OFFICE OF THE UNIVERSITY SYSTEM PRESIDENT
DIGITAL TRANSFORMATION OFFICE

Terms of Reference

Upgrading and Migration to Fully Web-based School Management System for all campuses of USTP

I. Rationale and Objectives

The USTP Online School Management System aims to improve the operational efficiency of the university by automating the management processes from the student admission to the university up to graduation and post-graduation processes and services following the ease of doing business.

The fully web-based system is expected to streamline the preparation and operational activities of the admission process, and student enrollment and registry of scholastic records, advising, and study load evaluation while addressing the challenges brought about by the Pandemic CoVid-19. Remote, smart, self-enrollment, and request for services can be accommodated into the system if not eliminate face-to-face services.

This can also generate various real-time reports and issuances to students, offices, colleges, and exchange of information to and from other external government agencies like CHED and UNIFAST, etc.

II. Scope:
- Software Perpetual License to USTP
- Software Perpetual Bug-free/Bug-free Updates to USTP
- Opensource secured web-based application with SSL, latest secured development framework, code optimized for client-side rendering, logs, and user and access management.
  - Admission sub-system
  - Enrolment sub-system
  - API for authentication, and information interoperability to other systems like eClearance, and eEvaluation System, etc.
- 1 Year Warranty, Support, and Customization
- Technical Training
  - Administrators Training
  - User's Training
    - Admission User's Training

- Program Chair's Training
- Assessment, Billing, and Cashier's Training
- Registrar's Training
- Scheduler's Training
- Documentation User's Manual
- Inclusive of 1 year Webhosting at Amazon Webservices (AWS) Cloud Server
  - 99.9% SLA Reliability
  - 24/7 Web Accessibility and Visibility
  - 1x 36Core 60GB RAM Application Server, 1x 36Core 60GB RAM Database Server Computing Power
  - Connectivity through LAN, Web, Cloud
- Others, Please see Annex A, B, and C.

III.   System Components and Platform:

OSMS basically will have two (2) sub-systems to include 1) Admission sub-system and 2) Enrolment Sub-system.

Student Management and Information System
- Dashboard/ Activity Module
- Create/View Upcoming News and Events Module
- Setup Module
  - Academic Year/Terms
  - Grade Encoding Period
    - Grade modifications after the set grade encoding period will be forwarded to University Registrar's account for approval
  - Group of Activities/ Messages
  - Class Sectioning
  - Club/Organization
  - Institution and Campus
  - Scholarship Providers
  - Scholarship Grants Template
  - Curriculum Builder
    - Customizable policies
  - Grades Subject Formation
    - Customizable subject elements and formula
  - Grade Points
  - Faculty Class Assigning
    - Assigning of subject area coordinators
    - Assigning adviser
  - School Policy
    - Publish Student Grades
    - Ranking Criteria Setup
  - Accounting
    - Chart of accounts
    - Payment options
    - Fees templates setup
  - Enrollment
    - Policy setup

- Enrollment schedule
  - o Academic Setup
    - Academic Calendar Setup
    - School Year and Semester Schedule and Setup

Admission and Testing Module
- Online application feature
- Applicant's profile
  - o Personal information
  - o Family background
  - o Educational background
  - o Admission test results and requirements checklist
  - o Interview assessment
- Qualifiers' results notification via applicant's email
- Customizable admission reports
- Admission statistics

Registrar / Student Center Module
- Student Master list
- Student Profile
  - o Personal information and status
  - o Family Background
  - o Medical Information
  - o Counseling
  - o Document records
  - o Attendance records
  - o Enrollment records
  - o Financial records
  - o Grades/Scholastic records
- Subject Master list
- Certifications
- Top students reports per college
- Attendance / Behavior of Students
  - o Student attendance monitoring

Enrollment / Registration Module
- Online Enrollment / Registration
- Block Registration
- Student Promotion to Higher Level
- Student Online Advising
- Pre-registration of New & Old Students
- Auto-import of information from applicant's profile to student profile for newly admitted/registered students
- Printing Assessment
- Monitoring of Officially Enrolled Student
- Monitoring of List of Registered Students

Academics Module
- Section Management
- Class Schedules

- Checking of Schedule Conflicts

Accounting and Cashiering Module
- Subject with Fees
- Financial Assistance
- Assessment and Billing
- Student Ledger
- Promissory Notes
- Student Allowed to Register
- Cashier Transactions
- Generate OR

Faculty Portal
- Dashboard/ Activity Module
- Viewing Upcoming News and Events Module
- List of Officers per section reports
- eClass Record Module
  - Faculty Load / Schedules
  - Encoding of Academic Grades
  - Encoding of Conduct Grades
  - Encoding of Club Grades
  - Encoding of Departments
  - Encoding of Remarks / Notes
- Class Module
  - Summary/detailed per subjects for upcoming/current and previous activities

Student / Parent Portal
- Dashboard/ Activity Module
- Viewing Upcoming News and Events Module
- Email Message Board Module
- Updating Parent Accounts
  - Parent Information
  - Upload Parent Photo
  - Family Background
  - Educational Attainment
  - Child Information
  - Fetcher Information
  - Viewing of School Policies
  - Viewing of Message Board
  - Viewing of Student Information
  - Viewing of Academic / Conduct Grades
  - Viewing of Summary / Detailed of Attendance
  - Viewing of Discipline/ Counselling Records
  - Viewing of School Calendar
  - Viewing of Class Schedules with Teachers
  - Viewing of Clinical and Medical Records
  - Viewing of SOA or Account Ledgers
  - Viewing of Accountabilities from Other Departments
  - Downloadable Forms
- Online Enrollment
  - Updating of Parent Account

- o Registration per Student
- o Implement School Policies
- o Auto Assessment Based on Tuition Fee Setup
- o Print Registration Form
- o Link with Online Payment
- o Auto Validate w/n 24hours upon payment

UNIFAST Module
- Free Tuition Fee/Unifast Billing
- Billing Statement
- Billing Details
- Reconciliation Details
- List of COR
- Registrar Certification
- Bulk Export of COR to PDF file.

Generated Reports
- Registrar's Report
  - o Summary of Enrollment
  - o Enrollment Profile
  - o Enrollment List
  - o Student Ranking (per Quarter or Final)
  - o Report Cards
  - o Academic Failures Summary (per Quarter or Final)
  - o Mean Average
  - o Academic Awardees (per Quarter or Final)
  - o Letter of Probation (per Quarter or Final)
  - o Promotion Report
  - o Transcript of Records
  - o Club Assignment
  - o Student Attendance
  - o Student Behavior
  - o Top Students per department

- Accounting Report
  - o Accounts Receivables (detailed)
  - o List of officially enrolled students
    - ▪ List of fully-paid students
    - ▪ List of students with balance
    - ▪ List of student with scholarship and grants
  - o Report on assessment (detailed and summary)
  - o Report of aging of Accounts Receivables

- Cashier's Report
  - o Daily collection report
  - o List of official receipts
  - o Summary of all collections
  - o Daily, weekly, monthly

- Other Standard and custom reports requested by user

- All Reports are exportable to different types of format such as MS Excel, HTML, CSV, XML, Rich Text-Box

User Management
- Manage user information and password
- Manage user access per module
- Manage user data access
- Manage automatic system lock after a period of inactivity (idle time)
  Manage force users' password change after set period by system admin

IV.   Delivery
- 30 days delivery and proof of concept
- 1-year warranty, and customization period after acceptance
- Perpetual Software Bug-free/Bug-free Updates
- 12 months support service after acceptance

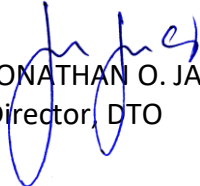## V.   Responsibilities of the Winning Bidder
- Install, setup, deploy, upgrade system at USTP's AWS Hosting service
- Data Migration from the old system database to the new system
- Conduct User and Administrator's Training
- Turn-over Administrator/Root accounts to USTP DTO/CDO ICT Administrator.

## VI.   Qualification, Terms, and Conditions

- OSMS will have a perpetual license to USTP
- OSMS can be integrated with other existing and running USTP acquired systems through API data exchange and interoperability
- Must have a proof of concept- demo on the running system following the design and parameters set
- 30days delivery of an acceptable and running system following the logic and requirements of the USTP with 12 months minor customization through a request for modification to include but not limited to reports, labels and description, sequence, the user interface that are detrimental to the overall functionality of the system, and among others.
- Warranty Period:
  - o 1 year on system/parts and labor/support service
  - o Delivery Period: 30 days upon receipt of Notice to Proceed
- Bidder must support and include additional requirements of the users which may be identified later on as significant components of the system within the customization and warranty period at no additional cost to USTP.
- Bidder must own the system and not a 3rd party provider with a corresponding copyright/patent certificate from the Intellectual Property of the Philippines.
- Bidder must have a minimum of 5 regular programmers who are employed for at least 3 years and with programming experience.
  - o Bidder must submit proof of employment (SSS, PhilHealth, Pag-IBIG, BIR) of the listed regular programmers.
- Bidder must be in the programming and systems integration industry/business for at least 10 years
- Winning Bidder shall perform the Migration of Data from the old database to the New database.

- The web browser application must be seamlessly accessible via Desktop and Mobile platforms.
  - Accessible via Windows, IOS, Android, Linux, and other operating systems with a web browser
- Provision of Back-up Services and System Recovery to be shared to USTP
  - Automated and Periodic system backups
  - Backup on demand by the USTP/Administrator
  - Secured backup in another Data Center and Local
  - Winning bidder shall conduct system recovery or reinstallation in case of a system crash or failure.
  - Winning bidder shall include a complete disaster recovery plan
  - Weekly back-up to a remote location to allow restoration of the School Management System configuration from the previous week.
  - Daily back-up to separate physical device to allow restoration of previous day's School Management system site
- Provision of Helpdesk and Support
  - 24/7 availability of technical and user support
  - 24/7 administrator help desk
  - 24/7 online support portal
- Provision of Training to Users
  - Onsite training for administrator: (16 hours)
  - Onsite training for users for each group: (16hours)
  - Provided training materials for different users.

Prepared by:

JONATHAN O. JACOBO
Director, DTO

Annex A: General System Diagram
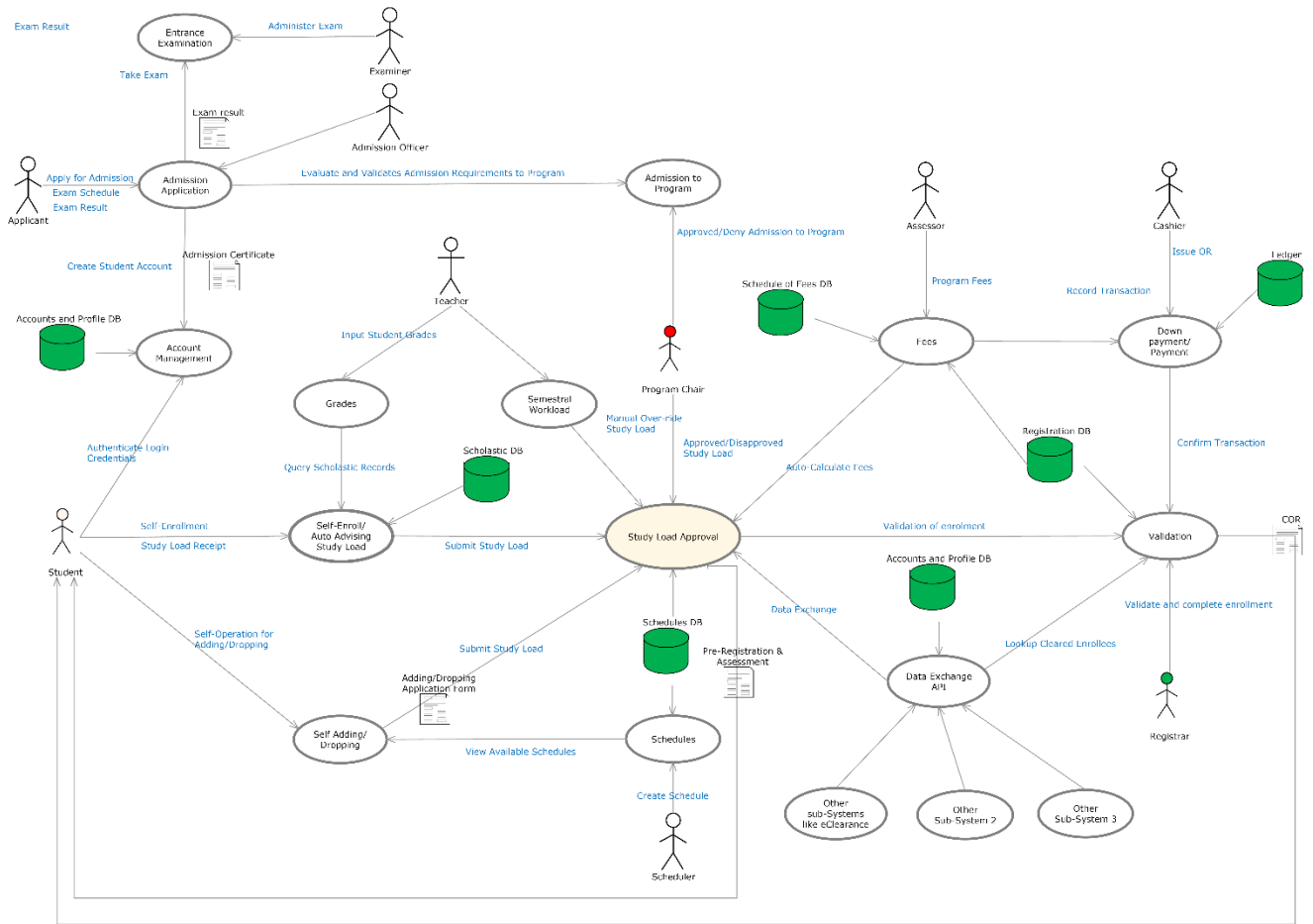
Annex B. Other Parameters

- Allows Self-Enrollment and Assisted-enrollment.
- Allows Self-Adding and Dropping.
- Enrollment including adding and dropping subjects will require approval from Program Chair.
- All Applicants who passed the entrance exam are admitted to the university but not necessarily admitted into the program they choose. Program Chairs will manually admit the applicant based on their perceived criteria.
- All enrollment data must appear in the Program Chairs Dashboard for monitoring and action.
- Program Chairs Dashboard should appear Normal Enrolment, Transferees, Adding, Dropping
- Semestral over-all student study load should conform to the Total Units Limit Policy or threshold per program.
- Adding and Dropping Schedules are only available by College first and then by Campus.
- Open schedules from other Colleges must be approved first by the Dean/Chair of that College, Schedules in the college are prioritized to their program and students.
- Cellphone number and active emails are required during admission and enrollment
- Cellphone number should be part of the Classlist for Teachers
- Global settings for Open and Closing Dates for Admission, and Enrolment by Program
- Registrar will use an external eClearance System to validate students or invalidate enrolment based on unsettled obligations in the university.
- The registrar will have the final say before final enrollment validation.
- USTeP required real-time reports and CSV/Excel Format shall be readily available for download anytime.

- **Admission Module**
  - Testing Schedule adds testing type (Onsite and Home-based).
  - Email will accept only the last name and first name of the applicant.
  - The first option of admission is the testing type(Onsite and Home-based).
  - No applicant every weekend.
  - Add taken and did not take Exam.
  - Hhighlights student applicant's name if 2 or 3 days will pass without supplication of correct rrequirement to call/delete the application if without response.
  - Separate template for onsite and home-based acceptance email and reschedule email.
  - Reschedule Examination Request
  - Add Academic Year and Term in admission and Pooling Application
  - Specific application type and Department on admission.
  - Add enrollment process image on Emails.
  - Disable Testing Date on admission.

- **Scholarship Application Module**
  - Add requirement on Scholarship Provider
  - Request form of Application of Scholarship
  - Accept and Denied Scholarship Application
  - Email for acceptance and non-acceptance of Application of Scholarship
  - Print of Scholarship Application Form
  - Deadline of Scholarship Application

Annex C: APIs for Data Exchange and Interoperability

API #1

API name	Description	Method	Parameters
Campuses	This API should return data of all USTP Campuses	GET/ POST	None
Colleges	This API should return data of all USTP Colleges or per Campus	GET/ POST	Campus ID (optional)
Departments	This API should return data of all USTP Departments or per College	GET/ POST	College ID (optional)
Programs	This API should return data of all USTP Programs or per Department	GET/ POST	Department ID(optional)
Faculties	This API should return data of all USTP Faculties or per Department	GET/ POST	Department ID(optional)
Students	This API should return data of all USTP Students or per Department	GET/ POST	Department ID (optional)
Subjects	This API should return data of all USTP Subjects or per Department	GET/ POST	Department ID (optional)
Sections	This API should return data of all USTP Sections or per Department	GET/ POST	Department ID (optional)
Student Subjects	This API should return data of all Subjects of a target student	GET/ POST	Student ID (optional)
Faculty Subjects	This API should return data of all Subjects of a target faculty	GET/ POST	Faculty ID (optional)
Faculty	This API should return faculty records	GET/ POST	Faculty ID (optional)
Student Search	This API should return Student Details / Records	GET/ POST	StudentID/Lastname/Firstname/Email/Year/Program
Faculty Search	This API should return Student ID, LASTNAME, FIRSTNAME, M.I., EMAIL, COURSE, YEAR LEVEL, CAMPUS	GET/ POST	Faculty ID/Lastname/Firstname/Email /Year/Program
Program	This API should return the program name	GET/ POST	
Student Authentication	This API should return STUDENT DETAIL, JWT TOKEN/AUTH TOKEN	GET/ POST	STUDENT ID AND PASSWORD
Faculty Authentication	This API should return FACULTY DETAILS, JWT TOKEN/AUTH TOKEN	GET/ POST	FACULTY ID AND PASSWORD

CSV REPORT FORMAT for USTeP

Purpose	Data Role	Parameter	Format CSV
Subject Masterlist	For Subject	A.Y. - SEMESTER (EX:2020-2021 - 2nd Semester)	Coursecode | LMS Unified Code | FullName | LEC UNIT | LAB UNIT | CREDIT

Faculty Load Report	For Faculty	A.Y. - SEMESTER (EX:2020-2021 - 2nd Semester) CAMPUS	Faculty Username | Faculty Firstname | Faculty Lastname | Faculty Email | Coursecode | LMS Unified Code | Section
Student Load Report	For Student	A.Y. - SEMESTER (EX:2020-2021 - 2nd Semester) CAMPUS	Student IDnumber | Student Firstname | Student Lastname | Student Email | Coursecode | LMS Unified Code | Section