work experience, health information, publications, languages, athletic and extracurricular activities, membership, photos, visa, passport details, education history					
		e. Ability to track present, historical and future information of a student via effective date					
		f. Able to maintain data integrity where the entry of duplicate or multiple records is minimized using search/match to define criteria to check if a student record already exist in the system					

		g. Able to maintain multiple types of checklist for a student / organization based on administrative function					
		h. Able to automatically trigger a restriction or additional levels of service to the students based on certain criteria such as if a student has outstanding library fines, he is not allowed to view his grades in self service					
	1.3 Event Management	a. Ability to create and maintain data about institutional events and committees					
		b. Organizes information about events and committees					
		c. The solution is able to maintain a graphical calendar of events					
		d. The solution has the ability to define one or more sessions for an event					
		e. The solution has the ability to record venues and record the venue against the event					
		f. Provides the ability to define invitee lists using a delivered segmentation tool					
		g. The solution can generate guest lists by importing contacts as CSV formatted files					
		h. The system allows for the collection and management of registration details and payments					
		i. The solution has the ability to issue invitation by such channels as, but not restricted to: Direct Mail, email, telesales, fax, SMS, web site banners or inbound marketing					
		j. The solution allows for the tracking and recording of RSVP's by such methods as, but not restricted to: Post (manual), Face-to-face (manual), email (automated), fax (manual), telephone (manual), or online self-service portal (automatic)					
		k. The solution has the ability to track responses by date, time and response outcome.					

		l. Provides ability to record event attendees					
		m. Provides ability to create reusable committee templates					
		n. Provides ability to allocate committee resources					
		o. The solution has the ability to clone existing events					
		p. The solution provides a repository for templates, documents, brochures, etc.					
	1.4 Community Directory	a. Ability to view contact information for students, employees and alumni on-line					
2	Recruiting & Admissions						
	2.1 Recruiter Information	a. Maintain recruiter information					
		b. Monitors recruiter activities and events					
		c. Plans and coordinates independent recruitment programs					
		d. Matches a recruiter to a prospective student based on region or interest					
		e. Maintain prospect information in the system					
		f. 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 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 should be able to create a recruiting history for the institution.					

		g. 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					
		h. Records and maintains the country, city and other pertinent geographical unit which is the agency's principal place of business					
		i. Records and maintains the agency and agent with whom the applicant initially submitted the application					
		j. Records and maintains the responsible agency and agent when an application outcome was finalized (offer/reject/request more info)					
		k. Records and maintains the agency and agent with whom the applicant completed the application					
		l. Records and maintains the agency and agent who is currently responsible for the application instance					
		m. Records and maintains details regarding whether the agency/agent is to be forwarded admission correspondence directly on behalf of the applicant					
		n. Enables agencies/agents to produce offers on behalf of the institution for specified applicants/courses based upon an appropriate security and role mechanism					
		o. Records and maintains the details of correspondence that has been forwarded to the agency/agent on behalf of the applicant					
		p. Records and maintains information: (i) about when an applicant changes agency/agent, (ii) of the applicants request and consent to change agency/agent within the overall communications features of the solution					
		q. Records and maintains information related to agencies and their staff (agents) e.g. name, address, multiple contact details and address types					

		r. 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					
		s. 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					
		t. 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					
		u. 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					
		v. Allows portal access for agencies and agents to maintain their own details to allow self-service / updating with appropriate security/role mechanism					
	2.2 Online Admissions Application System	a. The System should have the feature allowing students to submit their admission forms and pay its processing fee online.					
		b. In case a student cannot submit an online admission form, the system should have the feature to allow a Data Entry Operator to input information from the hardcopy of a student’s submitted form.					

		c. The system should store the batch or session wise data of all applicants who submitted their forms.					
	2.3 Prospect/ Applicant Information should	a. Maintains applicant information in the system					
		b. Automatically evaluates applicants based on user-defined criteria					
		c. Coordinates concurrent prospect and application records					
		d. Provides facilities for applicants/students to apply and register on multiple programs/ plans					
		e. Enables to have admission period flexibility to invite applications from new applicants/ students before each semester or academic year starts					
		f. Enables applicants to apply through different means such as mailing of an application form, online through the Internet, etc.					
		g. 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					
		h. 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.					

		i. 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					
		j. Provides a program table be created/ maintained to include the necessary attributes of programs offered. This will be the basis for verification of the programs applied for and the printing of transcripts/graduation certificate					
		k. 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/ programs					
		l. Allows students to change their course/ programs choices, and applicants to change their personal information as well. Relevant validity checking will be done on the new course/ programs choices					
		m. 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 programs basis instead of on a course basis, e.g. full-time associate degree programs with limited course choices; research degree programs consisting of a mixture of course and research elements. Applicants’ public examination results and programs choices may also be taken into consideration in prioritization of applicants for selection and admission					

		n. 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					
		o. 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					
		p. 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					
		q. Allows users to skip the normal procedures to register students directly subject to verifications such as no double registration on the same course					
		r. Integrates with the finance system (if available and operational at university) in relation to the students' payment of tuition fees					
		s. Allows various entry points such as area of interests, level of study, education background, etc. and display the relevant University programs for the applicants to consider					

		t. Provides facilities to let students transfer, defer and withdraw from programs/ courses					
		u. 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					
		v. 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 programs/courses					
		w. Maintains different status for students i.e. Active or Non Active, Special Leave, Postpone Semester					
		x. Provides services relating to Reporting and Analysis					
		y. Is enabled with to Enable or Disable any of the services/ features as mentioned in this RFP					
	2.4 Correspondence	a. The solution generates correspondence to prospects, students, alumni and external organizations maintained in the database					
		b. The solution generates correspondence to members of staff, sponsors and other persons maintained in the database					
		c. Communication records can be created, tracked, and tied to external Organizations					
		d. Ability to generate correspondence via hard copy (letter/fax) or softcopy (email) or notifications via SMS					
		e. The solution enables user definition of correspondence types with ability to maintain multiple templates for each correspondence type.					
		f. Able to apply a template to a particular student cohort and maintain different versions over time with effective dates					
		g. The solution allows generated correspondence to be printed, emailed or delivered via the student self-service facility					

		h. The preferred method of communication (letter, email) is tracked and can be maintained for each student					
		i. Email communications may be richly formatted HTML messages or plain text to accommodate recipients who have email applications that can handle HTML as well as those who do not					
		j. The solution provides the facility for an authorised business (non-technical) user to identify and target a granular student cohort for correspondence by “data mining” the constituents using a simple wizard based interface and should not require any technical, data structure or SQL knowledge .e.g. international students					
		k. Cohort lists can be either re-used or cloned					
		l. The solution provides the ability to generate cohort lists by importing recipients from CSV formatted files					
		m. Ability to merge information relating to different issues, into the one correspondence e.g. international student offer letter includes academic credit information					

		n. The solution provides the following, but not limited to, system correspondence types: • Application acknowledgement • Request for further information • Application outcomes • Admission application package offers • Admission acceptance acknowledgement • Course articulation • Intermission • Termination • Discontinuation • Probation and exclusion • Deferment • Withdrawal without academic penalty approved and not-approved • Withdrawal without financial penalty approved and not-approved • Statement of Account • Reminder Statement of Account • Sponsor Statement of Account • Ceremony Invitation					

		o. In addition to the above correspondence types, the system should also provide electronic correspondence, and any required landing pages, that allows two way, or interactive, communications with a recipient, for example • Surveys • Event Registration • Registration/Application forms • Newsletters • Profile update • Payments					
		p. Does the solution contain an integrated 'editing' tool to build electronic correspondence materials including, but not limited to newsletters, surveys, invitations, event registrations, corporate messaging and online applications					
		q. Can the editing tool be used by a non-technical user to create and edit emails and web page forms (e.g. landing pages) without any technical syntax or programming knowledge					
		r. The editing tool allows a user to build a web form by adding multiple field types to the form from a predefined list including, but not limited to: Paragraph, Custom HTML, Horizontal line, Profile field, Choose One, Choose Many, Yes/No, Text Entry, Date Entry, Time Entry, Upload File, Button					
		s. The editing tool must allow for fields to be mapped to, or pre-populated from, the database allowing for personalised messaging and/or data updates.					
		t. Field mapping is performed using a wizard based selection tool using field labels and logical groupings without the need for a user to know the underlying table and field names or complex SQL statements					

		u. Can the system use pre-defined branding templates to ensure the landing pages adhere to branding guidelines and maintains consistent design					
		v. The application has the ability to include opt-out keys to opt out of messages sent by the application					
		w. Can electronic communications be designed to create objects or start processes as a result of certain values or threshold scores being met, for example: Create tasks, create single or multiple print correspondence, create single or multiple follow up emails, or create single or broadcast Text Messages					
		x. Does the solution allow an authorised user to design and execute communication initiatives consisting of one or more correspondence distribution methods across multiple distribution channels to one or more cohorts					
		y. The solution provides the ability to manage the timing and scheduling of the above communication initiatives based on predefined triggers such as dates or system values, for example a student nearing the end of a leave period, or to issue follow-up correspondence to students who have accepted offer but not enrolled in allocated timeframe, or a student due to return from a leave of absence who has not re-enrolled					
		z. Can planned communication initiatives be viewed via a graphical calendar interface					
3	Curriculum Management	This module supports the university's course and unit development, approval and publication business processes					

	3.1 Academic Management	a. The Academic Management function is supported by: • version control of curriculum items • the extensive use of user-defined workflows that provide decision points for nominated users • user-defined mandatory fields • user-defined optional fields • user-defined decision rules as workflow on which a curriculum item should progress through the ability to reconfigure the system to support future changes in business processes • automatic e-mail notification to people or groups at user-defined steps in workflows • an audit trail of all changes to a curriculum item through all versions					
		b. The solution holds information on courses, study areas and units as follows: • objectives • entry requirements • career opportunities • description • completion rules • fees and charges • information details in the Curriculum Section					
	3.2 Curriculum (Courses, Study Areas and Units)	a. 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,					

		b. 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					
		c. 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					
		d. 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: • admission • enrolment • progression (probation/exclusion) • completion					
		e. The solution provides quota management functionality including, but not limited to, enrolment quota, reserved places, buffers, dedicated/designated assignment of places, wait listing					

		f. 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					
		g. This function is supported by: • workflow • Extensive use of management and operational reports					
		h. The information listed below is: • Dynamically maintained from the Academic Management function above. • Stored in the same tables as the data maintained by the Academic Management function above					
	3.3 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,					
		a. 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: • admission • enrolment • progression (probation/exclusion) • completion					
		b. Defines offerings of a course version that allows different course structures at different teaching locations					
		c. Provides the ability to put in a future start date and only accept commencing students after that date					
		d. Provides the ability to put in a future discontinued/expiry date and still accept commencing students into the course version					

		e. Allows courses to be linked to one or more awards					
		f. Allows students to take alternative exits from a course					
		g. Rolls course versions to a future teaching period/academic year					
		h. Allows easy grouping of all course that lead to the same award					
	3.4 Maintain Unit Details	a. The solution captures and stores unit related information including, but not restricted to: • start, end, expiry dates • unit credit points enrolled and achieved when completed • an indicator that specifies whether it is possible to override the enrolled and/or achieved credit points at student unit attempt level • total unit contact hours, broken down by components • Unit version activities (seminars, tutorials etc.) • record and maintain timetable information for unit versions, their modules (if any) and activities including, but not limited to: o primary lecture and quota o linked secondary activities (tutorial, lab etc.) and their quotas o mode of delivery for each activity o location / venue o time slot and duration o contact person for each activity • whether or not the unit is assessed • assessment items • grading schemas • unit category code(s) • unit reference code(s) • campuses offered • classes offered • Unit rules (pre-requisites, co-requisites, translations, incompatibles, quotas etc.)					
		b. Rolls unit versions to a future teaching period/academic year					

		c. Provides the facility to store comments/notes					
	3.5 Maintain Study Area	a. The solution records and maintains study area related information including, but not limited to: • start, expiry, end dates • status codes, e.g. planned, current, closed • linked to course versions • linked to course version offerings • study area structure(s) • entry requirements for a specific study area • linked to teaching periods • ‘Type’ i.e. Major, Minor etc.; whether administrative or academic • credit points for study area • an indicator to show whether or not a study area is printed on the students; o testament/ parchment o official academic transcript • discipline code(s) or fields of education • record and maintain relationships between study areas • record and maintain study area rules, including: o Co-requisites o Incompatibles o Pre-requisites o Equivalents o Completion • institutional defined fields					
		b. The solution incorporates rules for calculating a student's study area GPA					
		c. The solution supports multiple study areas in a single degree course					

		d. The solution supports multiple study areas in a multiple degree course, with the study area linked to the component courses					
	3.6 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,					
		a. Provides for personalized student course plans to be dynamically generated at time of offer/acceptance					
		b. Provides a student-friendly solution for managing student self-managed choice					
		c. 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					
		d. 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					
		e. The solution enables students to view/modify their course plan via the self-service portal					
		f. 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					

		g. Record and maintain details of course plans at the course offering level, including, but not limited to: • Course plan coordinator • Course plan status (e.g. approved for enrolment, approved for graduation) • Course components (Majors, Minors etc.) associated with course plan • Units of study within course components • Units of study within years of course • Other study options within years of course					
		h. The solution provides a student-friendly solution for managing student self-managed choices (e.g. selecting units from a list of options)					
		i. The solution incorporates checking of academic progress against a student course plan					
	3.7 Calendars	a. Incorporates a calendar enabling user definition of all significant periods of time (e.g. teaching periods, fee periods)					
		b. 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.					
		c. Provides the ability to link calendars via relationships e.g. teaching periods within an academic year					
		d. Allows Calendars to support spanning years					

		e. Provides a flexible calendaring facility, enabling institution definition of all significant periods of time including, but not limited to, definitions of: • Academic periods • Enrolment periods • Teaching periods • Fee assessment periods • Examination periods • Academic progression periods • Graduation periods					
		f. Electronically rolls calendars into the following 'year'					
		g. 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.					
		h. 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.					
	3.8 Class Timetabling	a. The solution is can be configured to import a generated class timetable from an external package					
		b. The solution provides a web-based facility for enquiries on the published class timetable					
		c. The solution uses a "shopping basket" concept, where students can select a variety of classes and validate that they meet the class pre-requisites for enrolment and upon completing enrolment, looks at their resultant personalized class timetable					

	3.9 Research	a. Able to indicate that the academic program/ plan is research eligible. Settings at the academic plan level will override academic program settings					
		b. Able to enroll candidates into the research program					
		c. Able to indicates that candidates are required to formally notify the University of their intention to submit their theses for examination by lodging a “Notice Of Intention To Submit” form prior to submission					
		d. Able to define when communications are sent to the candidate, supervisor, and any other interested parties regarding the imminence of the end of the candidature and the requirement to submit a thesis.					
		e. Able to define minimum and maximum number of examiners that must examine the thesis for the examination to be deemed valid					
		f. Able to configure research status codes to be used in Candidate / Thesis Management process (topic, supervisor, consumption, assignment and thesis)					
		g. Able to define progression level for each research status					
		h. Able to configure and activate (or deactivate) research topic categories and research topics or allow candidates to propose new topics with effective dates					
		i. Able to assign research topics to one or more academic program/plan or a combination of both					
		j. Able to define how many candidates can apply for admission for the research topic					
		k. Able to define assignment requirement for each research topic					

		l. Able to define additional business requirements or assignments that can be assigned to research candidates. Examples include: • Animal testing clearance. • Human testing approval. • Intellectual property rights on					
		m. Able to view and add attachments to the assignments					
		n. Able to define maximum number of candidates the supervisor can be assigned to supervise					
		o. Able to create candidates by the following methods:- • Application to a research-eligible program/plan • Updating an existing admissions application to a research-eligible program/plan • Using Quick Admit process • Using the Student Program / Plan component to assign a research-eligible program/plan					
		p. Able to allow candidates to search for a pre-defined research topic or to propose a new research topic					
		q. Able to define the earliest and final date for a candidate to submit their thesis for review					
		r. Able to track and manage the progress of the submission and final approval of the thesis					
		s. Able to allow to resubmit thesis and restarts the thesis examination and grading process again					
		t. Able to maintain the thesis final result and indicate whether the examination certificate has been approved					
		u. Able to maintain recommendations from the evaluation of the thesis					

		v. Able to indicate Embargo type (reason for withholding the thesis from public such as Intellectual property, ethical considerations, national security and Un embargoed)					
		w. Able to indicate if the candidate is ready for graduation					
		x. Able to indicate whether the archival copy of the thesis has been sent to the University library					
		y. Able to define how many candidates can apply for admission for the research topic					
		z. Able to define assignment requirement for each research topic					
		aa. Able to define additional business requirements or assignments that can be assigned to research candidates. Examples include: • Animal testing clearance. • Human testing approval. • Intellectual property rights on					
		bb. Able to view and add attachments to the assignments					
		cc. Able to define maximum number of candidates the supervisor can be assigned to supervise					
		dd. Able to create candidates by the following methods:- • Application to a research-eligible program/plan • Updating an existing admissions application to a research-eligible program/plan • Using Quick Admit process • Using the Student Program / Plan component to assign a research-eligible program/plan					
		ee. Able to allow candidates to search for a pre-defined research topic or to propose a new research topic					
	3.10 Transcript	a. Ability to maintain multiple transcript templates with effective dates					

		b. Ability to configure different transcripts for different student cohorts					
		c. Ability to configure transcript templates using XML Publisher					
4	Accommodation – Hostel Management System	Hostel support system specifically designed to allow students, warden & caretaker to monitor and manage hostel activities prolifically.					
	4.1 Hostel Administration	The system should provide monitoring of essential information pertaining to institutions students residential arrangement from resident status, location, emergency contact information, maintenance complaints and dues status					
		a. Hostel area/building record system					
		b. Residents (Student, Faculty) Information management					
		c. Hostel Room reservation					
		d. Resident (Student, Faculty) complaint record section					
		e. Hostel Inventory Tracking					
		f. Hostel Services management					
	4.2 System Configuration	Each hostel connected to central server, through LAN, which will maintain student information, complaints, inventory, Hostel Budget Information, Emergency number Information, Students Mess Bill information, student's resident's status, Hostel Accommodation availability					
		a. Provides management and reservation of Hostel room availability					
		b. Hostel Admission section					
		c. Configure and define Multiple Hostel buildings, blocks, rooms, floors					
		d. Room Categorization and Management					
		e. Configure prices schedule for a room category or a room at different events,					
		f. Configure room availability by editing of its available beds					

		g. Statistic and reporting of hostel booking along with advance search					
		h. Manual booking and beds allotment					
		i. Provide feature to record and manage the room shifting request					
		j. Provide Hostel fee setup					
		k. Email correspondence with the student for the follow up of room reservation					
		l. Mess management module with features mess staff record and fee details					
		m. Provides module to manage and provide hostel services as per request of the students					
		n. Students able to online submit their maintenance complaints related to electricity, plumbing, cleanliness, furniture, mess or other services					
		o. Maintain the record along with emergency contact information, guest list of students/faculty members/employees					
		p. Solution include the Hostel Inventory, stock details					
		q. Provides information of the hostel policies/rules and regulations, fee details, date of payments					
		r. Guests record					
		s. Hostel In/out record of residents (Daily Attendance)					
		t. Notice board for Hostel events and activities					
		u. Customized reports as for students list, student room allotment list, student mess dues, notifications, events circulars, faculty detail reports, inventory status reports					
5	Student Records	a. Provides a 'search by alternate id' facility					

		b. Provides services for date effective address details, including: • Home address • Preferred address for the receipt of official correspondence • Preferred billing address • Emergency contact details • Work details • Other address types (e.g. email) • Other contact data (e.g. telephone, personal web page, mobile number and a separate SMS phone number)					
		c. Maintains user definable titles e.g. Mr., Ms, Dr etc.					
		d. Records and maintains award types					
		e. Records and maintains text notes that apply at the person level with user definable levels of security governing who can access what notes					
		f. Records and maintains the following information about students and other persons as a single model: • name (title, surname; first, second, and other given names) • awards/honours • preferred name (for use in most system related applications) • official name (for academic record and graduation purposes) • Designate field (e.g. PhD, MPhil, MBE, etc.) • date of birth, gender (including a value of 'undisclosed' or similar) • a staff indicator • a student indicator • special requirements, e.g. first aid etc.					
		g. 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					
		h. The solution maintains a history of name changes					

		i. 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					
		j. In addition, search records can be easily modified to include Previous Name as search criteria					
6	Student's Academic History						
	6.1 Persons' Profile	a. Records and maintains the date of permanent residency					
		b. Records and maintains a person's secondary education details, e.g. school, subjects, grades achieved, year achieved, aggregate scores etc.					
		c. 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					
		d. Records and maintains a person's overseas secondary education details e.g. schools, subjects, grades achieved, year, aggregate scores, etc.					
		e. 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.					
		f. Records and maintains work experience					
		g. 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					

		h. Enables users to record assessment details, rankings and other decisions/outcomes both in the context of individual qualification assessments and admission application instances					
		i. 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					
		j. Enables users to assign "to do" items grouped by checklist to individuals, organizations, or events					
		k. Maintains private or public comments of each student					
		l. Maintains incoming and out-coming communication between the university and the student, i.e. through phone, email, etc.					
		m. Defines person-to-person relationships and send one communication to both parties					
		n. Personalizes communication with salutations					
		o. Assigns levels of service such as positive and negative indicators; • Positive indicators can be used to provide preferential levels of service • Negative indicators can be used to withhold service					
		p. Reports enrolment, graduation or demographic statistics					
		q. Provides summaries of student statistics, facility occupancy and class section availability					
		r. Maintains grading information					
		s. Alerts applicants on the course choices if there are any associated compulsory/advisory pre-requisites					

		t. 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 programs information, intended programs of award, progress on the course and programs, course result grade, top student award on a course basis, award granted, misconduct, disciplinary action, etc. will become part of the student record					
		u. 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.					
	6.2 Application History	The University provides many flexibilities 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 programs prior to graduation, or to revert to the original programs. 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. 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					
		b. Students who are going to resit in the examination shall be assigned to the appropriate tutorial groups by the Course Coordinator concerned					
		c. Allow changes of tutorial groups as requested by students because of various reasons					

		d. 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					
		e. 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					
		f. 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					
		g. Allows for the recording of details of each disciplinary case during the processing of assignment/examination records					
		h. 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.					
		i. 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					
		j. When the offer of prizes, awards or language proficiency test result are confirmed, the tracking information to include the student ID, course or programs 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;					
		k. The facility should also enable the information on records of student, award to be included for printing on testimonials, transcripts, etc.					

		l. 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 programs/courses					
		m. To record all the counselling activities which are accessible to the counsellor with online retrieval to personal student records					
7	Academic Advisement	a. Analyses degree progress and provide recommendation for working towards achieving the degree					
		b. Evaluates transfer credit from recognized program – universities/ institutions					
		c. Tailors academic program for each student					
		d. Alerts students to good news / bad news					
		e. Enables to advise that if the programs(s) has any specific entry requirements and allow the applicant to choose the courses for enrolment from the programs 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 programs					
		f. Provides flexibility to handle examination result process, which may include programs progression according to the specified programs rules as maintained in the system. The system shall provide facility to handle examination results of students on different mode of study or programs					
		g. 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					

		h. Each programs 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 programs. These criteria will need to be set up into the system as the necessary parameters governing graduation. For the degree with honours, each programs will have a set of criteria for the classification of the degree					
		i. Ability to have an online planning tool for students to plan their yearly studies					
		j. Ability for students to view the entire academic requirements and academic progress online in a quick and user friendly view and if they are admitted into more than one career/program, able to view the requirements separately					
		k. Ability for students to directly enroll from the advisement report or to place the courses in the planning tool					
		l. Ability to do a full analysis of requirements used to search for courses, classes based on degree requirements					
		m. Ability to define the academic requirement rules based on courses, units, institution, career, program, plan, academic level, academic group and dynamic conditions					
		n. Ability to maintain very flexible rules with "AND/OR" connectors for example Requirement A can be a combination of ("Course List 1" AND "Course List 2") OR ("Course List 1" AND "Course List 3")					
		o. Able to maintain changes in the academic requirement rules with effective date and requirement term so that students of the same program but from different intakes can have different set of requirements					

		p. Ability for student to do unlimited transfer credit modelling to 1) recognize courses taken in another institution 2) evaluate impact of a change in program / major					
		q. Ability for student to create what-if scenarios online based on their academic goals and review the previous what-if reports online					
		r. Ability for students to view their academic progress online					
		s. Ability for advisors to also view student's academic progress online					
8	Grade Book	a. 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					
		b. Provides for data capture of the attendance of day department/ laboratory and assignment marks including those from other sources					
		c. 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.					
		d. 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					
		e. Provides flexibility to handle the assignment process for students on different mode of study with a different timetable					
		f. 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					

		g. 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					
		h. Enables to create/maintain/amend/transfer assessment parameters, scores and records for students on each programs/course in the system from the existing or from the previous presentation according to the criteria set by the user					
		i. Allows to enquire/check the assignments scores by users/students via Learner Self Service					
		j. Ability to define the course assessment to be an exam-only assessment, or a combination of assessments and exams for a single component of the course, or for multiple components					
		k. Ability to define multi-levels of assessment requirements at course level, component level, etc. e.g. Course A will have Field Work, Course Work, Project, Attendance, Exam as Level 1 assessment requirements. Level 1 “Project” assessment will have Level 2 assessments such as “Group Project” and “Individual Project”. Level 3 assessments for “Group Project” can then be broken down into “Teamwork” and “Leadership skill” while “Individual Project” can be broken down into “Essay Writing” and “Presentation Skills”. Different weightages can be applied at various levels.					
		l. Ability to view the configuration and relationship of these multi-level assessments in a tree hierarchical manner					
		m. Ability to configure “AND/OR” connectors among the levels of assessments					
9	Campus Self Service						

	9.1 Learner Self Service	a. Able to access information via Student Centre					
		b. Able to view personal information such as addresses, contact numbers, emails, emergency contacts, extracurricular activities, work experiences, honours and awards online					
		c. Able to update personal information					
		d. Able to view announcements and open enrolment periods					
		e. Able to view program advisor that has been assigned					
		f. Able to view personalized individual course schedule in a list view or calendar view					
		g. Able to view lecturer, venue, date, time information for each class					
		h. Able to have date range and day range to view calendar view					
		i. Able to perform search for available courses / subjects and view information of each course					
		j. Able to add classes to a shopping cart before checking out					
		k. Able to drop classes from enrolled classes					
		l. Able to add classes to wish list (pre-registration)					
		m. Able to view grade (current and history) online					
		n. Able to view assignment information such as due date online					
		o. Able to view degree progress report to check progress towards completion of program					
		p. Able to request for official and unofficial transcript					
		q. Able to provide flexibility of payment through debit or credit card and maintain the payment profile for future use					
		r. Able to apply for graduation					

		s. Able to view outstanding payment amount details and payment history					
		t. Able to communicate with program advisors online					
	9.2 Faculty Self-Service	a. Able to access information via Faculty Centre					
		b. Able to view personal information online					
		c. Able to view teaching schedule online					
		d. Able to access class roster to view student who have enrolled, dropped, waitlisted					
		e. Able to access grade roster to view, add, update final grades					
		f. Able to access grade book to view and grade assignments					
		g. Able to import grades from Excel					
		h. Able to have access to student information such as personal information, degree progress report and view service indicators					
		i. Able to communicate with students online (selected students, all students)					
10	Student Financials & Financial Aid	a. Calculates tuition based on student enrolment or other criteria and ability to set effective dates for each rule configuration					
		b. Able to recalculate fees if the students add or drop classes					
		c. Able to allow a standard fee to be applied on a bucket of modules					
		d. Able to calculate fees for one student or by batch and to have tuition calculation controls such as by career, program, terms, etc.)					
		e. Able to define waivers (fee concessions, subsidy or discounts) based on criteria					
		f. Able to cater for changes in fee policies for new student intake while the previous student intake will follow the previous fee charges					

		g. Able to have an administrator view of student account which allows drilling into by term/semester and each item types (charges) and payment history					
		h. Bills and manage student and third party receivables					
		i. Processes and control credit card payments					
		j. Able to process refunds for an individual student or external organization or in batch					
		k. Able to setup refund approval workflow based on the refund amount					
		l. Posts financial aid disbursements to the student account					
		m. Age accounts and manage collections					
		n. The system will generate debit notes for students to register on those courses/ programs which they are eligible					
		o. 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					
		p. When an application is accepted, application information including claim details, personal data and payment details will be captured into the system					
		q. 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					

		r. 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					
		s. Able to define the accounting entries for each item type and when the accounting entries are generated					
		t. Able to allow up to 14 chart field combinations					
		u. Able to define the types of financial aid to be awarded to students (merit scholarships, 3rd party sponsorship)					
		v. Able to define the type of charges that can be offset by the financial aid (e.g. tuition fees only)					
		w. Able to identify which students are eligible for scholarships based on eligibility rules configuration					
		x. Able to offer scholarships to students to accept/decline online					
		y. Post financial aid disbursements to the student account					
11	Contributor Relations	a. Alumni membership registration					
		b. Alumni membership renewal					
		c. Alumni members directory and enquires					
		d. Alumni members info update					
		e. Membership registration can be link to graduation database					
		f. Ability to maintain the contributions made by alumni, friends or even external organizations					
		g. Ability to identify the top 10 contributions made by a person or organization					

		h. Ability to manage fund raising campaigns goals, initiatives, budget, activities, resources, etc.					
		i. Ability for alumni to make contributions online					
		j. Ability to send communications to Alumni such as upcoming events					
12	Solution compatibility& Integration						
	12.1 Online Learning	a. The solution should be configured to interface with a 3rd party learning management system such as Moodle, Skai, Blackboard and WebCT					
	12.2 ERP Modules	a. The solution should be configured to interface with ERP Modules					
	12.3 Active Directory	a. The solution should be configurable with AD or other LDAP					
	12.4 MS SharePoint 2010/2013	a. The solution should be configurable to interface with UoP's website and internal portal based on Microsoft Office SharePoint Server technology					
	12.5 Online Payment System	a. The solution should be configurable to integrate with Online Payment System for various financial activities					
	12.6 Oracle BI and Data warehouse	a. The solution should be configured to interface with BI and Data Warehouse as already deployed by UNIVERSITY OF PESHAWARfor higher education sector					
	12.7 3rd Party system	a. The solution should be enabled with integrating with other 3rd party off-the-shelf or indigenously developed or open source applications					
13	Learning Management System	a. Create different assignments					
		b. Can calculate and store Grade for Student on each assignment					
		c. Can manage summary outline of Course Requirements					

		d. Create and manage online assessments including but not limited to closed and open ended questions, matching, question pools, set point value, auto-grading, statistics, timed assessments, audio recording, etc.					
		e. Organize text, resources, quizzes, tests, assignments, media and other content onto a single page to fit the needs of a given lesson					
		f. Post current, time-critical information to a course or work site					
		g. Schedule and maintain deadlines, activities and events related to a course, project or work site; link to announcements, assignments, assessments, materials, etc.					
		h. Engage in real-time conversations with course or project participants. Also able to send emails to Couse participants.					
		i. Create, moderate and manage discussion topics and groups within a course					
		j. Share files privately with course, project or site participants					
		k. Easily create surveys, distribute and collect data from course or work site participants or groups					
		l. Present slides to many viewers; presenter may navigate through slides and viewers may navigate independently of the presenter					
		m. Able to define groups for the purposes of communication, grading, permissions, collaboration, assigning work or assessments, etc.					
		n. Post, store and organize material related to the course or work site					
		o. Create portfolios that present collections of content curated by the portfolio owner, and set permissions for sharing the portfolios with others					
		p. Able to access through Web Browser					

		q. Pre-built landing page for any course or work site containing common functionality such as recent announcements, chat messages, discussion forums, shared collaboration spaces and a course site information page.					
		r. Able to integrate with Student Information System					
14	Time Table / Scheduling System	a. Should have Web-based interface					
		b. Can cover university requirement for Course timetabling, examination timetabling, and event management					
		c. Can support multiple organizational units					
		d. Can allow interactive changes.					
		e. Class assignments can be optimized using course structure, reservations, and student preferences					
		f. Scheduling of Classes keeping in view the priorities and resolving conflicts between them.					
		g. Should also consider availability of faculty, rooms, and a variety of other constraints					
		h. Should also minimize student course conflicts through either actual student course demands, an established set of curricula, historical patterns, or a combination of these data.					
		i. Can accommodate comprehensive course structure model to define the relationships between components of courses with multiple types of instruction (e.g., lecture, discussion, and laboratory).					
		j. Allows users to easily search for alternatives that have a minimal impact on the overall timetable.					
		k. After change communicate these changes to affected students and other systems					

		l. Able to integrate with Student Information System					
15	Library Management System	a. Should have Web-based interface					
		b. Can cover university requirement for a comprehensive library management system					
		c. Independent of any operating systems					
		d. Full MARC 21 and UNIMARC support for professional cataloguing					
		e. web based, web based interfaces, ability to integrate with any website					
		f. Multilingual and Multiuser support					
		g. Library standards compliant. Compliant with industry standards					
		h. Facilitates online reservations					
		i. Full catalogue, circulation, acquisitions, library stock management					
		j. Can work with major industry databases					
		k. Should have serial management features					
		l. Ability to print bar codes					
		m. Ability to have bi-directional integration with Student Administration System					
		n. Ability to export and import records					
		o. Should provide a full-functioned Online Public Access Catalog (OPAC)					
		p. OPAC users who are logged-in members can place reservations on library items.					

		q. Bibiliobasket:Logged-in members can select records from an OPAC search and retrieve them by e-mall, either in human-readable form or in an ISO2709-format file. An ISO2709 file can be processed using bibliographic software like End Note.					
		r. PAC users can submit suggestions for acquisition. Koha automatically informs the OPAC user (by e-mall) of the action taken on each suggestion.					
		s. Circulation rules can be defined very finely by the library: for each member category, item category, and holding branch of the item, the duration of the loan and the maximum number of books loan able can be defined					
		t. Borrowing a book from any branch (not just the branch where the borrower first registered). Returning an item at any branch. Reserving an item for at any branch					
		u. Able to integrate with Student Information System					
16	Policy Automation						
	Policy/Rule Authoring Requirements	a. The rules should be written in a natural language that is easily understandable by business users.					
		b. The rules should mirror (be isomorphic) to the source policies					
		c. The rule authors should be able to write and debug/test policies and rules without having to first define an underlying Java, .NET or XML model, or define verb mappings to the underlying models.					
		d. Rules should be written using business friendly tools, such as Microsoft Office, which minimizes the learning curve. To leverage the strengths of MS Word, the rules should be in natural language.					

		e. The rules should be displayed in a combination of colors and formats to ensure that they are easily readable and comprehensible.					
		f. The rule language should support a wide range of time-based and date-based functions so as to process temporal or time-based logic.					
		g. Rule tables should support both horizontal and vertical orientations.					
		h. For clean, uncluttered appearance, rule tables should support merging of cells whenever adjacent cells contain the same values.					
		i. Rule editing should be available even in the absence of a network or internet connection.					
		j. Rules should be auto-sequenced by the rule execution system, and the rule author should not be burdened with having to determine the rule sequence or priority. This should be automatic. The system should be smart enough to automatically sequence the rules accordingly (rule3, rule2 then rule1) to ensure all needed variables are computed in the correct sequence. The rule author should not have to prioritize the rules manually.					
		k. To ensure that variables or attributes are easy to read, spaces should also be supported as part of the variable or attribute name. For example, variable names such as "the customer's salary" should be supported (including spaces), instead of the more unfriendly, technical-looking "cust_salary" or "cust.salary"					
		l. The rule author should be able to easily and quickly convert the source documents to rules, while retaining high readability. These readable rules should be in its executable form.					

		m. The target "executable" rule document should also be easily readable by non-technical personnel and stakeholders.					
	Rules Analysis and Testing requirements	a. The system should be able to analyze the written rules and guarantee that fatal errors like infinite loops are detected and flagged as errors. Other errors like redundant or duplicate rules should also be flagged.					
		b. The provided IDE should be simple enough for business users to use, without having to deal with programming, Java/.NET/XML, or writing XML.					
		c. The system should provide out of the box regression testing capability using a pure point and click interface, without having to deal with XML, and without having to require IT or developers spend time building a testing framework.					
		d. The system should provide a What-If analysis capability for policy owners to simulate policy changes without requiring technical skills. For ease of use, the What-if analysis should be based on familiar tools such as MS Excel.					
	Rule Deployment and Execution requirements	a. The rule execution should employ a high speed inferencing algorithm with low memory footprint.					
		b. The system should, based on the written rules, generate smart questionnaires, which interviews the end-user for information needed to reach a decision. The rules that drive the questionnaire are also the same rules that drive decision making.					

		c. The system should generate a report which explains how the decision was reached. This report should be in easy-to-understand natural language readable by non-technical users, making it suitable for use in self-service scenarios.					
		d. The above mentioned report should also be displayed to the end-user after the interview session. The user should be able to interactively make changes to his answers, resubmit, and obtain a new decision from the system.					
		e. The rules should be deployable as an auto-generated Web Application, and as Web Service.					
		f. The same rule project should be able to target both Cloud as well as On-Premise deployments.					
		g. Mobility. The system should should have the ability to quickly deploy the automated policies as NATIVE mobile apps by merely checking a checkbox to enable mobile capability. Further customization should be available via a powerful SDK.					
	Business Process Automation	a. The solution shall provide facility of generating generic reports by utilizing back end automation as per university's requirements. E.g.: students shall be able to generate fee challan from their self service portal.					
		b. The system should have the ability to integrate with third party financial solutions; e.g. interface with the banks' financial systems for data consolidation / reconciliation.					
	Data Archival	The solution should provide tools / utilities that will enable comprehensive database housekeeping and data archival as per the university's requirements.					

Item #	Description		Status (Yes/C/TP/N)	Compliance (y/n)	Proposed Required Component(s)	Type of User License(s) required to meet the respective technical/ functional requirement(s)	Reference page # Schedule/ Highlight the feature
B	Financial Management System						
1	General Accounting						
	1.1 General						
		a. UoP allows different expenditure limits for different authorities. These should be catered for.					
		b. The system should be able to capture the activities of users in terms of the prescribed roles and the forms that they have accessed.					
		c. An individual user shall be restricted to access only those applications / functionality relevant to his/her job function.					
		d. The System shall facilitate the attachment of documents, spreadsheets, or images to an application functionality to provide users with additional information or required documentation.					
		e. UoP wants an integrated financial system whereby all the components are integrated					
		f. The system must support printing of cheque (cheque writer) from payment vouchers on cheque leaves issued by banks.					
		g. The system should provide access to key financial data to organization's financial executives, department heads and other officials through easily personalized/customizable portal page lets.					

	1.2 Reporting	a. System must provide access for a reporting and retrieval tool that works across modules.					
		b. The implementer is expected to configure / implement the reports as per UoP requirements.					
	1.3 Accounting Books	a. Supports multiple level parent/subsidiary implementation for multiple accounting books					
		b. Should support automatic consolidation of accounts between subsidiaries accounting books and parent accounting books					
		c. Supports implementation of automatic process between Parent and Subsidiary and between subsidiaries transactions at General Ledger level					
		d. UoP will be preparing financial statements and complete set of management reports periodically, the package should support this periodic reporting					
	1.4 Chart of Accounts	a. The chart of account should be flexibly configurable with PIFRA's CoA with capability to support required number of child levels. It should contain at least five elements as per PIFRA CoA.					
		b. General Ledger must support the minimum chart of account reporting dimensions: Functional Cost Center, Location Cost Center and General Account. The system should support required number of characters in each of the recording/reporting dimension.					
		c. The General Ledger should support creating alphanumeric codes in each chart of accounts dimension.					
		d. The General Ledger should provide end-users with the functionality to define, create, and disable codes within the chart of accounts dimensions without the need for technical support.					

		e. General Ledger should allow users to define the codes within the General Account dimension according to the standard financial statements classification (Expenditure, Revenue, Capital, Receipts, Assets, Liabilities and Equities). The General Ledger must recognize this standard classification.					
		f. The system should have the capability either automatically or manually as per users' requirement to carry forward balances between fiscal years and close expenditure accounts.					
		g. The General Ledger should support creating Chart of account codes at summary level and at posting level. At summary level the package should allow users to define multiple summary levels with no restrictions on the number of summary codes.					
		h. At minimum General Ledger should support entry of budget at summary level and/or posting level as per requirement of user, as well as actual amounts at the posting level codes in the chart of accounts dimensions. Also it should have the capability to transfer any sum of budget from one account head to another and keep a record thereof.					
		i. The system should allow carry forward un-utilized budget balances of the selected accounts as a separate entry and also allow recording the current year's budget recognizable separately. Expenditure to be allowed from the sum total of both balances.					
		j. The system must have the functionality to support the creation of code combination across the different dimensions within the chart of accounts. General Ledger will not allow entry and posting before the code combination is used.					
		k. The system must have the functionality to define and enforce the pre-defined logical rules for creating a code combination.					
		l. The system should support prior year entries with suitable controls.					

		m. General Ledger has a graphical user interface to provide authorized users with a hierarchal view for all reporting dimensions posting and summary level codes with Drag and drop functionality for users to use in maintaining and re-organizing the chart of accounts.					
	1.5 Accounting Calendar	a. The implementer is expected to configure the chart of accounts security codes as per UoP requirements.					
		b. General Ledger must allow authorized users to create and define accounting calendar. UoP follows a fiscal year starts from July to June.					
		c. General Ledger must support the configuration of 12 month normal fiscal month in each fiscal year with at least 2 additional adjustment periods at the year-end (each for accounting adjustments and post- audit adjustments).					
		d. The transaction effective date according to accounting calendar in the General Ledger should be the date when the transaction is entered if it falls within the same fiscal month or the last date of the fiscal month if the transaction is entered in a subsequent month.					
		e. The system should provide the user with a functionality to define a schedule to automatically open the fiscal month within the fiscal year.					
	1.6 Currencies	a. UoPs uses Pakistani Rupee (PKR) as the functional currency. The accounting set of books should be configured using the PKR, with capability to enter transactions in international currency like Dollar, Sterling, Yen, and Euro etc.					
		b. The General Ledger should support the conversion of transaction in foreign currency to the PKR currency using pre-defined accounting exchange rates.					
	1.7 Transaction Entry	a. General Ledger must provide users to enter journals in actual amounts within available budgets.					
		b. The system must support reversing journals by authorized users.					

		c. Functionality for Recurring Journals with code combination and amounts should support entering fixed amounts or formula based amounts, and to configure recurring journals for pre-paid expenditures and deferred charges to be agreed with UoP.					
		d. Functionality for allocation journals should based on fixed percentages or/and calculated percentages (based on statistical amounts or actual amounts).					
		e. The general ledger must provide users with the functionality to define a schedule to generate recurring and allocations journals automatically and post it to accounts.					
		f. The approval hierarchy shouldn't conflict with the approval hierarchy defined in each sub-ledger.					
		g. General Ledger must provide users with a configurable functionality to track Journal by source (for Audit Trail) and type or category.					
		h. Implementer is expected to implement journal sources and categories/types to be agreed with UoP					
		i. General Ledger must provide users with the functionality to define different journal numbering sequences and assign it to journal sources and/or categories/types					
		j. The journal sequence numbering can be either configured for one fiscal year or for fiscal year.					
		k. General Ledger must allow users to print journals.					
		l. Journals Voucher print out must be according to UoP requirements and formats.					
		m. General Ledger must have reports for un-posted Journals (either awaiting approval or approved) or journals not concluded but pending in the workflow.					

		n. General Ledger must have audit trail reports to show journals created by source/category along with the sequence number, and when deleted showing users name.					
		o. General Ledger must have reports to allow users to check if journals created from external systems have been validated and created in the General Ledger.					
		p. The distribution section in the journal form should have a field against each line for users to enter line description. Field length shouldn't be less than 256 characters.					
		q. General ledger must support transaction amounts beyond 999 billion Rupees.					
		r. Support drill down from an account balance to the associated journal lines to the complete journal entry, to view both sides of the journal entries that affect the account balances. It should also show the budget balance where applicable.					
		s. It should have a mechanism for payment of advances and settlement thereof during the same fiscal year and/or in the next fiscal year.					
	1.8 Consolidation	a. General Ledger must provide the users with a functionality to define a parent/subsidiary relationship between different set of books.					
		b. General Ledger must provide the users with a functionality to define the mapping rules between the subsidiary set of books and the parent set of books.					
		c. Implementer is expected to design and implement the process for consolidation, including the elimination of inter-company transactions.					

		d. General Ledger must have audit trail reports to help users validate if the consolidation was successfully created and all subsidiary accounts are fully consolidated.					
		e. Consolidation process should be initiated and managed from the parent set of books which will call/pull accounts from subsidiaries.					
		f. General Ledger must support a monthly consolidation process.					
2	Reporting						
	2.1 Report Writer	a. The General Ledger must provide users with a flexible and user friendly tool to allow them to create financial reports without support from technical staff.					
		b. Implementer is expected to build trial balance using the flexible reports functionality.					
		c. It must provide reports as per requirements of UoP					
		d. Implementer is expected to build statement of financial ratios report using the flexible reports functionality					
	2.2 Analysis	a. The implementer is expected to design and implement an analysis model for actual vs. budget. It should combine statistical information to help report users to identify the type of variance while considering monthly, year to date, quarter to date, fully year figures.					
		b. There should be a What-if analysis report which allows facilitating forecasting for revenues, expenditure and cash.					
		c. The multi-dimensional analysis tool must allow user to distribute and share reports and analysis electronically.					
		d. The multi-dimensional analysis tool must allow user to print the reports and analysis.					

		e. System must be able to perform trend analysis taking financial data for last three to five years without the need to built a separate data warehouse, and yet provide almost real time intelligence reporting. 100% of transaction data should be available for drill down without any data duplication.					
		f. The system must have a report on budget, statistical, and actual detail for current and all past periods.					
		g. The system should have the ability to define sophisticated multi-line formulas to derive report figures.					
		h. The system must have the ability to create summarized reports by headquarter, division, department, cost center, etc.					
	2.3 Audit Trail	a. It should be possible to configure audit trails for all user activities. The audit trail should capture all data changes with time stamp and user ID stamp.					
3	Budgeting and Control						
	3.1 Budget Structure	a. The system should allow defining Objectives, Targets, Goals, Priorities, Outputs, Activities and other indicators, which would be used in the Budgeting Process.					
		b. The budgeting system should support preparation of budgets and account heads with five dimensions, as well as required child accounts.					
		c. UoP will follow the cost element, as well as, cost-center budgeting concept. There may be functional / operational cost-centers and regional/divisional cost centers. The system should support these separate budgets and their consolidation.					
		d. It should have the capability to prepare separate budgets for current expenditure and development expenditure by different departments, and also to consolidate it.					

	3.2 Budget Entry	a. The budgeting system should allow users to create budgets and also provide them with a functionality to upload the amounts from other applications if required.					
		b. System should allow usage of Subsidiary data / General Ledger data for budgeting. Information should be uploaded directly into relevant budgeting account heads.					
		c. Budgeting system should provide users with a functionality to enter budget amounts through creating formulas to calculate amounts.					
		d. Budgeting system should support budgeting at detail level (posting level accounts) and summary level budgeting.					
		e. Budgeting system should allow users to create multiple budget versions.					
		f. Authorized users should have a functionality to freeze one of the budget versions for the budgetary control and variance.					
	3.3 Budgetary Control	a. The package should support budgetary control policy that allows UNIVERSITY OF PESHAWARto impose strict control over spend beyond a certain tolerance level and/or amount.					
		b. Budget over spend tolerance is set on Period to Date balances on certain heads as well as on monthly balances on certain heads. Likewise spend tolerance will not be required in certain heads.					
		c. Budgetary control configured in the budgeting system should be imposed across all integrated sub-ledgers.					
		d. The budgetary control for ordering physical items (i.e. items in stores) should check the funds at the requisition point. If there are funds budgeted then the ordering system (i.e. purchasing) will create an internal requisition to release item from stock.					

		e. The system must support re-appropriation of funds from one budget head (General Ledger Account) to another. Likewise re-appropriation will take place among cost-centers.					
		f. Supplementary Budgets maybe required to be prepared budgeting / monitoring for these funds is required. System is expected to facilitate this and provide report of such changes.					
	3.4 Report Writer	a. The implementer should design and build reports for all cost-center to show funds available, total funds, funds pre-committed and funds committed for each budgeted item.					
4	Fixed Asset Management	The Fixed Assets module is used for efficiently tracking and maintaining fixed assets. Assets can be grouped by category, type, and location. It supports multiple and simultaneous depreciation methods, automatically calculates depreciation, calculates gain/loss on disposition of assets, and creates entries to the general ledger. Amounts for repairs and improvements can be added later to assets for recalculation of depreciation					
	4.1 Setup	a. System must be able to record the transactions relating to acquiring, disposal and depreciation of fixed assets fully. It must be in line with NAM.					
		b. Asset profile					
		c. Assets with categories					
		d. Depreciation [Dispose Off] Policy					
		e. Distribute Transactions					
		f. Integration with General Ledger					
		g. Asset locations					
		h. Depreciation policy					
	4.2 Reports	a. Standard listings					

		b. Asset categories					
		c. Asset types					
		d. Asset depreciation					
		e. Others					
5	Expenditure/ Payables						
	5.1 Application	a. The system must maintain supplier details.					
		b. System should allow relating a vendor to a parent member and child members.					
	5.2 Receipt	a. System must facilitate expenditure booking against Expenditure Element and Cost Center.					
	5.3 Invoice and Payables	a. The system must also support booking of expenditure and liability upon entry of the invoice.					
		b. The system must allow capturing of Vendor Debit / Credit notes, advances, payments, cash receipts for refunds and discounts.					
		c. System must capture employee related payments for advances and prepayments. Employee expenditures, Employee debit / credit notes should be match able against each other and with advances.					
		d. The system must provide for recording invoice details					
		e. System must automatically calculate the due date for payment based on the contracted payment terms, unless manually overridden.					
		f. System must have the functionality to separately treat amounts and invoices where input tax is to be withheld and paid to tax authorities.					
		g. The system must allow processing of partial payment(s) against and invoice. In this regard system should apply indicative checks.					
		h. In case of an advance being given to a Vendor, system must correlate each advance to a sanction or Purchase Order No. etc.					

		i. System must facilitate applying advances/payments against invoices – One advance/payment to one invoice / partly to an invoice / multiple advances/payment to an invoice.					
		j. The system must allow multiple tier workflows for invoice approval.					
	5.4 Petty Cash	a. System must support a mechanism of recording and controlling petty cash expenditure for each of the petty cash funds maintained by different custodians.					
		b. The recording of Petty cash expenditures is supposed to be the same as normal expenditure. The system must be able to capture for each petty cash reimbursement/ claim the Claim reference, Expenditure codes and Expenditure Amounts.					
		c. Based on the sanctioned limit and expenditure claim, the system should automatically compute the amount to be replenished.					
	5.5 Payments	a. System must have the capability to link the payments functionality with the payables functionality where applicable and should allow payments once the expenditure gets successfully through matching and approvals.					
		b. Where part payment / deduction / retention is made, details of such deductions must be maintained in the system under the particular vendor/employee head with the associated invoice.					
		c. Consolidated payments for various invoices and partial payments against one invoice must be supported by the system with appropriate tracking.					
		d. System must support workflow for authorization of payments.					
		e. System must support withholdings based on certain percentages and deductions e.g. taxes, retentions etc.					
		f. System must support automatic payments (based on payment due date)					

		g. System must support manual payments through selection of invoices for a supplier.					
		h. System must be enabled with printing a remittance advice for payments, which shall show the Payee's Name, Payee's address, Vendor/Employee Code, Contact number, Cheque Number, Cheque issue date, Invoice/expenditure reference, Gross invoice amount, Tax deducted, advance deducted against the invoice, Net amount being paid/settled)					
		i. System should support payments through cheques, letters to bank.					
		j. At present there is not electronic communication with the banks. However a provision for it required for sending or receiving reports/requests to and from the bank.					
		k. System must support payment through cash/petty cash.					
		l. System must be enabled with selecting from which bank account payment(s) needs to be made.					
		m. System must be able to reverse a cheque in case the payment run fails or the cheque is stalled.					
		n. System must automatically update the invoice record to a paid status once the payment is made and to the open status once the check is staled/reversed.					
		o. System must be able to print the Payee name, Currency and Amount in numbers, Amount in words and Date of Cheque on the cheque.					
		p. System should be able to record stop payments.					
		q. System should allow consolidated payment advice to the bank - mode wise e.g. through cheque, bank transfer.					
		r. There should be a facility to view the current bank balance while making payment.					

		s. System should be able to make bank transfer payment voucher.					
		t. System must support tracking of retained payments (individually and Consolidated) against performance guarantee / contract.					
	5.6 Enquiry	a. System must allow a flexible enquiry system based on user selectable periods for selected vendor/employee and should be able to show vendor/employee master and transaction information.					
		b. System must provide for reviewing outstanding advances, retentions, stop payments online.					
6	Treasury						
	6.1 Bank Reconciliation	a. The system must support automatic and manual bank reconciliation and match transaction (Payments and Receipts) at the system level while considering the entries at the General / Sub-ledger Level.					
	6.2 Bank Management	a. There must be a facility to view consolidated cash/bank position.					
		b. System should have a facility to link each bank account with the bank system to exchange electronic information on cash positions.					
		c. There should be a facility to issue online instructions to bank for payments/transfer of funds.					
	6.3 Enquiry	a. System must support online enquiry of bank accounts.					
D	Procurement and Inventory						
1	Procurement						
	1.1 General	a. System should be able to follow the rules and procedures as defined by UNIVERSITY OF PESHAWAR.					
		b. System must support Ranking of approved supplier lists by item or commodity.					

		c. Ability to associate supplier item numbers with in-house Sl. /part numbers.					
		d. Ability to prevent purchases from un-approved supplier where applicable.					
	1.2 Purchase Requisitions	a. The system must be able to support manual or automatic purchase requisitions (PR) creation, as per user requirements. based on: • Inventory replenishment recommendation • Procurement Committee recommendation • Requisitions by authorized employees					
		b. The system must be able to have automatic purchase order (PO) generation from PR to eliminate duplicate data entry.					
		c. The system must be able to tie PR number to PO and allow: • PO search by PR number • PR search by PO number					
		d. The system must be able to supports requisition tracking and inquiry, and to alert Purchasing department on the PR's that should be reviewed and processed.					
		e. The system must allow users to combine multiple PR's into one PO.					
		f. Allow users to split one PR into multiple PO's or PO lines.					
		g. Users must be able to input multiple comment lines and attached to the PR's and PO's.					
		h. Ability to customize requisition summary screens to meet the user needs.					
		i. The system must be enabled with distributing expenditures across multiple cost centers, projects or departments.					
		j. Ability to create the account distributions automatically during requisition creation.					

		k. System must be able to support attachment of notes, multimedia, etc.					
	1.3 Quotation/ Tender	a. Users must be able to generate request for quotation (RFQ)/RFP to be sent to vendors, published.					
		b. The system must be able to track vendor response.					
		c. The system must be able to support vendor quotation maintenance and inquiry.					
		d. The system must be able to support multiple price breaks.					
		e. Users should be able to attach standard text document (e.g. terms and conditions) on all RFQ's.					
		f. Users must be able to create and update quotations based on vendor response.					
		g. The system should alert users to review quotations that are going to expire in a certain time frame.					
	1.4 Purchase Order Creation & Maintenance	a. The system must provide online PO maintenance and inquiry functions to add, change, delete and list PO.					
		b. Users must be able to locate existing vendors through flexible search facility during PO creation, maintenance and inquiry: • search by partial vendor code • search by partial vendor name • others (please specify)					
		c. Once a purchase order is confirmed, any further changes to the PO will create a PO new revision. The system should provide a facility to track multiple revisions of the same PO.					
		d. Re-approval is required whenever a new PO revision is created.					
		e. The system must be able to control the approvals by amount, cost center, budget, account, item, category, and location.					

		f. Users must be able to print only the PO lines changed in a particular PO revision.					
		g. Users must be able to create the PO automatically from on-line requisition.					
		h. System should support consolidate and centralize purchase requirements from multiple projects, cost centers or locations.					
		i. The system must allow users to enter multiple items per PO.					
		j. The system must allow users to enter multiple shipment delivery dates for a PO line.					
		k. There should be facilities to inquiry all outstanding PO's items by: • PO and PR number, PO number showing the status of PO • Item/Part number and category • Due Date, etc.					
		l. The system must be able to support blanket order (that is, an agreement to buy certain items at a predefined price over a certain period).					
		m. The system must have a facility to 'call off' against a blanket order with validation of the price, date, and purchase amount.					
		n. Users must be able to assign primary/preferred vendor for each item.					
		o. The system must have a facility to put a vendor on hold by: • prohibit the release of PO's for the vendor • putting a specific item/vendor combination on hold					
		p. The users must be able to define multiple vendors per item/part.					

		q. Users must be able to generate PO for: • direct item (stock item) • indirect item • spare part/consumable • services • others					
		s. Users must have the option to include extra information or notes to be displayed/printed on PO when required.					
		t. User must have the option to store standard notes relating to items and/or vendors to be displayed and/or printed on PO.					
		u. Users must be able to define receiving quantity tolerances for each item/part.					
		v. Users must be able to define receiving early/late tolerances for each item/part.					
		w. The system must provide the option to prohibit it or issue a warning when a receipt violates such tolerances.					
		x. The system must be able to track the purchase price history.					
		y. Ability to customize the Purchase Order Summary screen to meet the users need.					
	1.5 Receiving	a. The system must provide on-line PO receipt transaction and automatic update of stock balance and PO status on receipt of items.					
		b. The system should generate a full audit trail of all receipts to be posted to the GL.					
		c. The system must provide automatic conversion of purchasing unit of measure to stock unit of measure.					
		d. Ability to control receiving routing.					
		e. Users must be able to indicate goods under inspection and not available for production					

		f. Ability to receive unordered items and later match them to Purchase order.					
		g. Ability to keep track of lot and serial number during receiving.					
		h. The system must support substitute items.					
		i. There must be a facility to handle material rejects after inspection and reflect on the PO as outstanding quantity.					
		j. Ability to view expected receipts by promised date and the viewing of complete receiving history.					
	1.6 Vendor Analysis and Performance Measurement	a. The system must maintain a detailed history of each vendor's performance and provide comprehensive analysis based on: • quality • delivery quantity • delivery time • price					
	1.7 Self-Service Procurement	a. Self-service procurement solution for the entire organization • Role-based catalogs • Powerful and flexible search capability • Workflow approvals anytime, anyplace • Procurement cards • Supplier enablement					

		b. Requisition Processing Provide a single source for employees across the enterprise to order products. • Use the Catalog Browser to find the right item quickly. • Highlight the best value items based on contracts, preferred suppliers, or recommendations, and obtain real-time price and availability before submitting a request. • Compare products side by side to select the right one for you. • Enter a special request for unique or one-time purchases. • Request items from inventory locations and query inventory levels before submitting the request. • Use powerful express forms to gather complete details related to complex requests. • Maintain, group, and share favorite item lists by requester. • Specify delivery to multiple locations and delivery schedules for each line item, multiple accounting charges per delivery, and one-time shipping locations • Requesters to select, compare, and order items and services from role-based online catalogs that are tailored to their role in the organization. • Use of synonyms, match case, and Boolean logic to find items easily that meet requesters' criteria					

		• Parametric search of attributes that are registered to a category needed during the approval process. • Configure workflow approvals based on criteria appropriate to the organization. • Receive notification of approvals through email, a worklist item on the portal, or wireless device, and perform approvals while out of the office using a wireless device. • Use serial and parallel approval paths or add approvers, reviewers, or both, as needed during the approval process. • Authorize line item approval and re-approval for multiple line requests. • View full details about requests, including detailed product information, cost distributions, attachments, and requester comments. • Edit requests during the approval process					
2	Inventory Control System						
	2.1 Definitions &	a. Item/Product Profile					
		b. Product General Info					
		c. Suppliers					
		d. Units					
		e. Locations					
	2.2 Inventory Transactions	a. Item Listings					
		b. Manual/automatic Transactions, Transfer & Adjustments					
		c. Inventory in/out					
		d. Goods Receipt Notes					
		e. Item issuance note/requisition					

	2.3 Search	a. Item Search – by category					
		b. Item Search – by location					
		c. Item Search – by item description					
		d. Item Search – by serial number					
		e. Item Search – by types					
	2.4 Inventory Transfer &	a. Inspection of returned products					
		b. Inventory Transfer & Adjustments – Outputs					
		c. Basic lookup reports					
		d. Intimation letter to party for returned products					
		e. Inspection report					
		f. Inventory adjustment					
		g. Inventory rejections					
	2.5 Reports	a. Item listings					
		b. Activity based analysis [items in/out]					
		c. Inventory in hand					
		d. Stock register					
		e. Suppliers/vendors					
		f. Purchase requisitions					
		g. Purchase orders					
		h. Rejections					

Annex VI: Form III – Campus Management System/Enterprise Resource Planning System Project Deployment and Data Entry Services

(To be filled by the bidder as part of technical proposal)

Item #	Description		Status (Yes/C/TP/N)	Compliance (y/n)	Proposed Required Component(s)	Reference page # Schedule/ Highlight the feature
	1 Implementation Services					
	1.1 Project Implementation Plan	a. The technical proposal should include the implementation plan for the project, including the deliverables for each milestone, such as Requirement Analysis, Design, Gap analysis, Implementation, Deployment, User Acceptance, Go-Live, Support and Sign off.				
		b. Project plan as per the project execution phases				
	1.2 Governance Plan	a. Steering Committee (Structure & Function)				
		b. Team Structure of the Implementer's (Project Management Unit: comprising of shared and dedicated resources)				
		c. Team structure required in the university/ institute (Project Management Unit: comprising of shared and dedicated resources)				
		d. Organogram of University/ institute, UNIVERSITY OF PESHAWAR, implementer				

		e. Dependencies, Assumptions, Constraints, Risks identification (potential risks), mitigation and management plan				
		f. Details of the Acceptance Criteria				
		g. Roles of parties in the Acceptance Process				
		h. Acceptance Process duration (Preliminary and Final acceptance)				
		i. Change Request Procedure				
		j. Additional Work Order procedure				
		k. Communication mode, level of interface & details				
		l. Communication addresses				
		m. Documents (hardcopy) provisioning among all parties				
		n. Project Documents Repository (versioning, access & archival details)				
		o. Reporting details (process, reporting frequency, mode, format)				
		p. Solution architecture details w.r.t its deployment (with details of development, testing, final production setup)				
		q. Solution landscape details				
		r. Solution audit, monitoring and management tools details (features as provided with the solution)				
		s. Solution manuals / guides, process details, technical architecture details as provided by the Solution Principal				
	1.3 Requirement Analysis Sign-off	a. Activity flow for the Requirement Analysis (RA) Phase				
		b. Requirement Analysis Review Sessions				

		c. Deliverable of the RA phase				
		d. Sign-off Process of the RA document				
	1.4 Gap Analysis Sign-off	a. Activity flow for the Gap Analysis (GA) Phase				
		b. Deliverable of the GA phase				
		c. Sign-off Process of the GA document				
	1.5 Deployment Design Sign-off	a. Activity flow for the Design Phase				
		b. Design Review Sessions				
		c. Deliverable of the Design phase				
		d. Sign-off Process of the Design document				
		e. Development of the SOPs / Activities process flow (as per actual working and mapping with System implementation)				
	1.6 Implementation	a. Deployment Process				
		b. Setting up development environment				
		c. Setting up Quality Assurance and other systems in the overall landscape				
		d. Setting up Training system				
	1.7 User Acceptance Tests	a. Acceptance Test Process				
		b. Duration of acceptance process (Preliminary & Final)				
		c. Issue logging, Tracking & Resolution Process				

	1.8 Data Entry/ Transport/ Migration	a. Identification of Master and Transactional Data				
		b. Preparation of data				
		c. Data Migration / Transfer process				
		d. Preparation of scripts for import and/ or export of data				
	2 Integration Services					
	2.1 Other Modules of ERP	a. Integration components / modules details b. Integration Process details (inputs, dependencies, settings details) c. Standard, Technical Documentation of the Integration component as provided by the Principal d. Case Study of the reference integration already done e. Any other component/ module requirement for integration				
	2.2 Campus Management Solution	a. Integration components / modules details b. Integration Process details (inputs, dependencies, settings details) c. Standard, Technical Documentation of the Integration component as provided by the Principal d. Case Study of the reference integration already done e. Any other component/ module requirement for integration				
	2.5 Other Third party off-the-shelf systems	a. Integration components / modules details b. Integration Process details (inputs, dependencies, settings) c. Standard, Technical Documentation of the Integration component as provided by the Principal d. Case Study of the reference already done integration e. Any other component/ module requirement for integration				

	2.6 Open-Source systems (e.g. Moodle, Koha)	a. Integration components / modules details b. Integration Process details (inputs, dependencies, settings) c. Standard Technical Documentation of Integration component Case Study of the reference integration already done d. Any other component/ module requirement for integration				
	2.7 Indigenous Applications in use at UoP	a. Integration components / modules details (separate for each application) b. Integration Process details (inputs, dependencies, settings) c. Standard Technical Documentation of Integration component Case Study of the reference integration already done d. Any other component/ module requirement for integration				
3.	Data Entry Services					
	3.1 Data Entry for initial One Year for Complete CMS/ERP	a. Data Entry of actual data for all modules of CMS/ERP for initial One Year following 'Go Live'				

Annex VII: Form IV - Bill of Quantities (Software Licenses, Implementation and Data Entry)

(To be filled by the bidder as part of Technical Proposal)

S. No.	Description	Unit	Licenses Required	Scope of Project			Compliance (Y/N)	Reference page #/ Section Highlighting the features
			Qty	Functional	Technical	Implementation		
A	**Campus Management Solution**							
	Student Administration	Students	10,000	As per Scope of Work defined at Annex VI: Form – I & Form II	Type of User License(s) viz. Power Users, Developers/ Designers, Module Users, and Ordinary Users required to meet the respective functional requirement(s) as elaborated for Campus Management Solution	As per Scope of Work defined at Annex VI: Form - II		
	Gradebook	Students	10,000	As per Scope of Work defined at Annex VI: Form - I & Form II				
	Campus Self-service	Students	10,000	As per Scope of Work defined at Annex VI: Form - I & Form II				
	Student Financials & Financial Aid	Students	10,000	As per Scope of Work defined at Annex VI: Form - I & Form II				

	Contributor Relations	Module Users	01	As per Scope of Work defined at Annex VI: Form - I & Form II Section				
	Enterprise Portal	Module Users	01	As per Scope of Work defined at Annex VI: Form - I & Form II				
	Accommodation - Hostel Management	Module Users	01	As per Scope of Work defined at Annex VI: Form - I & Form II				
	Integration module	Students	10,000	As per Scope of Work defined at Annex VI: Form - I & Form II				
B	**Financial Management System**							
	General Accounting/ Financials	Module Users	10	As per Scope of Work defined at Annex VI: Form - I & Form II	Type of User License(s) viz. Power Users, Developers/ Designers, Module Users, and Ordinary Users required to meet the	As per Scope of Work defined at Annex VI: Form - II		
	Budgeting & Control	Module Users	10	As per Scope of Work defined at Annex VI: Form - I & Form II				

	Treasury	Module Users	10	As per Scope of Work defined at Annex VI: Form - I & Form II	respective functional requirement(s) as elaborated for Financial Management System			
	Grant Management	Module Users	10	As per Scope of Work defined at Annex VI: Form - I & Form II				
C	**Procurement & Inventory**							
	Procurement	Module Users	10	As per Scope of Work defined at Annex VI: Form - I & Form II	Type of User License(s) viz. Power Users, Developers/ Designers, Module Users, and Ordinary Users required	As per Scope of Work defined at Annex VI: Form - II		
	Inventory Control System	Module Users	10	As per Scope of Work defined at Annex VI: Form - I & Form II				
D	**Master Data Management**							
	Data Profiling	Users	10,000	As per Scope of Work defined at Annex VI: Form - I & Form II	Type of User License(s) required	As per Scope of Work defined at Annex VI: Form - II		
E	**User Productivity**							
	Developer	Module Users	01		Type of User License(s) required			
	Application	Module Users	05					
	Content Material (CMS)	UoP	01					

	Content Material (FMS)	UoP	01					
F	**Database(s)**							
	Oracle	Cores		As per the proposed architecture of solution implementation as defined by the bidder				
	MS SQL	Cores						
G	**Warranty Support/ Services**							
	CMS/ERP Solution	UoP	01	Annual Product Warranty/ Support in percentage of License(s) costs, applicable to individual License cost as well	Post-Production Support in percentage of Implementation costs, applicable to individual implementation cost of each module			
J	**Data Entry**							
	Data Entry	UoP	01	Data Entry for entire solution for the initial One Year after 'Go Live'				
I	**Any Other Component(s)/ Service(s)**	**UoP**	**01**	**Additional Components needed to fulfill the Scope of Work as per the Objectives of CMS/ERP Project**	**Define the Technical requirements of the proposed Additional Components/ Services**			

Annex VI: Form V - Non-functional requirements

(To be filled by the bidder as part of technical proposal)

S #		Environment Description	Mandatory/Desirable	Compliance (Y/N)	Required Components	Reference page # Schedule/ (Highlight the feature)
1.	**Users Trainings**	UoP requires trainings at various levels on the proposed solution for business, functional, technical and End users:	M			
		a. Trainings at the UoP premises for Business Users of the solution implemented for each of the modules implemented.	M			
		b. Functional level trainings shall also be provided to the nominated focal persons against the modules implemented at UOP	M			
		c. End user training and faculty explaining the functionality and day to day usage of application must be carried out for the end users. Number of people for end user training should be identified during the Pre Scoping exercise conducted by bidders at the UoP premises.	M			
		d. A technical level training of the IT staff must be carried out for the smooth functioning of the applications after signing of the contract. This will include embedding of Four (04) 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 team.	M			
2.	**System Documentations**	Solution Integrators must provide All the system necessary documentation including but not limited to, Service manual, Design Document with Technical Configurations, SOPs, Customizations, Change Configurations, Setup tutorials	M			

3.	**Availability of source code (customizations made for UoP)**	The source code must be made available, in its full version	M			
4.	**Project management / dedicated resources**	Following minimum resources are required During Project Roll Out: - One Project Manager - One Technical Lead - One Technical resource other than Lead - One dedicated resource developer / designer BI	M			

Annex VI: Form VI – Hardware Requirements

(To be filled by the bidder as part of technical proposal)

Id		Environment Description	Mandatory / Desirable	Compliance (y/n)	Required Components	Reference page # Schedule/ (Highlight the feature)
1	**Hardware Solution Requirements**					
	Servers	Bidders Must Quote Separate Hardware sizing considering following points: a. International renowned Brand (Dell, IBM ,Sun or equivalent) b. Server Farm must cater separate development / production environment c. Servers Farm must cater the applications Load Balancing and high availability. d. Servers Farm Must cater the multi-tier architecture so that the public applications can be hosted in separately on multiple servers in load balanced environment e. Number of processors / memory / servers must be sized to cater the workload of all applications with numbers of users listed in Form III f. Server must have 50% memory/ processing power Future up-grade g. Solution must be designed to ensure the Performance metrics e.g. required 15 sec query response times and in-memory processing etc. h. Solution should have separate Physical Zones for internet and intranet Layers with security Components	M			

	Storage	a. Storage brands should be internationally renowned brand b. Users reports repository quota should be minimum 50 MB for Public Users , 20 GB per business user c. Solution Must have Minimum 3 TB Data space Usable across all the servers other than OS requirements d. Storage must have 30% Up-gradation path with additional of additional chassis e. Storage Must have Fiber channel (equal to required servers with 30 % Up-grade path) and iSCS interfaces f. Storage should have high availability features (Multiple Path Connectivity etc.) and security (Zoning) g. Solution should have recovery time object with one hour for servers and three hours for data				
2	**Hardware Requirements for Disaster Recovery and Backup**					
		a. Server must be of internationally renowned brand b. Solution should have high availability features and security c. Solution must be quoted with DR active hot site backup components d. Solution should have recovery time object with one hour for servers and three hours for data e. Solution should have minimum power consumption and must include internationally renowned brand of UPS to provide backup of one hour f. Solution should have all management elements (rack, cables, switches, Digital KVM of Same Brand etc) g. All the Items/ Server/ Solution/ UPS should be covered with three *warranty services* as per SLA	D			

3	**Application/ Server/ Database Security/ Hardening Appliances**	Solution for safeguarding entire application and database infrastructure, including but not limited to: • **Real-time database activity monitoring** for proactively identifying unauthorized or suspicious activities • **Auditing and compliance solutions** for simplifying SOX and data privacy processes • **Change control solutions** for preventing unauthorized changes to database structures, data values, privileges, and configurations • **Vulnerability management solutions** for identifying and resolving vulnerabilities • **Database leak prevention** for locating sensitive data and thwarting data center breaches • **Application /Data/ Threat Protections:** Protect Application for Vulnerabilities, DDOS attacks, SQL injection Attacks, Man in middle attaches etc.				

Annex VII: Bill of Costs (Software Licenses and Implementation)

(To be filled by the bidder as part of financial proposal. Bidders should quote the prices with educational discounts)

S. No.	Description	Unit	Costs			
			Qty	Unit License	Total License	Implementation
A	**Campus Management Solution**					
	Student Administration	Students	10,000			
	Gradebook	Students	10,000			
	Campus Self-service	Students	10,000			
	Student Financials & Financial Aid	Students	10,000			
	Contributor Relations	Module Users	02			
	Enterprise Portal	Module Users	01			
	Accommodation - Hostel Management	Module Users	01			
	Integration module	Students	10,000			
B	**Financial Management System**					
	General Accounting/ Financials	Module Users	10			
	Budgeting & Control	Module Users	10			
	Treasury	Module Users	10			
	Grant Management	Module Users	10			
C	**Procurement & Inventory**					
	Procurement	Module Users	10			
	Inventory Control System	Module Users	10			
D	**Master Data Management**		10,000			
	Data Profiling	Users	10,000			
E	**User Productivity**					

	Developer	Module Users	01			
	Application	Module Users	04			
	Content Material (CMS)		01			
	Content Material (FMS)		01			
F	Database(s)		01			
	Oracle	Cores	As per sizing			
	Microsoft SQL	Cores	As per sizing			
H	Warranty/ Support Services					
	Product Warranty Support	Percentage	% of Licenses Cost			
	Post-Production Support Services	Percentage	% of Implementation Cost			
I	Data Entry for One Year		01			
J	Any Other Component(s)/ Service(s) needed to fulfill the Scope of Work as per the Objectives of CMS/ERP Project		01			
	Component - 1	Please define Unit(s)	Please mention Quantity			
	Component - 2					
	Component - n					
GRAND TOTAL						

Note: University of Peshawar may choose or drop any of the Component(s)/ Modules(s).

Annex VIII Declaration of fees, commission and brokerage etc. Payable by the suppliers of goods, services & works in contracts worth Rs.10.00 million or more

Contract Number:________________________Dated: ________________________

Contract Value:______________________________

Contract Title: _________________________________

______hereby declares that it has not obtained or induced the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of Pakistan or any administrative subdivision or agency thereof or any other entity owned or controlled by it (GoP) through any corrupt business practice. Without limiting the generality of the foregoing, ____ represents and warrants that it has fully declared the brokerage, commission, fees etc. paid or payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within or outside Pakistan either directly or indirectly through any natural or juridical person, including its affiliate, agent, associate, broker, consultant, director, promoter, shareholder, sponsor or subsidiary, any commission, gratification, bribe, finder's fee or kickback, whether described as consultation fee or otherwise, with the object of obtaining or inducing the procurement of a contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoP, except that which has been expressly declared pursuant hereto.

_________________certifies that it has made and will make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with GoP and has not taken any action or will not take any action to circumvent the above declaration, representation or warranty.

______________accepts full responsibility and strict liability for making any false declaration, not making full disclosure, misrepresenting facts or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any contract, right, interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other right and remedies available to GoP under any law, contract or other instrument, be voidable at the option of GoP.

Notwithstanding any rights and remedies exercised by GoP in this regard,_____________agrees to indemnify GoP for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to GoP in an amount equivalent to ten time the sum of any commission, gratification, bribe, finder's fee or kickback given by____as aforesaid for the purpose of obtaining or inducing the procurement of any contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoP.

[Company name]