

## 6.2.3. ERP (Enterprise Resource Planning) Document

This is to certify the Enterprise Resource Planning Document ( 17 Pages) which follows herewith



**REGISTRAR**  
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## **ERP (Enterprise Resource Planning) Document**

Karpagam Academy of Higher Education (KAHE) has engaged agreement with Veradis Technologies LLP and Brightnest Technologies Private Limited has a full time service provider for ERP

### **Introduction:**

Veradis Technologies is a full service software engineering service provider. We provide leading edge IT solutions that enhance process efficiency, productivity, performance and reduce overall cost of your software development initiatives. We strive hard to deliver greatest value in each and every project that we engage with our customers. Our strong dual shore development experience combined with our proven global delivery model allows us to deliver the value that we promise.

Veradis delivers software product engineering services using a combination of onsite, offsite and offshore teams & distributed development methods to align with your business objectives.

### **About us:**

We are a Pacific Northwest based software development service provider. We provide timely, cost effective and high quality software development service. We executed many projects using our proven software development methodologies and project management expertise. We understand the value of long term partnership. We believe every client, in every transaction needs to be treated fairly and honestly. This leads to a partnership based on trust and produces loyalty from both parties.

We build this type of relationship by providing solutions that exactly fit our client's needs and anticipate future changes. We are passionately committed to helping clients achieve rapid results using latest technologies and industry best practices. All our consultants are highly skilled information management professionals with many years of experience. Whether you need software architect, developer, quality analyst or a program delivery team, Veradis has the expertise to deliver the expected results. Our proven dual-shore delivery model means that you benefit from rapid application deployment based on industry-standard best practices.

**Our Specialization:**

Veradis specializes in designing and implementing facebook social applications, android mobile applications, data warehousing, business intelligence & performance management solutions.

Proven Outsourcing Solutions

Demonstrable Cost Savings

Low Risk and High quality delivery model

Effective Project Management

Flexible and Scalable business Solutions

Experienced Management and Technical Team

**Our Value Proposition:**

The value proposition offered by Veradis is quite simple, timely and practical solutions for our customers software development resource needs at a very reasonable and competitive rate. Most importantly we will strive towards building and retaining our customer's confidence.

We provide state of the art IT infrastructure to our employees along with best secured connectivity, facilitating them to provide highest service levels to our customers. We sharply reduce the costly error rates associated with software development deliverables, providing huge productivity benefits to our clients.

**Our Philosophy:**

At Veradis, we value our customer's business and recognize that our own success is intimately tied to the success of our clientele. We seek to establish long term relationships by providing low cost, highly efficient and innovative solutions to their ever changing software development requirements. We adhere to the highest standard of business ethics and seek to merit the respect of our customers.

We also recognize that the expertise of our employees is our key to providing the necessary breadth of skills and resources to meet the needs of our client as they arise

and evolve. We recruit and retain the highest trained and most skilful IT experts by offering a challenging work environment and premium salaries.

### **Start-up of ERP :**

Enterprise Resource Planning (ERP) college web application is the one kind of web application which integrates all the modules of a college system as a single hand system that can be handled by the administrative head and access by the students and faculties with valid user id and password. In the year of 2009 November we planned to start up with this ERP process to avoid manual work and to make simpler in documentation.

#### **Engineering Department:**

As a start-up process we started the ERP enrollment with engineering department. Attendance report for the students was been generated newly with new Admission number. Further each and everyday the generated reports are regarding Staffs login their attendance are been sent to three administrative person for verification and validation.

Each and every module has been developed to generate a automation report. I request you to go through the activities included in the every module:

<b>PERFORMANCE MODULE</b>			
<b>S.No</b>	<b>TAB NAME</b>	<b>SUB TAB NAME</b>	<b>MODULE DESC</b>
1	General	Admin / User	Adding admin / user for giving access to setup or execute performance modules. These users have overall control of the application
		Password Update	Admin / user updating their password.
		Base Faculty	Adding Faculty created by the college based on their curriculum setup
		Base School	Adding schools as per curriculum setup and assigning them under above added base faculty
		Base Department	Adding department as per curriculum setup

			and assigning them under above added base school
		OD Privilege Setup	Setting up OD privileges, so that student can apply for OD online
		Retest Privilege Setup	Setting up of retest privileges for absent , failure or both students. When this setup is made for a particular department then they have provision to enroll students for retest 1 or retest 2 and enter marks accordingly.
		Bonafide Types	Here bonafides names are defined so that student can apply for bonafide.
		ABC Institutions	College has set of other colleges names for which student can apply for OD.
		Feedback Questionnaire	
2	Student	Update Section	Students section for each semester has to be updated from here. While converting semester for the students of course, this section will get updated automatically with previous semester section value as default. Later on request from department coordinator or hod, admin will update section accordingly.
		Student DOJ	Some students will attend college in between the semester. For them attendance need to be marked from the day they joined college. So at that time doj will be updated otherwise previous day attendance sheet will show pending for the late joining students.
		Personal Details	Provision to update student personal details.
		Complete Biodata	Overall student biodata along with internal marks, semester marks, attendance details, family details, qualification details etc all are viewed here in single page
		OD Approval	Once OD Privilege setup is made, students can apply od online, these applied od's will be approved by the HOD
		Leave Approval	students can apply leave online, these applied leave will be approved by the HOD. NOT IMPLEMENTED
		Bonafide Approval	Students can apply for bonafide available

			from list, or they can apply for general bonafide other than the predefined ones. HOD has to approve and the approved bonafides will be issued from main office.
		Bonafide Print	All approved bonafide will be issued, while issuing the concerned person has to update bonafide issued date of the student. Manual bonafides will be issued for student without applying online and hod approval. These manual bonafide will be issued on the spot by admin on request from student.
		Change of Address	When there is a change in address, the student has to apply online with valid documents. These documents will be available in Karpagam.edu.in server, later our database team will move the uploaded documents from karpagam.edu.in server to respective college server.
		Roll No Search	Using roll no we can search for student details. From here we can preview complete biodata of all students, including who got TC, Discontinued.
		Transfer Certificate	Student will be given TC whenever needed by them. If they are reissuing a duplicate copy of the TC for a student then history will be maintained.
3	Staff	Add/Update Delete Staff	Newly appointed staffs will be added here with the designation allotted. Upon creation newly generated staff code will be given for further login of the staff to control their modules.
		Department Change	Few staffs change their department according to the instructions from top management, at that time we use this module to change their department
		Assign Responsibility	Tutor / Class Advisor are the responsibilities given to the staff. The staff is assigned as Tutor / Advisor for each semester under their department or other department
		Manage Tutor - Student	Staffs assigned as Tutor / Advisor will be allotted students to have control over them in academics.

		Individual Workload	Staffs allotted hours will be shown here, so that they will know the scheduled hours for them under each department. This is individual workload
		Department Workload	All Staffs allotted hours will be shown here, so that they will know the scheduled hours for them under each department. This is based on department as a whole
		Search Staff Details	Staffs personal biodata will be displayed based upon the staff code we use in search.
		Add HOD Subordinates	When there is no HOD in a department, temporarily available staffs in the department will be assigned with Level 1 and Level 2 cadre. NOT IMPLEMENTED after this.
		Performance Analysis by HOD	HOD can analyse the performance of a particular staff and enter the feedback in the system. System will randomly generate a staffcode for analysis, if the staffcode shown is absent, then HOD can regenerate a new staff code. HOD responsibility is to go the concerned person class and note this communication skill, technical skill, class handling skill, finally HOD has to enter the feedback in system. This will help management further during reviews.
		Log Book Entry	Staffs has to enter the log book details after each unit completion. The entered log details will be reviewed by the department HOD and further ADMIN will do the final review.
		Mentor Process	Staff will be assigned as mentor. An assigned mentor will be allotted students irrespective of their departments. The mentor responsibility is to control all activities of the students allotted under them.
		Event Management	Departments will conduct events like seminar, guest lecturer etc.. and also students or staff from departments participate in the events conducted by other departments. Here we track such events and the documents related to that event.
		NPTEL Setup	NPTEL is a extra certification to be

			maintained for each subject by the staff and student. Here under setup we set from date and last date for enrolling NPTEL names.
		NPTEL Enrollment	After npTEL setup has been made , now staff can enroll their NPTEL Names and also can add students under them. For each student also they can submit a NPTEL Name individual. If not individually done for student then the Enrollment name used by staff will be used
		NPTEL Upload	Here for the staff and students enrolled under them , they can upload the NPTEL certificate issued.
		NPTEL Report	All uploaded NPTEL certificates and names will be generated as report.
4	Internals	Exam Setup	Here we define how many internals, seminars, model, assignment, unit , attendance they have under semester. After setting up we say whether they follow bestfit way or individual way.EX: Under bestfit if there are 3 internals then out of 3 if we ay 2 then best 2 exam marks scored by the students will be used for calculating final internals. Under Individual all 3 internals will be considered for mark calculation for the aggregate set. This setup can be done for all subjects of the course as common or for individual subject under each course.
		Practical Setup	For practical papers we create a setup and define marks. This setup can be done for all subjects of the course as common or for individual subject under each course. Here also we set experiment and test mark details commonly or individually.
		Exam Mark Limit Setup	Here we set internal max and min marks to be obtained for calculating pass/fail under each exam set under Exam Setup Module. Overall aggregate will be used to find out pass / fail after calculating overall splitup.
		Mark Entry and Analysis	All individual internal marks, seminar marks, assignment marks, model marks, unit marks will be entered here. User will have provision to enter the corresponding subject marks into the system



			based upon the setup we have created under exam calendar module. We set last date for mark entry while setting up exam calendar. After mark entering Subject analysis is done here to know the progress. Overall split shows values after major calculation part done based on the setup under exam setup module.
		Exp and Test Mark Entry	Here we enter PART 1 , PART 2, RECORD marks for each experiment / Test defined.
		Paper Upload Setup	Staffs can set up date for student uploading assignment / seminar papers through online login. After date set up , students upload documents relating to the subject. Student once upload documents staff will be able to download documents in their login
		Retest Setup	Staff has to enroll students who all are eligible for retest. Enrollment students marks will be uploaded here. These marks based on percentage set will be used for internal calculation
		Consolidated Internal Marksheet	Consolidate overall internal marks will be calculated for all subjects.
		Export Internal	Final internal marks obtained by students under all subjects will be saved here. For lab embedded theory papers we store lab and theory mark separately in table along with final marks. Database team will move this mark to control section for semester results
5	Calendar	Set Academic Calendar and Events	When beginning of each semester admin has to setup semester start date and end date. Based on these dates we show courses selected under each department. Here we set holidays. These holidays will get reflected under exam calendar setup , exam timetable, attendance sheet. We define holiday for a whole day.
		View Academic Events	Reports to view events set under academic calendar
		Setup Exam Calendar	Admin setup exam calendar date for all course of departments. There may be some dates inbetween the start and end date of

			exams which doesn't have exams , these dates set under reject dates setup for each course
		Calendar Dayorder Setup	Here admin will setup which dayorder to be followed on each day. Here the dayorder name gets displayed in dropdown. These days are fetched from the timetable days defined.
6	Timetable	General Subject	These subjects are not in syllabus setup. These all are extra papers provided for students by the college.
		Prepare Timetable	<p><b>ASSIGN SUBJECT TO STAFF MODULE:</b> Here we assign staff to the subject they are going to handle.</p> <p><b>ALLOT STUDENT MODULE:</b> After assigning staff to subjects, here we are going to assign students under that staff based on groups defined.</p> <p><b>TIMETABLE PREPARATION:</b> After completion of above two modules we need to prepare class timetable. First we have to set which type to follow - DO TYPE - where we can set for 7 seven days (Monday - Sunday) - MF TYPE - where we can set (Monday - Friday). After defining timetable days we have create class timetable.</p> <p><b>NOTE:</b> We cannot create two timetables on the same day. (ie) 1) When we are going to create timetable for the first time click new timetable version 1 will start. After completion again we cannot create new timetable on the same day. 2) Deletion and updating of timetable , assign subject to staff, allot student module will be available only when attendance is not marked for any day after timetable creation. If there is any single entry in attendance or exam calendar is set then deletion / updating of timetable provision will not be seen. For making any further changes in timetable we have to create a new timetable. That too newly created timetable will be considered from next day onwards.</p>

		Print Timetable	Timetable created will be printed here based on the versions
		Exam Timetable	Already we have defined exam calendar days. Here we set which subjects are going to be conducted on days and hours we have set in exam calendar
7	Attendance	Attendance Sheet	Based on timetable attendance sheet gets displayed for marking. When exam calendar set and exam timetable not set then it shows message TIMETABLE NOT SET. When it is declared holiday it shows message ITS A DECLARED HOLIDAY DUE TO SO AND SO. When day order not set under calendar dayorder setup it shows message CALENDAR NOT SET
		Attendance Pending	Hours for which attendance are not marked are shown here. For admin based on department , Staffs, individual pending For HOD based on Staffs , individual pending For END USER their individual pending.
		Individual Overall Attendance	For a rollno given we are going to show all attendance related to the particular student from beginning till end
		Calculate Attendance Percentage	Under Subject based attendance report, total hour present , total hours absent, total hours will be calculated for each subject the student has opted. Under Overall attendance report, total DAYS present , total DAYS absent, total DAYS will be calculated for each student.
		Individual Attendance DOJ calculation	Here we have provision to check whether there are attendance marked in excess for the student . (ie) DOJ for the student will be June 15 but staff would have marked attendance from JULY 1 then excess days from 1 - 14 have to be deleted from table. At that time we use this to check and delete attendance details.
		OD and Bonafide Report	OD Count applied and approved, Bonafide applied , Approved and Issued for shown in report.

8	Analysis	Result Analysis	
9	Dispatch	Intimation Dispatch	After generation of Intimation letters to students, the dispatch section has to take care of posting letters. If there is any return back of letters they have to enter details into the system. These dispatch details will be shown under HOD / Coordinator for rectification
		Intimation Report	Final report generation.
10	Reports	Daily Attendance	Here we display attendance marked by staffs along with absentees rollno, students for whom attendance is not marked and OD applied students
		Consolidated Daily Attendance	<p><b>DAILY INDIVIDUAL HOUR REPORT:</b> Individual hour based report is generated here. No of absentees in each hour is shown if attendance is marked. If attendance not marked then NE will be displayed</p> <p><b>STUDENT WISE ABSENT REPORT:</b> Based on individual hour attendance here we show absentees rollnos and student names.</p> <p><b>DAILY CONSOLIDATED REPORT:</b> Under consolidated report no of absentees in the morning session and no of absentees in the afternoon session will be displayed. If attendance is not marked for a single hour then overall consolidated attendance percentage will not be calculated. For Overall percentage calculation we need to have complete attendance marked for all courses displayed.</p> <p><b>DAILY STAFF PENDING REPORT:</b> Staff names whose attendance is not marked will be displayed here.</p> <p><b>ATTENDANCE DELAYED REPORT:</b> Staffs who have marked attendance on different dates for a date. (ie) For July 1st</p>

			staff marks attendance on July 2nd or any date. Such different in attendance marked dates will be displayed.
		Overall Attendance	Student with attendance less than 75% will be shortlisted separately. Here we generate report for First year and other year students separately.
		Weekly Hour Wise Attendance	Attendance report for dates specified will be fetched.
		Hour wise subject attendance	Hour wise subject based attendance will be fetched for the date selected
		Parent Report - Attendance Intimation	Attendance percentage obtained by students so far will be sent as mail.
		Parent Report - CIA Intimation	Internal marks obtained by student in internal exams will be mailed to students
		Parent Report - Semester Mark Attendance	Overall semester marks will be mailed to students.
		Notice Board Attendance Report	Attendance Report calculated till date will be put on notice board using the report generated here
		Notice Board Subject Based Attendance Report	Subject based Attendance Report calculated till date will be put on notice board using the report generated here
		Notice Board CIA Report	Internal marks scored by students will be generated here
		Fort Night Attendance Report	Here we generate different PDF ,Generated PDF'S are : 1) View 1 Year PDF Report (0-65%) 2) View PDF Report(0-65%) 3) View 1 Year PDF Report (66-80%) 4) View PDF Report (66-80%)
		CIA Performance Monitoring	Here also we generate PDF related to internal marks  1) VIEW FIRST YEAR CIA PDF

			REPORT 2) VIEW CIA PDF REPORT
		Mark Statement Analysis - GPA Claculation	Analysis is Applicable only for Previous Semester. Current Semester Analysis Cannot be Done. GPA obtained by each student under all semester till given semester will be shown here in report
		Semester Analysis	First Section wise report to be generated and later batch wise report to be generated. SEction wise report helps in getting consolidated values for batch wise.

RESEARCH MODULE			
S.No	TAB NAME	SUB TAB NAME	MODULE DESC
1	Student	Application	Under Research Module, we update application of Phd and Mphil students
		Entrance Process	<p><b>DUMMY REG NO:</b> Here we set dummy register no for students for writing entrance exam.</p> <p><b>GENERATE HALL TICKET:</b> After creating dummy register no we need to generate hall ticket for the students. These halltickets will be mailed.</p> <p><b>MARK THRESHOLD:</b> Here we set min and max marks for the entrance exam</p> <p><b>MARK ENTRY:</b> After exams are over marks are entered here, pass / fail is calculated from threshold set inspite of that admin can change the pass / fail status for approving.</p>

		Interview Process	<p><b>GENERATE HALL TICKET:</b> Here only students passed from entrance exam will be listed. we need to generate hall ticket for the shortlisted students with interview scheduled dates.. These halltickets will be mailed.</p> <p><b>MARK THRESHOLD:</b> Here we set min and max marks for the interview exam</p> <p><b>MARK ENTRY:</b> After exams are over marks are entered here, pass / fail is calculated from threshold set, inspite of that admin can change the pass / fail status for approving.</p>
		Admission Process	Students who got cleared in interview process will be sent admission letter asking them to meet Concerned guide on time mentioned.
2	Guide	Guide Registration	Staffs who have completed phd and the authorisation to guide research scholar can enroll here.
		Guide - Student Allocation	Guide registered will be allotted students.
3	Report	Overall Report	<p><b>REGISTERED REPORT:</b> Total scholars registered so far</p> <p><b>ENTRANCE DETAILS:</b> No of scholars passed entrance exam</p> <p><b>INTERVIEW DETAILS:</b> No of scholars passed interview exam</p> <p><b>CANCELLATION DETAILS:</b> No of scholar count in entrance and got cancelled. No of scholar count reached interview and got cancelled.</p> <p><b>ADMISSION DETAILS:</b> Scholars finally sent admission letters.</p> <p><b>STUDENT GUIDE ALLOTTED:</b> Students and guide details.</p> <p><b>PASSED OUT COUNT DETAILS:</b> Overall passed out count in entrance, interview</p>

PLACEMENT MODULE			
S.No	TAB NAME	SUB TAB NAME	MODULE DESC
1	Staff	Individual Workload	EXPLAINED UNDER PERFORMANCE
2	Student	Student Complete Profile	Here we fetch all details of the student related to personal and academic. Here we can select details for a particular rollno or for the course as a whole. Under course selection we have button to navigate between students
3	Report	Student Complete Report	Complete details of the students along with their GPA and CGPA are shown here.

HOSTEL MODULE			
S.No	TAB NAME	SUB TAB NAME	MODULE DESC
1	Admin	Hostel	First we have to define whether its for BOYS / GIRLS
		Hostel Block	Block names under each hostel is to be set. While creating blocks we have to define no of floors in each block
		Hostel Floor	Floor names under each block are to be set. While creating names we have to define no of rooms under each floor.
		Hostel Room	Hostel room nos are to be set for each floor. While creating



			room names we have define no of beds under each room.
		Hostel Incharge	Staffs will be assigned as incharge for floor or hostel. These staff incharge is responsible for generating and signing pass (outpass / home going pass)
2	Student	Student Room	Here we allocate beds for student. Suppose if we have set no of beds = 3 then only 3 students can be allotted here. When we assign a student to bed no 1 , status will be 'S - Stay' at this time this student name cannot be entered in any other room, when they want to change we have to set change request for the bed allotted now the status will be 'C- change' , at this time we can add this student under any other room. When the particular student need to vacate hostel then status will be 'V - Vacate'. At this time we need to get reason why they are vacating.
		Hostel Pass	While student applying for pass it can be by Application no, Rollno or department wise
		Pass Search	Searching applied pass for entering return time details
		Vacate	Hostel vacating can be done under types of search Application no, Rollno or department wise
3	Report	Pass Report	Based on below mentioned ways reports are generated  Department with High pass, Student's with high pass, Incharge given more pass, Student's with high breach, Rollno based overall report, Daily Report.
		Vacate Report	Based on below mentioned ways vacating reports are generated  Temporary, Permanently, Semester end, Course Completed.