

**IMPLEMENTATION OF ACADEMIC MANAGEMENT AND STUDENT
REPORT CARD SYSTEM - SOFTWARE SOLUTION**



**ACHARYA N.G. RANGA AGRICULTURAL UNIVERSITY
LAM, GUNTUR**

PREFACE:

About ACHARYA N.G. RANGA AGRICULTURAL UNIVERSITY

Andhra Pradesh Agricultural University is the only farm university in Andhra Pradesh which was established on 12th June, 1964. The university was renamed as Acharya N.G. Ranga Agricultural University from 7th November, 1996 in honour of Acharya N.G. Ranga an Eminent parliamentarian, Farmer leader and ducationist in Andhra Pradesh. The university got bifurcated after bifurcation of the State of Andhra Pradesh as per the Andhra Pradesh Reorganization Act, 2014 and the ANGRAU was devolved to residual Andhra Pradesh State.

Overview of the University

ANGRAU is one of the largest State Agricultural University in the country with an infrastructure of 12 Colleges (Five in Agriculture, Two in Agricultural Engineering, Two in Food Science & Technology, one in Home Science, Two Post Graduate Centres, 36 Research Stations distributed in 6 Agro-Climatic zones of the State and having strong extension linkages with 13 District Agricultural Advisory and Transfer of Technology Centres (DAATTCs) and 13 *KrishiVigyanKendras* (KVKs). Thus, it is an unique multi campus University in the country having its units functioning all over the State with the three faculties viz., Faculty of Agriculture, Agricultural Engineering & Technology and Home Science showing splendid performance of exemplary nature. Aiming to build a dynamic human resource in consonance with the dynamic agricultural scenario, ANGRAU offers Bachelors degree (UG), Master's degree (PG) and Doctoral degree (Ph.D) programmes in Agriculture and allied subjects. The Colleges where Masters and Doctoral programme is being offered is listed below;

List of Colleges and Polytechnics of ANGRAU

Agricultural Colleges

1. Agricultural College, Bapatla
2. SV Agricultural College, Tirupati
3. Agricultural College, Naira
4. Agricultural College, Mahanandi
5. Agricultural College, Rajamahendravaram

Agricultural Engineering Colleges

1. Dr NTR College of Agricultural Engineering, Bapatla
2. College of Agricultural Engineering, Madakasira

Food Technology Colleges

1. Dr NTR College of Food Science & Technology, Bapatla
2. College of Food Science & Technology, Pulivendula

Home Science

1. College of Home Science, Guntur

Post Graduate Colleges

1. Advanced Post Graduate Centre, Guntur
2. Institute of Agribusiness Management, Tirupati

Polytechnics

1. Agricultural Polytechnic, Anakapalle
2. Agricultural Polytechnic, Rampachodavaram
3. Agricultural Polytechnic, Maruteru
4. Agricultural Polytechnic, Garikapadu
5. Agricultural Polytechnic, Ghantasala
6. Agricultural Polytechnic, Darsi
7. Agricultural Polytechnic, Podalakuru
8. Agricultural Polytechnic, Somasila
9. Agricultural Polytechnic, Kalikiri
10. Agricultural Polytechnic, Tirupati
11. Agricultural Polytechnic, Utukuru
12. Agricultural Polytechnic, Nandyala
13. Agricultural Polytechnic, Reddipalli
14. Agricultural Polytechnic, Madakasira
15. Agricultural Polytechnic, Ramgiri
16. Polytechnic of Agricultural Engineering, Anakapalle
17. Polytechnic of Agricultural Engineering, Kailikiri
18. Agricultural Polytechnic (Organic Farming), Chinthapalli
19. Agricultural Polytechnic (Seed. Tech.), Jangameswarapuram

The university is running 6 affiliated Agricultural Colleges and 81 affiliated Polytechnics.

Student strength

Sl. No.	Course	ANGRAU		Other admissions	Total
		Constituent	Affiliated		
A	Post-Graduation (Ph.D)				
1	Ph.D. (Ag)	37	-	33	70
2	Ph.D. (Ag. Engg.)	4	-	5	9
3	Ph.D. H.Sc.	4	-	3	7
	Total (A)	45	-	41	86
B	Post-Graduation (Masters)				
4	M.Sc. (Ag.)	119	-	52	171
5	M.Tech. (Ag. Engg.)	13	-	4	17
6	MBA (ABM)	16	-	4	20
7	M.Sc. (H.Sc.)	15	-	2	17
	Total (B)	163	-	62	225
C	Under Graduation				
8	B.Sc. (Hons) Agriculture	560	360	302	1222
9	B.Tech. (Hons) Ag. Engg.	110	-	34	144
10	B.Tech. (Hons) Food Technology	78	-	12	90
11	B.Sc. (Hons) Community Science	83	-	8	91
	Total (C)	831	360	356	1547
D	Diploma				
12	Diploma in Agriculture	510	2420	-	2930
13	Diploma in Ag.Engg.	60	450	-	510
14	Diploma in Seed Tech.	25	440	-	465
15	Diploma in Organic farming	25	120	-	145
	Total (D)	620	3430	-	4050
	Grand Total (A+B+C+D)	1659	3790	459	5908

Request for Quotations (RFQ) is invited from reputed and experienced firms for this purpose. The University envisages improving the Information and Communication Technology Usage within itself and its affiliated colleges and polytechnics and improving the efficiency of delivery of services to the students at large. The proposed Academic Management and Student Report Card System Software Solution is intended to be a complete Integrated Academic Management System connecting all the Under Graduate, Post Graduate and Diploma colleges across the university jurisdiction and facilitating student centric services.

Components of the proposed system:

Following are the key components of the proposed Academic Management and Student Report Card System in ANGRAU:

- The implementation of this solution would help Acharya N.G. Ranga Agricultural University in creating a centralized admission and education related database for all the colleges and polytechnics.
- The ownership of these databases and other data of this entire project shall be vested with Acharya N.G. Ranga Agricultural University and not the solution provider.
- This solution could be hosted centrally at the University's Data Center (SDC) Servers, or rack space for the servers from solution provider can be provided in the Data Center to setup his hardware required to implement the solution.
- It should be accessible 24x7, student, teacher, parent visibility and accessible to administrators at various levels.
- ***Mobile application*** has to be developed which contain chat, fee, library, student management including time table, attendance and assignments etc.

The Solution shall also provide workflow automation for the following;

1. Front Office:

- a. **Students**: Student profile, Attendance and marks reports, Forms for PG students, Posting feedback, complaints, uploading assignments etc.
 - b. **Parents**: Ward's complete profile, Access to marks, attendance, fee dues reports of their wards, progress reports, Correspondence with student counselor/HOD, Posting of feedback about the program/institution.
 - c. **Administration**: Maintaining colleges, polytechnics and college farms under the university, Creation of departments for university and colleges, Configuring academic programs to be offered by the university/college departments, Creation of User roles with proper access rights, Users' management, News & events for the attention of staff and students, Complaints/grievances' management, Circulars/notifications management, Associate Dean Office Management. RTI applications, tracking and their management. etc
2. **Admissions**: Online applications, Online student registration for admission, Online fee payment by students for application/prospectus, Roll numbers & ID cards generation for students after admission, College transfers / Polytechnic transfers, Admission cancellations, Fee refund rules etc.

3. Academics:

- a. **Student management**: Academic calendar of UG / PG / Ph.D. / Polytechnics, Semester Registration, Regulation settings, Time table setting, Attendance, Marks, Marks sheet generation, online system, student promotions, Allocation of chairpersons for PG students, PG forms and their management
 - b. **Course management**: Educational resources, Assignments, Lesson plans management, progress of course schedule, student READY, Comprehensive examination, PG / Ph.D. research work and its progress, Compilation of PG research year wise, Assignments/ seminars and evaluation etc.
4. **Staff**: Registration and generation of faculty ID cards, Complete profiles, management, projects (internal and external), attendance, leaves, service records, recruitment of temporary staff, Pay rolls, Pay slip generation, increments, GPF/CPF etc, Income tax etc.
 5. **Accounts and Budget**: Revenue/Expenditure heads configuration, Bank accounts, Non fee receipts & payments, Funds & grants management, fee payment, configuring seat types, online/ offline fee payment, tracking students, scholarships/ stipend/fellowships et, balance sheet, account statements, Defining budget heads, Online budget proposals and approvals, Budget allocation, Budget tracking with receipts and expenditures etc.
 6. **Examinations and Results**: Exam notifications, schedules, Notification, Online fee payment if any, SMS/Email alerts to students about notifications and fee payments, Hall tickets generation, Configuring internal exams for various programs, Finalization of internal marks, Exam halls configuration, External examiners management, Invigilation duties, Subject wise question banks, online generation of question bank, Coding of exam papers and allocation to the evaluators, Configuration of Grade rules., grade card generation, rank list generation etc.
 7. **Library and Stores**: Maintaining titles. Authors and publishers database, Provision for OPAC, Generation and printing of barcodes, Online and offline entry of books, Issues, renewals and returns of books, student fines, suppliers and purchases, purchases and receipts, sales and returns, stock maintenance etc.

8. **Hostels and Guest Houses:** Allotment of students and guests against vacancies in hostels, Biometric authentication to track movements of hostel inmates, Managing assets allotted to hostels etc.
9. **Placements:** Maintenance of student data base, companies, invitation to companies, generation student profiles, selections, feedback etc.
10. **Convocation:** Provision for students to apply online for convocation, Online fee payment, certificate verification, Reports etc.
11. **Transport:** Vehicles, drivers and their management, Fuel management and maintenance, hired vehicles, log books etc.
12. **Students welfare:** Committees, tracking activities, proposals, recommendations, sports and cultural events, sports stock management, documentation of events, prize winners, donations, photo gallery etc.
13. **Women/SC/ST cells:** Constitution of cells, responsibilities, tracking activities, grievances and their management etc.
14. **Inventory, Stock and Assets management:** Assets acquisition, repairs and maintenance, transfers, disposals etc.

Envisaged scope of Work:

This project envisages the design, development and implementation of an end-to-end integrated ACADEMIC MANAGEMENT AND STUDENT REPORT CARD SYSTEM. Application Software to automate all the processes of the University as stated above. This Application Software would be hosted on IT Infrastructure that would be created by the selected implementation partner. The University envisages improving the usage of Information and Communication Technology within its offices and improving the efficiency of delivery of all its services to all the stake-holders at large.

The broad Scope of Work for this project will revolve around the following deliverables (detailed scope of work will be finalized at the time of issue of RFP to selected bidders who submit their EOIs). It will include:

- Digitized student database creation
- Deployment of web based Management Software Solution applications for the management of Colleges and Polytechnics
- Create Grievance Redressal mechanism for all the stake-holders and a mechanism for their speedy disposal.

Specifically, the selected solution provider would be required to do the following work but not limited to:

1. Procurement and implementation of IT infrastructure equipment for the University's Data Center for implementing this ACADEMIC MANAGEMENT SOFTWARE SOLUTION.
2. Design, development, customization and implementation of University Automation ACADEMIC MANAGEMENT SOFTWARE SOLUTION Application software
3. Management of MIS reports with proper workflows imbibed into the application
4. Provide for Training, Support, Installation & maintenance for the solution provided
5. Result Management & Financial Account Management Solution.
6. Operations and Maintenance of Application and IT infrastructure
7. The supplier will be providing the Operations and Management support for the Application Software and IT infrastructure provided for the contract period which is expected to be for a period of 5 years.
8. Facilitating On-line Payment through Banks

The solution providers should suggest a most appropriate and feasible implementation methodology for the entire project.

For a period of 3 years from the date of completion of the implementing Academic Management and Student Report Card System in ANGRAU.

Qualification Criteria for participation in the Request for Quotation (RFQ)

S.No.	Criteria	Supporting documents
1	Should be a Company registered under the Companies act 1956	Company Registration Certificate issued by ROC
2	ISO 9001: 2015 certified ISO 27001 Certification are essential	Self-attested copy of ISO9001:2015 Certificate
3	Should have an average annual turnover of Rs.10 Crores in the last 3 financial years - i.e. FY 2013-14, 2014-15 and 2015-16 from Information Technology services.	Chartered Accountant's Certificate along with self-attested copy of Annual Statement containing annual turnover figures
4	Selected bidder should have provided similar software solution in university, Agriculture University experience shall be preferred	Detail of Work Order & experience details shall be attached
5	The Company should have its own developed software solution; third party software solutions will not be entertained.	Certificate to that effect
6	The bidder should have 5+ years Software Development experience in IT industry	Experience proof certificate

7	Should produce a solvency certificate from their bankers	Bankers certificate
8	The Bidder should have tailor made & ready to use software solution which can be deployed in shortest period of time frame at ANGRAU, Guntur	
9	The software firm should provide Four (4) technical staff conversant in “Telugu – regional language” full time (24x7) during online application process and web counselling.	Self certification to that extent needed
10	The software firm should provide “Multiple Payment Gateway ” for handling Online Applications.	Proof of successful implementation need to be provided
11	The company should not have been blacklisted by State/ Central Government organisation	Self certification to that extent needed

Based on the evaluation of the RFQ submitted, The RFQ will be shortlisted based on their eligibility and technical competence will be evaluated through presentations. The short listed companies will be evaluated for their financial quote and will be processed as per guidelines.

Sd/- xxxxx
DEAN OF AGRICULTURE &
PRINCIPAL INVESTIGATOR
INSTITUTIONAL DEVELOPMENT PLAN –
ANGRAU (NAHEP)
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UNIVERSITY, LAM, GUNTUR