

## UNIVERSITY ANNUAL REPORT 15-16

KL University is the metamorphosis of Koneru Lakshmaiah College of Engineering (KLCE) established in 1980 has a memorable journey of about 35 years packed with remarkable landmark achievements. It began its sojourn as an affiliated College of the Acharya Nagarjuna University with four undergraduate programs, and grew to offer 8 UG Engineering programs, 8 UG Non engineering programs, 17 PG Engineering programs, 1 integrated Management Program, 1 PG Management program and 13 Doctoral programs as on today. We take pride in stepping into an enviable position of excellence and feel confident that within, next few years the pool of diverse and inquisitive students, the devoted faculty, staff and the alumni would work collectively towards building this educational institution as a 'WORLD CLASS UNIVERISTY'. A number of landmarks have been achieved by the institution some of which include the following:

<b>Serial Number</b>	<b>Type of achievement</b>	<b>Year of achievement</b>
	NBA Accreditation	2004
	Autonomous status	2006
	NBA Accreditation	2007
	NACC Accreditation (Highest CGPA 3.76 / 4.00 among Engineering institutes in India)	2007
	Deemed University status u/s 3 of UGC Act 1956	2009
	NAAC Accreditation (A' grade with CGPA 3.16/4.00)	2013

During this year, a galaxy of dignitaries, Scientists and academicians from India and abroad visited the University and made us richer by their gracious presence and sharing of their experiences. The list of such dignitaries is very large to be read here but to name a few: Dr. James M Conard, University of North Carolina, Charlotte, Dr. Dion Gouws, Assistant Dean, School of Business, Chair Accounting and Finance, University of Virgin Islands, Prof. D Ramachandra Rao, Asso. Director, G.R.Harrison Spectroscopy Laboratory, Massachusetts Institute of Technology, USA, Prof. G.S.N Raju, Vice-Chancellor, Andhra University, Prahalada Rao, Joint Director, C-DAC, Bangalore, etc.,

The number and quality of faculty have the greatest impact on the performance of an educational institution. The University has strength of 810 faculty out of which 303 doctorates and industry experience and 320+ faculty are pursuing PhD. The University organizes several orientation and faculty development programs for the faculty to make them well equipped for the various teaching – learning mechanisms that prevail in the University.

KL University is situated in a spacious campus on the banks of Buckingham Canal of river Krishna, eight kilometers from Vijayawada city. Built within a rural setting of lush Green Fields, the Institute is a virtual paradise of pristine nature and idyllic beauty. The campus has been aptly named “Green Fields” and the splendid avenue of trees and gardens bear testimony to the importance of ecology and environment. The campus ambience is most befitting for scholastic pursuits. The University’s Hallmarks were studded with accolades and honors right through the year. The University of Bradford, U.K. and Education Matters bestowed “The Engineering Educators Award”, “Best Innovation in Higher Education in India” at World Education Summit 2015, “Top 10 in India, Top 5 in South India among all private technical universities” by The Week, “Best Private Technical University in Asia”, at Asian Education Excellence Awards 2015, to name a few. The University has achieved a number of landmarks some which include the following

Serial Number	Type of landmark achieved	Feature/ Level of achievement
1.	Recognized as Public Funded Research Institute	By DSIR of Government of India – in recognition of the existence of excellent research environment in the institute.
2.	Number of doctorates	303
3.	Number of Faculty pursuing doctoral research	329
4.	Number of faculty	810
5.	Faculty-Student ratio	1:14.14
6.	Number of students per mentor	Between 15 to 20
7.	Number of smart class rooms	80
8.	Number of faculty to impart the students with soft and communication skills	40
9.	Member of National Knowledge Network connected	Networked with KLU servers with bandwidth of 1.3 Gbps
10.	Advisory committee for each department	IIT, NIT and Industry personnel
11.	Placements & Industrial Practice School Department (P&IPS)	100% placement for the last 11 Years
12.	Special attention to First year students	Freshman Engineering department
13.	Existence of student welfare Guidance division	Headed by a Dean
14.	Discipline	100% Ragging free campus
15.	Existence of centers of excellence	Microsoft (Microsoft Dreams-spark),

		IBM (IBM Centre of Excellence), Oracle (Oracle IT Academy Lab), CISCO (CISCO Lab) and Adobe (Abode Centre of Excellence), Mission 10X etc.
16.	Mode of teaching	E-Learning
17.	Existence of special labs	Open Academy Lab, Multimedia and Animation Center, VLSI Centre of Excellence, Altair Hyper works Design Center, Advanced Bio-Tech Labs, NI Lab View etc.
18.	Entrepreneur development	University has set up an innovation, incubation and proto-typing cells
19.	Mental health development	Through Yoga and Meditation centers
20.	Extracurricular activities	Through technology forums and hobby clubs.
21.	Indoor and outdoor games	State of the art indoor stadium with trainers with great expertise
22.	MOUS with foreign universities situated in the countries like	US, UK, Australia, Romania, Sri Lanka, Poland, Thailand, Japan, Sweden
23.	Rule Book	Policy document
24.	Quality achievement	Existence of internal IQAC cell headed by a direction
25.	Development of administrators	Through IAS academy situated in India

### 3. Curricular Aspects

#### 3.1 Academic Programs and Structures

Ever since KLU got established as a University, it has been expanding its horizon of higher education and research. It offers undergraduate and post graduate programs not only in Engineering but also in Management and Commerce as well.

The following programs are being offered by the university

Serial Number	Program	Level of programs	Number of discipline in which the program is offered
1.	4 Year B. tech program	Under Graduate	B. Tech Program 1. Bio Technology 2. Civil Engineering 3. Computer Science & Engineering 4. Electronics & Communications Engineering 5. Electronics & Computers Engineering, 6. Electrical Electronics Engineering, 7. Mechanical Engineering

			8. Petroleum Engineering
2.	3 Year programs	Undergraduate	<ol style="list-style-type: none"> <li>1. B. Com (Hons) in Accounting &amp; Finance</li> <li>2. Bachelor of Hotel Management</li> <li>3. BBA (Bachelors of Business Administration)</li> <li>4. B.Sc.(Visual Communications)</li> <li>5. Bachelor of Computer Applications</li> </ol>
3.	3 Year programs	Undergraduate	<ol style="list-style-type: none"> <li>1. Bachelor of Fine Arts(BFA)</li> </ol>
4.	5 Year programs	Undergraduate	<ol style="list-style-type: none"> <li>1. Bachelor of Architecture</li> </ol>
5.	5 Year program	Integrated Double Degree	<ol style="list-style-type: none"> <li>1. B.BA.,LL.B</li> </ol>
6.	5 Year program	UG + PG	<ol style="list-style-type: none"> <li>1. BBA + MBA</li> </ol>
7.	2 Year Programs in Management	PG	<p>MBA Program:</p> <ol style="list-style-type: none"> <li>i. General Management with functional specialization,</li> <li>ii. Technology Management,</li> <li>iii. Health Care &amp; Hospital Management,</li> <li>iv. Banking and Financial Services</li> </ol>
8.	2 Year Programs in Engineering	PG	<p>M. tech Programs</p> <ol style="list-style-type: none"> <li>1. Bio Technology</li> <li>2. Computer Science &amp; Engineering</li> <li>3. Computer Networks &amp; Security,</li> <li>4. Communications &amp; Radar Systems</li> <li>5. Wireless Communication &amp; Sensor Networks</li> <li>6. Power Systems</li> <li>7. Power Electronics &amp; Drives</li> <li>8. Mechatronics</li> <li>9. Structural Engineering</li> <li>10. Construction Technology and Management</li> <li>11. VLSI</li> <li>12. Embedded Systems</li> <li>13. Thermal Engineering</li> <li>14. Cloud Computing</li> <li>15. Space Technology &amp; Atmospheric Science</li> <li>16. Cyber Security &amp; Digital Forensics</li> <li>17. Geospatial Technology</li> </ol>
9.	<p>3 Year full time PhD Programs</p> <p>4 year part time PhD programs</p>	Doctoral	<p>Full-time and Part-Time programs in various disciplines of Science, Engineering, Management and Humanities.</p> <ol style="list-style-type: none"> <li>1. Bio Technology</li> <li>2. Civil Engineering</li> <li>3. Computer Science and Engineering</li> <li>4. Electronics and Communication Engineering</li> <li>5. Electronics and Computer Engineering</li> </ol>

			6. Electrical and Electronics Engineering 7. Mechanical Engineering 8. Management 9. Mathematics 10. Physics 11. Chemistry 12. English 13. Commerce
10.	New programs proposed from academic year 2016-2017		1. B. Pharmacy 2. BA 3. M.Sc.(Chemistry)

Salient features of B Tech academic structure of K L University include:

- Highly flexible academic structure including options to select instructors in a multi-section course, being able to choose elective courses within and across the disciplines, opting for degree with specialization and degree with interdisciplinary minor.
- Practice School (internship in industry) of one-semester duration in either of the semesters in B Tech final year.
- Students working on Term Papers in all core courses with a view to inculcate research aptitude.
- Project based labs and open labs are commissioned.

In addition to the aforementioned academic flexibilities, our University also offers several operational flexibilities, such as:

- Change of Branch at the end of 1st year B Tech program of study.
- Repeating a course for improving CGPA.
- Withdrawal and substitution of an elective course.
- Summer term courses for weaker students as well as for quality-performers to earn honors degree and dual degree.

#### **4.0 Teaching Learning and Evaluation**

The University has established Academic Staff College for the development of the faculty. It is organizing in-house Teacher Training programs to enhance skills in Effective teaching, Teaching Pedagogy, Outcomes Based Education, Class Room Management, Human Values, ICT Oriented teaching, Software Tools and Active learning. 25 programs have been organized during the academic year through invited resource persons as well as expertise available in the University. 6 workshops on English Communication Skills (both Oral and Verbal) have been conducted to

bring out the awareness about the importance of the same in the Teaching-Learning process. 4 programs were also conducted on Curriculum Design and Delivery based on ABET and International standards.

### 5.0 Research, Consultancy & Extension

A university can grow successfully only when research and teaching mesh together seamlessly - one without the other is incomplete. Therefore we have ensured the development of a collaborative environment conducive to learning, exposure to the best international practices and promotion of innovation and creativity.

The University has been offering PhD programs from the Academic year 2009-10. KLU encourages interdisciplinary research. The University offers its own research fellowships to full-time research scholars. Quality research output is envisaged through regular monitoring of the work. In order to enhance R&D and Consultancy activities in the University, 32 Research Groups have been created to carry on collaborative research. The Groups also deliver quality courses and take research into the class rooms. These Groups are actively involved in setting up Research Labs and obtaining funded Research and Consultancy Projects.

Research Progressive Assessment Committees have been formed in each department headed by a senior Professor having rich research experience. These committees co-ordinate all the activities related to research in the departments.

Serial Number	Academic Year	Number of scholars admitted
1.	2009-2010	72
2.	2010-2011	76
3.	2011-2012	93
4.	2012-2013	74
5.	2013-2014	398
6.	2014-2015	422
7.	2015-2016	326
Total Scholars		1,461

Science and Technology is a key mover and shaker in the development of any region of the country. KL University has tremendous locational advantage as it is situated in one of the regions endowed with rich natural resources. Enhancing quality in teaching learning in Science and Engineering is therefore of paramount importance. We are pleased to state that five departments of the University Electronics and Communication Engineering, Mechanical Engineering, Computer Science Engineering, Bio Technology and Atmospheric sciences have been selected for support under the 'Fund for Improvement of Science and Technology infrastructure (FIST) in

higher educational institutions' programme of the Department of Science and Technology (DST), Government of India.

Tables I and II below show complete details of the projects sanctioned to the University.

**Table I**

Sl.No.	Completed Projects	Ongoing Projects	Total Projects
1	53	45	98

**Table II**

S.No	Name of the PI/Co-PI	Title of the Project	Amt (in laks)	Status
1	HOD (ECE)	Antennas, RF & Microwave Engineering	55.00	Ongoing
2	HOD (ME)	Robotics & Mechtronics Lab	55.00	Ongoing
3	HOD (AS)	Centre for Atmosphere Science Research Studies	47.00	Ongoing
4	HOD (CSE)	Internet of things (IoT) Research Laboratory	45.00	Ongoing
5	Dr.G.V.Subba Rao	Depth Resolution and Sizing Studies in Thermal Wave Detection and Ranging (TWDAR)	29.47	Ongoing
6	Mr.J.Somlal	Fuzzy based space vector PWM Controlled shunt hybrid active power filter for power conditioning	19.20	Ongoing
7	Dr.B.Pradeep Kumar	Development of electrochemical Immunosensor as a prostate cancer diagnostic tool	20.00	Ongoing
8	Dr.G.V.Subba Rao	Subsurface analysis using compressed infrared imaging	16.82	Ongoing
9	Dr.D.Venkata Ratnam	Stimulation of adoptive Kalman Filter for unmanned Air craft vehicles (UAV) 2015-17	--	Ongoing
10	Dr. S.R.Krishna Motukuri	Transcriptome analysis of Chilli against drought	8.52	Ongoing
11	Dr.B.Pradeep Kumar	An ultra sensitive electrochemical sensing platform for prostate cancer diagnosis at early stage	7.96	Ongoing

12	Mr.Maddila Srikanth	Maximum Power Point Tracking Applications for DC Distribution System by Integration of Buck-Boost Converter.	27.79	Ongoing
13	Ms.Ch.Chitralkha Dr.B.Mahendran	Screening and Characterization of SNP associated Sex linked Biomarkers	23.10	Ongoing
14	Ms.K.Lavanya Dr.B.Mahendran	Isolation and Characterization of Human COX-2 Inhibitors from Cyperus scariosus R.Br rhizomes	23.65	Ongoing
15	Dr.G.V.Krishna Mohan	Red mud as an adsorbent for removal of pollutants	17.82	Ongoing
16	Mr.M.Nageswara Rao	Integration of Strategic Tactical and Operational Level Planning of Scheduling in Flexible Manufacturing System	59.23	Ongoing
17	Dr.Obbu Chandra Sekhar	Development and Performance Evaluation of Controlled Techniques for Multi-Point Clamped Inverter fed Direct Torque Control Induction Motor Drive.	34.41	Ongoing
18	Dr.Kumar Naik	Analysis and Design of Concentric Circular Ring Microstrip Patch Antenna	35.50	Ongoing
19	Dr.A.Venkateswara Rao	Synthesis, characterization and evaluation of nanostructured spinel thin-film LiMn <sub>2</sub> O <sub>4</sub> cathode active materials with hetero valent multi ion insertion: Application for rechargeable microbatteries.	37.54	Ongoing
20	Dr.D.Aruna Kumari	Design and Development of an Effective Privacy Preserving Data Mining Technique for Cardiac, Cancer and Diabetic Healthcare.	35.78	Ongoing
21	Dr.S.Koteswara Rao	Advanced Submarine Target Motion Analysis	18.76	Ongoing
22	Dr.A.Siva Sankar	Creation of Andhra Pradesh Coastal Environmental Information System (APCEIS) using Remote Sensing & GIS	12.00	Ongoing



23	Dr.K.Ch.Sri Kavya	Performance Analysis of Ka-Band Reconfigurable Antennas for Fade Mitigation in Earth Space Paths	38.93	Ongoing
24	Ms.N. Lavanya	A topology for multiple generation system with doubly fed induction machines and indirect matrix converter	23.48	Ongoing
25	HOD	Metabolic Engineering Lab	67.00	Ongoing
26	Dr M. Sreedevi	Rural Women Technology Park in Tadepalle Mandal (Vaddeswaram Village), Guntur District, Andhra Pradesh	86.22	Ongoing
27	Mrs. K. Hemamalini	Developing Nutritional Security and Economic Empowerment of Rural Women Throgh Community based approach in selected villages of Tadepalli Mandal, Guntur District.	24.67	Ongoing
28	Mr.Sripath Roy Kognati	Xenomai OS porting on i.Mx6 dual core processor (This amount not included because he is co-pi and the PI was another University)	9.90	Ongoing
29	Dr.K.Ch.Srikavya	Characterization and Modelling of Ka-Band Earth Space Paths for Prediction of Total Attenuation including Fade Dynamics	53.60	Ongoing
30	Ms. B.Jyothi	Three phase to five phase transformation using transformer and five leg inverter to drive the five phase induction motor.	21.62	Ongoing
31	Dr.V.Chandra Prakash	Development of an expert system for career assessment based on cognitive models	16.87	Ongoing
32	Dr.P.V.V.Kishore	Visual - Verbal Machine Interpreter Fostering Hearing Impaired and Elderly	62.65	Ongoing
33	Dr.S.Vijaya Laxmi	Organocatalytic enantioselective synthesis of biologically active heteroaryl compounds	11.00	Ongoing

34	Dr. Vijayalaxmi Somarapu	Organocatalytic Enantioselective Synthesis of Biologically Active Heteroaryl Compounds	15.51	Ongoing
35	Dr.Ch. Rajesh	"Electron Energy Level Estimation Of Diluted Magnetic Quantum Nano Hetero Structures."	34.51	Ongoing
36	Dr. Swapna Koneru	Spectral Characterization of Rare Earth ions doped telluride glasses for Optoelectronic materials applications	44.33	Ongoing
37	Dr. K.V. Ramana	Development, Testing and Optimization of MRF dampers	269.67	Ongoing
38	Ms. Anusha Marouthu	An Effective Co-operative MAC Protocol in Multi-Channel Multi-Radio Environment of Cognitive Wireless Mesh Networks	20.50	Ongoing
39	Mrs. Chandrika Panigrahi, Dr. Habibulla Khan (Mentor)	Validation of the Dropsize Distribution Models Over Indian Region for Rain Attenuation Studies	19.20	Ongoing
40	Mr. G.V.S Rama Krishna	Application of pullulan based Edible Active Films and Coatings (EAFCS) in shelf life extension and packaging of fresh produce	12.49	Ongoing
41	Dr B T P Madhav	Development of Conformal Liquid Crystal Polymer based Reconfigurable Antenna for Vehicular Band Applications	43.01	Ongoing
42	Dr. Ramesh Kumar Vobulapuram Dr. M. Durga Prakash	Design of CNT based TSVs for a Realistic 3D Integrated Circuits	39.60	Ongoing
43	Dr. Mahamuda Shaik	Preparation and Characterization of Rare Earth ions doped Oxide, Fluoride and Oxy - Fluoride Glasses/Glassy Ceramics for Fiber Lasers and Optical Fiber	52.03	Ongoing
44	Dr Srinivasa Rao Karumuri, Mr. M. Durga Prakash	Design Fabrication and Characterization of MEMS Bio-Sensor for Detection of Cholera and Diarrhea	31.55	Ongoing

45	Dr Devanaboyina Venkata Ratnam Dr S. Koteswara Rao	Development of Ionospheric TEC Data Assimilation Model based on Kalman Filter using Ground and Space based GNSS and Ionosonde observations	17.32	Ongoing
46	Dr. P. Siddaiah	Carrying out theoretical studies on simulator	4.50	completed
47	Dr. P. Siddaiah	Modernisation of Digital Signal Processing Lab	5.00	completed
48	Prof. K. Subba Rao	Switching control strategies for the Direct Torque control of Induction motor Drives	5.00	completed
49	Prof. K. V. Ramana	Development of expert systems for condition monitoring	9.49	completed
50	Dr. P. Siddaiah	Radome design	5.82	completed
51	HOD	Modernisation of Civil Engineering Lab	5.00	completed
52	Dr. P. Siddaiah	Theoretical studies on phased array antennas for satellite links from Aircrafts	8.50	completed
53	Dr. R. Srinivasa Reddy	Sequential separation of high value products from microalgae	12.96	completed
54	Dr. M. Srinivasan	Non-classical estimation techniques for autonomous Robots simultaneous localization and mapping in unknown Environment	6.34	completed
55	Dr. B. J. K. Singh	Isolation, identification and characterization of protein pollen allergens of Indian origin	10.13	completed
56	Dr. R. S. Reddy	Studies on flue gas fed microalgae for alternative fuel production	10.36	completed
57	Dr. P. Siddaiah	Design for optimization of phased array antennas	10.26	completed
58	Dr. P. Siddaiah (PI)	Design feasibility study and realization of a single directional antenna for L & S bands	13.44	completed
59	Dr. P. Siddaiah (PI)	RF Front end Receivers spurious/Harmonic analysis	8.25	completed

60	Dr. A. Srinath (PI)	Development of an expert system for design of an optimum manipulator for any medical/ surgical robot with the incorporation of neural network & fuzzy logic concepts for sensing.	7.69	completed
61	Prof. V.G.K.M. Pisipati	Systematic studies of phase stability in dimeric liquid crystals	26.00	completed
62	Dr. K. Sarat Kumar	Prediction of Propagation Impairments for Ku & Ka Band Satellite Links – Real Time Monitoring & Analysis for Communications/ Services	11.00	completed
63	Mrs.D. Madhavi Latha	Optical studies on nano-particles doped liquid crystals	14.58	completed
64	Dr. R. Srinivasa Reddy	CO <sub>2</sub> Mitigation and Cultivation of oil rich microalgae for Bio-fuel production	20.91	completed
65	Dr. B. J. K. Singh	Molecular characterization of plant Endo-N-Acetylglucosaminidases (ENGase)	16.47	completed
66	Ms.Swapna Koneru	Absorption and emission characteristics of earth doped glasses for efficient lasers	21.70	completed
67	Dr. Gouthu Uma	Global studies on ionospheric density irregularities during quiet time using space-based remote sensing techniques	19.30	completed
68	Dr. K. Raghava Rao	Web description and building models for sensors to discover knowledge for prediction and decision making	15.54	completed
69	Ms.S.Srijaya Lakshmi	Systematic Designing of compact slot antennas for wireless LAN applications	24.55	completed
70	Mrs.I. Govardhani	Experimental Studies on Ku and Ka-band Satellite Signal Propagation Impairments	25.50	completed
71	Ms.K. Ch. Sri Kavya	Communication Platforms using the Low Cost Transceivers setup's for Quick Establishment and Operation during Disaster Situations	25.45	completed

72	Mrs.K. Chandrika	An integrated process development of continuous sequestration of CO <sub>2</sub> and the production of value added products	26.00	completed
73	Ms.Deevi Radha Rani	Securing the Embedded Systems from side channels	21.60	completed
74	Dr. K. Sarat Kumar	Design of Low Cost Amateur Radio SATELLITE Compatible Transceiver Setup's for Operation and Quick Establishment of Communication Platforms during Disaster Situations (A Means to Save the Life during Disasters)	9.28	completed
75	Dr.A.Srihari Prasad	Experimental investigation of thermomechanical properties of natural fiberreinforced composite materials.	8.70	completed
76	Mrs.Sk.Mahamuda	Spectral Studies of Neodymium doped glass and glass ceramics for efficient laser action	14.98	completed
77	Mrs.G.Swapna	Screening the mitigation of carcinogenic PAHs and CO emissions of flue gases by microbial consortia	22.40	completed
78	Dr.T.Venkateswara Rao	Insilico approaches to multitarget ligand designing and assay based screening of Acetylcholinesterase inhibitors	27.20	completed
79	Dr. R. Srinivasa Reddy	Novel Biorefineries : Design and process development for production of high value products and biofuels from microalgal consortium	60.81	completed
80	Dr.B.J.K.Singh	Allergen Epitope Mapping and Invivo screening of Pro-inflammatory Cytokines	12.29	completed
81	Dr.D.Venkata Ratnam	Development of Ionospheric forecasting models for satellite based Navigation systems over low latitude stations	21.33	completed

82	Dr. A. Srinath	Design and Development of Robotic Set up for Cardio Pulmonary Disorders - Emphasis on Cardiac Resuscitation	17.71	completed
83	Mrs.N.Krishna Jyothi Dr.K.Vijay Kumar	Development and Characterization of Nano-structured conducting polymer electrolyte system for electrochemical cell applications	23.80	completed
84	Ms.Shechinah Felice Choragudi Dr.B.Jayakumar Singh	Characterization of Pollen specific Polygalacturonase of Sorghum bicolor	19.40	completed
85	Mrs.R.Revati Dr.K.S.Ramesh	Study of Dynamical Coupling between Ionospheric and Earth's Atmosphere subject to Meteorological and Seismic Disturbances over Coastal area (Guntur) by installing GPS receiver	26.50	completed
86	Dr.M.Sudhamani	Application of Therapeutic sugar producing lactic acid bacteria in diabetes and obesity management	25.00	completed
87	Dr.B.Mahendran Dr.K. Vijaya Kumar	Targeted Delivery of Nanoparticle to Enhance DR5-DDX3 Mediated Apoptosis in Tumour Environment	42.95	completed
88	Dr. K.L.Narayana	Matching and Shaping of Material Employing WEDM	13.75	completed
89	Dr.B.Mahendran	Identification and characterization of DDX3 interactive proteins in the development of Breast Cancer	27.15	completed
90	Dr.B.Jaya Kumar Singh	Development of ELISA based diagnostic kit for the plant pollen cross reactive allergens	34.69	completed
91	Dr.A.Srinath	Development of CPR Apparatus using AI interface	35.92	completed
92	Dr.P.Raja Babu	A Study on Financial Inclusion in Krishna District.	7.00	completed
93	Dr.K.L.Narayana	8th Meeting of the programme Advisory Committee on Atmospheric sciences (PAC-AS)	9.75	completed

94	Dr.K.L.Narayana	100th meeting of the expert committee on Science Technology for Women-SEED	10.50	completed
95	Prof.D.V. Bhaskara Rao	"SERB School on Computational Meteorology"	19.60	completed
96	Dr.K.Thirupathi Rao	Big Data Analytics	6.00	completed
97	Dr.K.Satya Ramesh Dr.D.V.Ratnam	Study of Subtropical Ionospheric Electon Irregularities and Seismo-Inonospheric Peturbations using GPS Recivers - Reg.	31.11	completed
98	Dr.K.Sarat Kumar Dr.D.Venkata Ratnam	Ku band propogation impairments studies over Indian region to develop rain attenuation contours and suitable models	39.81	completed
<b>Total</b>				<b>2604.18</b>

The University has also provided support to faculty and students to participate in national and International Seminars, Conferences and other events. Last year has witnessed a greater focus on building research facilities augmented by funding from various national funding agencies. New labs have been added during this year. Resources have been generated by the faculty through sponsored research projects which has added value to their research and technology development. Faculty members of the University have actively involved themselves in consultancy projects from various organizations. A total of 98 sponsored projects worth **2604.18 lakhs** are the research assets of the faculty of the University. During this year more than 27 research and consultancy projects from various funding agencies have been sanctioned with a total budget outlay of over Rs. 655 lakhs. I offer congratulations to the faculty members for getting these grants. I am sure that the number of extramural projects will further increase during this year.

In addition, numerous schemes under internal funding for faculty who need institutional support for kick-starting their research and innovations are available. Such efforts lead to better teaching and research outcome. In the current year alone, 10 internal funded projects with a cost value of 21.6 lakhs were sanctioned and 10 more projects worth 50 lakhs are in pipeline sanctioned and ready to be taken up by the faculty.

The faculty members of KLU have been active in doing research and publishing papers in journals and conference proceedings as evident from the total number of publications which is

6331. Out of these 3967 are INDEXED in SCOPUS / SCI whereas 2364 are categorized under others. In this year alone, the faculty members and the research scholars have published around 1136 research papers in peer reviewed journals and around 1182 papers were presented in national and international seminars and conferences, making a total of 2318 research papers indexed in international databases like Scopus and SCI. The papers have been getting many more citations than before thereby pushing up the 'h' index. Some of the faculty members and students of the University have also published books.

It is creditable that the Research and Development Cell of the University has organized 3 INSPIRE programs and 01 Science Fair under the auspices of the Department of Science & Technology (DST) and trained about 800 school children for making innovations. The children had chance to interact with top class scientists of the country.

The University has organized 24 International and National seminars, Conferences and Workshops. To name a few: SPACES 2015, ICAESW 2015, RABAEB 2015 NCBR 2015 etc.

## 6.0 Infrastructure and Learning resources

### 6.1 Research Centers

The University has been pursuing with its policy of engaging its faculty members in carrying out high-end research in emerging areas of national and international importance. Research laboratories for Communication and Atmospheric Sciences have been established. Various Centers of Excellence like Center of Excellence for VMware, Center of Excellence for E M C, Center of Excellence for iii (Petrofac), Center of Excellence for IPsoft, Center of Excellence for Wipro, Center of Excellence for C-DAC and Center of Excellence for Embedded Applications have been established and are operational.

Sl. No.	Name of Excellence Centre	Name of the Professor In-charge
1	VMware	Mr. B. Thirupathi Reddy, Associate Professor, CSE
2	E M C	Dr. K.V.D. Kiran, Assistant Professor, CSE
3	iii (Petrofac)	Dr. Ravindra Dadaji Jilte, Professor, ME
4	IPsoft	Mr. M. Vishnuvardhan, Associate Professor, CSE
5	Wipro	Dr. Y. Prasanth, Professor, CSE & Mr.K. Ravindranath, Assistant Professor, CSE
6	C-DAC	Dr. K. Raghava Rao, Professor, ECM
7	NI Centre of Excellence	Dr. K. Srinivasa Rao, Professor, ECE
8	Embedded Applications	Dr. P. Satyanarayana, Associate Professor, ECE



## 6.2 Central Library

The Central Library is an essential component of the University's outstanding research and education mission and occupies a place of pride in the University. The university has established a huge library that meets the requirements of the students, scholars and the faculty.

Serial Number	Type of resource	Numbers/ memberships
	Book Volumes	1,44,131
	Book Titles	36031
	Online Journals	21487
	e-books	3138166
	Journals	519
	Memberships and subscriptions	INFLIBNET ASME ASCE IEEE ACM MAA MIS STM Springer Link J gate DELNET EDSCO PROWSE Bio Pharama Geo Technical
	CDS and VCDs	9972
	International open access Journals	2

The University has improved its infrastructure facilities like lecture halls, auditoriums, guest house and video-conferencing which have become world class. The University has upgraded its library facilities and several additional e-journals and e-books are now available. New block of the School of Mechanical Engineering has been started, new block for Central Library and Professor Centric Laboratories have become operational this year.

## 7.0 Student Progression and support

K L University has signed MoUs seeking academic partnership with foreign Universities. Renowned experts from many partnering Universities have been visiting us to deliver courses at both UG and PG levels as well as for taking up joint research projects and joint Ph D guidance. We are also working on student exchange programs.

The following Professors from abroad have visited KL University to deliver courses at the campus for the benefit of the students

<b>Name of Professor</b>	<b>Course delivered</b>
Dr. Yarlagadda Prasad, Queens Land University, Australia.	Biotechnology, Mechanical Engineering, Computer Science Engineering.
Dr. Prathap Reddy, Rochester University, USA	Electronics and Communication Engineering
Dr. Chari Kandla, Scientist, United States Dept. of Agriculture, Georgia, USA	Biotechnology, Electronics and Communication Engineering
Dr. Raghu Echempati, Kettering University, USA	Mechanical Engineering
Dr. Harrico Gonzalez, National College of Ireland, Ireland	Computer Science Engineering
Dr. Suzanne Zyngier, La Trobe University, Australia	MBA and BBA
Dr. .ChandraSekhar, University of California	CIVIL Engineering
Dr.Voicu Sucals	MBA(Gen) MBA(TN) and BBA
Dr.Anastauciu	CIVIL Engineering
Dr.Chary	ECM & BT

## 7.1 Student's Achievements

The University is proud of placing it on record that it has achieved 100% placement for the 2015 passed-out students. In a way it indicates the quality of education provided by the university. During this year 90 companies visited the University. The recruiting companies include Infosys, Wipro, CTS, and some of the Fortune companies such as VISA Inc., ADP, CDK Global, Huwaei, and other companies such as Flipkart, NTT Data, Tech Mahindra, I-Gate, Hyundai, Amar Raja, Cyient Technologies etc.,

The University has provided the following avenues for the student community to nurture their inner hidden talents:

- i. NSS Wing – This wing regularly organizes various programs to sensitize the students with respect to their obligation to the society through blood donation camps, tree plantation, conducting awareness programs and literacy drives in the villages, and distributing funds, medicines and clothes among the needy.
- ii. Hobby Clubs – Around 22 student activities and clubs such as Music club, Dance club, Drama club, Literary and Speaking club, Photography club, Journalism club, Painting club, Sports club, Cultural club, Technical club, Movie club, Trekking club, Designing Club, etc. operate in the campus wholly managed by the students. Through these clubs every year we organize a National level Techno management fest, cultural fest, Women’s day celebrations, Republic day, Independence Day, Department fests, Awareness drives etc. KLUSO i.e.; K L University Student Ordinate is an official student body of K L University where each and every Kluian by default becomes the member of this ordinate as soon as they get admitted into the university. This will be used as a platform by students for showcasing, exploring and molding their talent by joining in any of the 22 clubs that exist in KLUSO.
- iii. Life Skill and Inner Engineering – This University strongly believes that it is its responsibility to mould the students as good human beings. Along with the regular programs every student admitted into KLU undergoes one week of special orientation program on life skills. Strict regularity, implicit obedience, courtesy in speech and conduct, cleanliness in dress, etc are held in esteem.

## **8.0 Governance and Leadership**

KLU has eight academic departments and a number of centers to carry on specialized studies and research in emerging and thrust areas of national importance. After KLCE got graduated to KLU, several new programs have been initiated in diverse fields based on the present need of the society. Introduction of Ph. D. & M. Phil are one of such initiatives.

## **9.0 Innovative Practices**

The university has introduced a number of innovative practices during the year which include the following

1. Project based LABS
2. LAB taken into class rooms
3. Outcome based delivery system

Project based LABS and LAB taken to class is a cutting-edge research and learning facility in the University, a process of teaching and learning that focuses on problem-based, project-centered activities, which take the idea of learning-by-doing. Each lab features classroom sessions coupled with a project. At the end of each session, students take the myriad lessons learned and

apply them to other courses and action learning projects. Within this framework students pursue solutions to non-trivial problems by asking and refining questions, debating ideas, making predictions, designing plans and /or experiments, collecting and analyzing data, drawing conclusions, communicating their ideas and findings to others and creating artifacts

The University has been following Choice based Credit System for quite some time, making the curriculum interdisciplinary. Interdisciplinary approach enables integration of concepts, theories, techniques, and perspectives from two or more disciplines to advance fundamental understanding or to solve problems whose solutions are beyond the scope of a single discipline.

The University has already initiated Outcome Based Education. The focus on outcomes creates a clear expectation of what needs to be accomplished by the end of the course. Students will understand what is expected of them and teachers will know what they need to teach during the course. With a clear sense of what needs to be accomplished, instructors will be able to structure their lessons around the student’s needs. OBE does not specify a specific method of instruction, leaving instructors free to teach their students using any method. Instructors will also be able to recognize diversity among students by using various teaching and assessment techniques during their class. OBE is meant to be a student-centered learning model. Teachers are meant to guide and help the students understand the material in any way necessary, study guides, and group work are some of the methods instructors can use to facilitate students learning.

### **9.1 INDIVIDUAL ACHIEVEMENTS IN GAMES AND SPORTS**

Our University is committed to making the students' educational experience multifaceted and holistic. This commitment is very evident with world class sports facilities, holding sports meets, and encouraging and facilitating student participation in national and international level competitions.

The following players of our K L University are Medalists in the International, National, and South Zone & State Tournaments in different Games & Sports for the year 2015-16.

<b>SL. NO</b>	<b>NAME OF THE STUDENT</b>	<b>EVENT</b>	<b>LEVEL</b>	<b>PLACE</b>
1	P. Sonika Sai	Badminton	International (Under 19Years)	Selected
2	G.Vivek Teja	Power Lifting	Krishna District	1 <sup>st</sup> place +120
				2 <sup>nd</sup> place 120
3	P. Sonika Sai	Badminton	National	III Place
			(Under 19 years) Doubles	
4	P. Sonika Sai	Badminton	National	III Place

			(Under 19 years) Mixed Doubles	
5	P. Sonika Sai	Badminton	National (Under 19 years) Doubles	III Place
6	M. Mallika	Badminton	Krishna District U-19 Girls Singles	1 <sup>st</sup> place
7	M. Mallika	Badminton	Krishna District U-19 Girls Doubles	1 <sup>st</sup> place
8	P. Sharmila			1 <sup>st</sup> place
9	B. V.S. Padmaja	Badminton	Krishna District U-19 Girls Singles	2 <sup>nd</sup> place
10	B. V.S. Padmaja	Badminton	Krishna District U-19 Girls Doubles	2 <sup>nd</sup> place
11	B. Manasa			2 <sup>nd</sup> place
12	V.V.K. Sankeerth	Badminton	Krishna District, men Doubles	1 <sup>st</sup> place
13	V.V.K. Sankeerth	Badminton	Krishna District, men Singles	2 place
14	V.V.K. Sankeerth	Badminton	AP State Men Doubles	3 place
15	M. Jai Sai	Hand ball	State Level	1 <sup>st</sup> place
16	V. Jyothi Surekha	Archery	International Level	1 <sup>st</sup> Rank (Ranking Round)
				Gold Medal (Mixed team)
				Silver Medal (Women team)
17	P. Surya Nikhil	Karate 65 Kg	State Level	Gold Medal Black Belt
18	P. Satya Nikhil	Karate 68.kg	State Level	Gold Medal Black Belt
19	V. Gayathri	Athletics (U- 18)	District Level	1 <sup>st</sup> Place
20	P. Sonika Sai	Badminton	All India	2 <sup>nd</sup> Position

21	Stanslaus Adam	Basket Ball	Checker Board International	2 <sup>nd</sup> place
22	J. Naveen Kumar	Karate (Black belt)	National (South India)	3 <sup>rd</sup> Place
23	J.Naveen Kumar	Karate (Black belt)	National (All India)	1 <sup>st</sup> Place
24	P. Sonika Sai	Badminton	International (Junior)	Participated
25	G. Vivek Teja	Power lifting	State Level	3rd Place +120 Kgs
26	K. Vandana	Power lifting	State Level	3rd Place + 84 Kgs
27	Srikari Surya	Power lifting	State Level	3rd Place, 84 Kgs