ANNAMACHARYA INSTITUTE OF TECHNOLOGY & SCIENCES :: TIRUPATI ANNUAL REPORT FOR THE ACADEMIC YEAR 2016-17

(Presented by Dr. C. Nadhamuni Reddy, Principal)

It's a privilege for me as the Principal to present a brief annual report on the growth, curricular and co-curricular activities of the college for the year 2016-17.

The institution is completing its 10th year of its establishment in running both UG and PG courses in Engineering in addition to MBA. No account of institutional history can be complete without remembering the yeomen services of the management and especially the illustrious work of **Sri. C. Gangi Reddy, Honorary Secretary & Correspondent** of this institution, philanthropist, and educationist providing technical education to the youth in the backward region of Rayalaseema. He has started many educational institutions in the fields of Engineering, Pharmacy, Education, Teacher Training and Science & Arts.

With the initial setting of Engineering college for 240 intake <u>and with 3000 sq. mts of RCC</u> in the year 2007, the institution has been gradually adding the RCC buildings to meet the RCC requirements stipulated by AICTE and affiliating university namely, JNTUA Anantapuramu. The institution is now provided with 23312 sq. mts of RCC comprising four blocks (A, B, C and D).

The institution has obtained permanent affiliation status from the academic year 2014-15 based on the university stipulated norms like mandatory 50 % faculty ratification, and mandatory establishment of physical resources like labs and other infrastructure for Engineering skills.

Adequate measures have been taken to build quality systems for continuous improvement of curricular and co-curricular activities.

The milestones in the history of AITS, Tirupati include:

- 1) Microsoft Certified Campus.
- 2) Recognition of the institution under sections 2(f) and 12 (B) of UGC Act, 1956.
- 3) Three UG Programmes of CSE, ECE and EEE are accredited by the Institution of Engineers (India), Kolkata.
- 4) Three UG Programmes of CSE, ECE and EEE accredited by National Board of Accreditation (NBA), New Delhi
- 5) Institution is accredited by National Assessment and Accreditation Council (NAAC), Bangalore up to May 2021.
- 6) Received BEST EMERGING INSTITUTE AWARD by DEWANG MEHTA NATIONAL EDUCATION AWARDS 2016.
- 7) Visit of NBA Expert Team for Accreditation of B.Tech Civil Engineering and B.Tech Mechanical Engineering completed and results awaited, and paved the way to become 'AUTONOMOUS' soon.

Basic Academic Programs:

This institute offers five undergraduate programmes in Engineering leading to B.Tech. Degree with a total annual intake of 780 students in the following branches:

i)	Computer Science & Engineering	120
ii)	Electronics & Communication Engineering	180
iii)	Electrical & Electronics Engineering	120
iv)	Civil Engineering	180
v)	Mechanical Engineering	180

Our postgraduate programs are:

i)	M.Tech - Computer Science and Engineering	18
ii)	M.Tech - Computer Science	24
iii)	M.Tech - Digital Systems and Computer Electronics	18
iv)	M.Tech - Digital Electronics and Communication Systems	24
v)	M.Tech - Power Systems	24
vi)	M.Tech - Power Electronics	24
vii)	M.Tech - Structural Engineering	24
viii)	M.Tech - Production Engineering & Engineering Design	24
ix)	Master of Business Administration (MBA)	180

ADMISSION

The admission into B.Tech. / M.Tech. / MBA Programme is made in two categories: A & B.

- ➤ <u>Category-A:</u> Admissions for 70% of the sanctioned intake, will be made by the convener of Common Entrance Test (CET) through single window web counseling based on the rank obtained in CET conducted by State Government (APSCHE).
 - → EAMCET for admission into I Year of B.Tech Programmes
 - → PGECET for admission into I Year M.Tech Programme
 - → ICET for admission into I year MBA / MCA Programme
 - → ECET for direct admission into II Year of B.Tech Programmes (Under LES)
- <u>Category-B:</u> Admissions for remaining 30% of the seats may be filled by the Management as per the rules stipulated by APSCHE.
- Lateral Entry: 20 % of the sanctioned intake will be filled by the convener of ECET, for admission into II B.Tech directly under Lateral Entry Scheme, provided the candidates must have passed 3 year Diploma course in the concerned branch of Engineering and must have qualified in ECET conducted by APSCHE for that academic year.

DEVELOPMENTS IN THE ACADEMIC YEAR 2016-17

INFRASTRUCTURE / AMENITIES ADDED:

- a) **New Buildings:** Additional Infrastructure for new canteen building to the extent of 10000 Sq. ft has been added.
- b) Seminar Hall for each Department
- c) Online Journal Subscription: DELNET of AICTE, J-GATE of Informatics India (8000 Journals)
- d) Health Care Center in B Block, with regular Doctor.
- e) **Internet:** Internet bandwidth has been upgraded to 65 Mbps from 20 Mbps.
- f) **Library:** Central library is equipped with adequate number of volumes. With the addition of few more volumes and titles, the number of volumes has reached to 22884 and the number of titles to 3838.

FACULTY AND STAFF

We have the required number of optimal mix of Senior Professors, Professors, Associate Professors and Assistant Professors meeting AICTE and affiliating university norms as per mandatory Student-Faculty Ratio (SFR) and Cadre Ratio. In addition, staff required for security, transport, maintenance, gardening and similar centralized facilities are available. Nearly 25% faculty members have their research degrees like Ph.D or M.Phil. and the remaining 75% have Masters Degree in their respective disciplines.

AITS has been encouraging and partially sponsoring its faculty to pursue higher studies. 41 faculty members are now pursuing their Ph.D in full time or part-time mode registered with various universities.

a) Research / Paper Publications (2016-17)

Altogether, there are 93 papers presented in conference / published in journals of national and international repute.

Dept. (\rightarrow)	CSE	ECE	EEE	CE	ME	H&S	MBA	TOTAL
NJ	-	-	-	-	-	-	-	00
INJ	14	10	12	29	2	-	1	68
NC	4	-	-	-	-	-	-	04
INC	5	10	-	1	-	5	-	21
TOTAL	23	20	12	30	02	05	01	93

b) Research & Development Activities

Our faculty are strong at Research & Development activities. Proposals were submitted seeking financial assistance from:

- ✓ Indian Council of Social Science Research, New Delhi, worth Rs. 12.5 Lakhs.
- ✓ National Board of Higher Mathematics, Worth Rs. 45 Lakhs
- ✓ HRDG CSIR Complex, Worth Rs. 95 Lakhs
- ✓ Science & Engineering Research Board (SERB), Worth Rs. 130 Lakhs
- ✓ AICTE Quality Improvement Schemes, Worth Rs. 147 Lakhs

c) Research Degrees Received / Thesis submitted By The Faculty

Two faculty members in English have received their Ph.D and two ECE faculty and one ME faculty have submitted Ph.D thesis and are waiting for viva-voce.

- ➤ Dr. R. Devarajulu Reddy, Head of H&S has received Ph.D in English from Dravidian University, under the guidance of Dr. M.A.K. Sukumar, Professor, Dept. of English, S.V. University, Tirupati.
- ➤ Dr. R. Sandhya, Assistant Professor in English has received Ph.D in English from Dravidian University, under the guidance of Dr. Daiva Dattam, Professor & Head, Dept. of English, Dravidian University, Kuppam.
- > Smt. Irala Suneetha, HoD (ECE) has submitted her Ph.D thesis to S.V. University under the guidance of Dr. T. Venkateswarlu, Professor in ECE, SVUCE, Tirupati and waiting for viva-voce.
- > Smt. N. Pushpalatha, Assistant Professor in ECE has submitted her Ph.D thesis to JNTUH Hyderabad under the guidance of Dr. B. Anuradha, Professor in ECE, SVUCE, Tirupati and waiting for viva-voce.
- ➤ Sri. K. Ramesh Reddy, Assistant Professor in Mechanical Engineering has submitted his Ph.D thesis to JNTUA, Ananthapuramu under the guidance of Prof. C. Nadhamuni Reddy, Principal, AITS Tirupati.

d) Ph.Ds guided by the faculty

Six Ph.Ds have been produced by the faculty members, and 10 are waiting for viva-voce.

- ➤ Three (03) Ph.Ds have been produced by Prof. V. C. Veera Reddy, Dept. of EEE out of which Two (02) are from SVU and one (01) from JNTUK. Three (03) more are in pipeline for adjudication under SVU.
- ➤ Three (03) Ph.Ds have been produced by Prof. G. Krishnaiah, Dept. of ME out of which Two (02) are from SVU and one (01) from JNTUK. Five (05) more are in pipeline for adjudication out of which Two (02) are under SVU and Three (03) are under Rayalaseema University, Kurnool.
- Two (02) Ph.D thesis have been submitted under the guidance of Prof. C. Nadhamuni Reddy out of which, one (01) is under JNTUA and the other one (01) under JNTUH.

e) Faculty Visiting Abroad

It has been the regular practice that a few faculty members visit abroad every year and stays there couple of months to give guest lectures at various reputed universities / institutions.

- > Prof. P. Satyanarayana, Dept. ECE visited USA twice this year.
- > Prof. A. Ramakrishna Rao, Dept. of ME visited USA once this year.

f) Seminars / Workshops / Training Programmes / FDPs Organized

- FTP on "Curriculum Design, Measurement and Evaluation" in association with NITTTR Kolkata during 22nd 27th November, 2016.
- CCQC-2016 of QCFI Tirupati Chapter, during 12th 13th September 2016.
- More than 30 major events have been organized by various departments this year.
- ➤ An International Conference on "Internet of Things (IoT) and applications for Smart City" (ICIOTAS-16) was organized during 19th − 20th March 2016.
 Invited Speakers: Dr. Robert Tommy, Innovation lead at TCS; Dr. Parag Chatterjee, Adjunct Professor, Ballsbridge University, Ireland; Dr. P.C.S. Srikanth, Malnad college of Engg, Hassan and Vaibhav A Meshram, Professor & Head, Jain University. 02 Best
 - papers were selected from 145 papers shortlisted for presentation out of 450 papers received. There were 300 participants for the conference.
- ➤ The institution has hosted 2nd Chapter Convention on Quality Concepts (CCQC-2016) of Quality Circles Forum of India (QCFI) Tirupati Chapter in association with Amara Raja Group of Industries, during 12th − 13th September 2016. QCFI Tirupati Chapter and also the convention were inaugurated in a big way. Presentations went on for two days. More than 350 case studies were presented on various Quality Circles and Concepts by the teams from different industries located in Andhra Pradesh and Tamilnadu. All the teams have presented their achievements by implementing Quality Circles Philosophies and Techniques.
- ➤ A Faculty Training Programme on the topic "Curriculum Design, Measurement and Evaluation" was organized in association with National Institute of Technical Teachers Training and Research (NITTTR), Kolkata during 22nd 27th November 2016. Prof. Urmila Kar and Prof. S. K. Naskar, Academic Coordinators, NITTTR Kolkata were the resource persons. Coordinator: Prof. Y. Hariprasada Reddy, Dept. of ME. No. of participants: 35 senior faculty members.
- ➤ Department of **Civil Engineering** has organized:
 - A National Level Technical Symposium "AASHAY-2K17" on <u>21st January 2017</u>, inviting the resource person Dr.D.Pavan Kumar, Senior Structural Engineer, Hyundai Heavy Industries, South Korea.

- A seminar on the topic "Civil Engineering Students Awareness Programme" on <u>23rd</u>
 <u>December 2016</u>. Mr. Veerendra Nijampure, Manager, JK Cements Limited, Bangalore.
- A Technical seminar on the topic "Advances in Transportation Engineering" on <u>14th</u>
 <u>July 2016</u> inviting the resource person Mr. G. Bhaskara, Team Leader, CDM Smith,
 Dubai, United Arab Emirates.
- ➤ Department of **Electronics & Communication Engineering** has organized:
 - A National Level Technical Symposium under TRISHNA-2K17 on <u>15th March 2017</u> and Dr. T. Rajendra Prasad, Scientist/Engineer NARL Gadanki delivered a key-note address.
- ➤ Department of **Computer Science & Engineering** has organized:
 - One Day National Level Technical Symposium on <u>27th March 2017</u> inviting chief guest Mr. M. Giridhar, CEO 7 in Q, VENUSGEO, President, Information Technology, Association of Andhra Pradesh.
 - One Day Hands on Workshop in "Embedded Systems (IoT)" on 4th March 2017, inviting resource persons are Mr. Rachit Thukral, Ms. Manasi Mishra, Director(s), Edutech Labs, New Delhi.
 - A Two day workshop on the topic "Big Data" during 30th 31st July 2016, by inviting the resource person Sri. G. Srikanth, Hadoop Developer, IBM, Bangalore.
- ➤ Department of **Electrical & Electronics Engineering** has organized:
 - Two Day National Level Technical Symposium GETRADI-2k16 on 20th & 21st
 September 2016 inviting chief guest Sri. Krishna Murthy Naidu, Senior General Manager, Amara Raja Batteries, Tirupati.
- > Department of **Mechanical Engineering** has organized:
 - A Two-Day National Level Technical Symposium "Metallo Mania" on Metals on 16th
 <u>& 17th September 2016</u>, Dr. V. Diwakar Reddy, Professor, Department of Mechanical Engineering, Sri Venkateswara University, Tirupati, arrived in as Chief Guest and delivered a key-note address of this program.
 - One Day Workshop on "ROBOTICS" under II Club of Robotics, Hyderabad on <u>18th</u> july 2016.
- ➤ Department of **Master of Business Administration** has organized:
 - A seminar on "TALENT DEVELOPMENT & MANAGEMENT" on 7th March 2017, Dr. ROSELINA AHMED SAUFI, Professor, International Business School, Universiti Teknologi Malaysia, Malaysia acted as resource person.
 - A Two day National Level innovative competitions program "Bestt-O-Mania 2016" on 24th & 25th October 2016, Prof. Chalam, Professor of Management Studies, Acharya Nagarjuna University, acted as Chief guest for this programme.

g) Seminars / Conferences / Workshops Attended By The Faculty

More than 50 faculty attended FDPs, 27 faculty participated in workshops and 11 faculty attended / presented papers in conferences.

CSE: FDPs: 10 Workshops: 03 Conferences: 02

ECE: FDPs: 09 Workshops: 09

EEE: FDPs: 03

CE: FDPs/Workshops: 15

ME: FDPs: 03

H&S: FDPs: 09 Conferences: 09

MBA: FDPs: 03

h) Guest Lectures Organized

On an average each department has organized 10 guest lectures this year.

ECE - 02, CE - 02, MBA - 04.

- > Department of **Civil Engineering** has organized:
 - A Technical guest lecture on the topic "Importance of Cement Concrete" on <u>07th</u>
 <u>February 2017</u> by inviting the recourse persons: Sri. K. Venkata Raman, Regional Head, and Mr. R. Ajay Kumar, Technical Manager, UltraTech Cement Ltd., Chennai

i) Industrial Visits Organized

It has been regular practice to organize Industrial Visits to the students of all the branches every year. This year nearly 10 industries were visited by the students of various departments.

ECE - 04, MBA - 01

j) Professional memberships enrolled:

The institution is member in the professional societies like IEEE, IETE, CSI, ISTE, IE(I), QCFI, CMTI and IIPE etc. Our faculty have enrolled 242 memberships with various professional societies.

- ➤ AITS is institutional member with the prestigious professional society "Quality Circle Forum of India (QCFI).
- ➤ Department of Mechanical Engineering enrolled as the institutional member with the following professional societies.
 - Central Manufacturing Technology Institute (CMTI), Bangalore.
 - Indian Institution of Production Engineers (IIPE), Bangalore.

Dept. (→)	CSE	ECE	EEE	CE	ME	H&S	MBA	TOTAL
ISTE	5	12	18	3	3	0	0	41
IE(I)	1	10	0	3	4	0	0	18
IAENG	31	36	19	13	8	0	0	107
IMES	1	2	0	0	2	0	0	5
CSI	15	0	1	0	0	0	0	16
ACM	1	0	0	0	0	0	0	1
CSTA	4	0	0	0	0	0	0	4
UACEE	5	0	0	0	0	0	0	5
IETE	1	6	0	0	0	0	0	7
IEEE	2	0	0	0	0	0	0	2
ORSI	0	0	0	0	2	0	0	2
IAETSD	0	4	0	0	0	0	0	4
IWTA	0	0	0	1	0	0	0	1
ICER	0	0	0	1	0	0	0	1
ISRD	0	0	0	17	7	0	0	24
IRED	0	0	0	0	4	0	0	4
TOTAL:	66	70	38	38	30	0	0	242

STUDENTS

Altogether, there are 2055 students in various programs and at different levels.

a) Results / Achievements

Results awarded last year / 2016 passed out batch students:

	ECE	EEE	CSE	CE	ME	TOT
Total number of Students appeared	90	64	56	79	72	361
Number of Students Passed	81	43	37	60	69	290
Number of Students Passed in Distinction	72	43	35	58	56	264
Number of Students Passed in I-Class	09	00	02	02	13	26
Pass percentage	90.00	67.19	66.07	75.95	95.83	80.33

UG - B.TECH (2016 Passed out Batch)

BRANCH	Roll .No	Name of the Candidate	Father Name	%
ECE	12AK1A0445	MYDHILI K	P.R. KUMAR	81.62
EEE	12AK1A0248	SRINIVASULU REDDY K	K.MOGILI REDDY	80.75
CSE	12AK1A0506	BHARATH KUMAR M	BHASKAR	79.96
MECH	13AK5A0308	V SREEKANTH	V VENUGOPAL MURTHY	73.90
CIVIL	13AK5A0106	DURGAMA GARI MANJULA	D SHIVAPPA	73.07

b) Awards / Rewards received, if any

- ➤ Mr. K. Sai Abhinav (14AK1D2009), S/o. K. Kasaiah, a student of M.Tech. (Structural Engineering) secured 85.17% marks and received Pratibha Award instituted by the Govt. of A.P from the hands of Dr. P. Raghunatha Reddy, Minister for IT & Communications, Govt. of Andhra Pradesh.
- ➤ Ms. G. Hima Bindu (14AK1E0026), D/o. G. Venkata Rami Reddy, a student of MBA secured 79.67% marks and received Pratibha Award instituted by the Govt. of A.P from the hands of Dr. P. Raghunatha Reddy, Minister for IT & Communications, Govt. of Andhra Pradesh.

c) Technical Symposia Organized

- Department of CSE Organized **LORECRON2K17** on 27th March 2017.
- Department of ECE Organized **TRISHNA2K17** on 15th March 2017.
- Department of EEE Organized **GETRADI-2K16** on 20th & 21st Sept. 2016.
- Department of CE Organized **AASHAY-2K17** on 21st January 2017.
- Department of ME Organized **METALLOMANIA** on 16th & 17th Sept. 2016.
- Department of MBA Organized innovative competition program **Best-o-Mania** 2k16 on 24th & 25th October 2016.

In all the above symposia, more than 1000 papers were presented, technical quizzes organized; Exhibition of models and projects were also found.

d) Papers Presented in Symposia / Conferences / Published in Journals 600+ students attended 93 workshops; 800 students of this institution presented 620 papers at 51 symposia. 22 students / teams won either I or II Prize for their respective papers.

e) Placements

AITS lived up to the expectation in providing the placements for the outgoing batch. The total number of B.Tech/M.B.A students placed during the academic year 2016-17 so far is 126. The following are the Companies visited the campus so far: Techmahindra, Cyient, Genpact, Maintec, Vistex, Epalm, Hyundai, Technovert, Acheron, GK Technologies, Mphasis, Medhaservo, Globaledge, Efftronics, Sonata Software, Multiplier Solutions, Uber, Ramtech, Agna global Solutions, Bajaj Capital, Sevyait, Firmnxt, Dmart.

f) Entrepreneurship Development Activities Organized

➤ Organized three (03) Entrepreneurship Awareness Camps (3 days duration each), sponsored by Entrepreneurship Development Institute of India (EDII), Ahmedabad, under DST–NIMAT Project 2015–16, Under the Aegis of National Science and Technology Entrepreneurship Development Board (NSTEDB), Department of Science & Technology, Government of India, New Delhi.

g) Skill Development Centre (SDC)

Established to deliver a structured, sustainable & scalable framework to impart state of the art skills to the unemployed, underemployed, uncertified and un-benchmarked. One of the main reasons for establishment is to address the lack of relevant skills amongst the current and potential Skill workforce in the state of A.P. and to increase employability in sync with Industrial growth of the State. And, to implement a structured and pragmatic solution to skill and up skill the workforce in the state of A.P. and to increase employability, and promote entrepreneurship in sync with Industrial growth of the State.

32 Mobile APPs are developed by registered students of CSE & ECE after training by APSSDC and for the best 6 APPs, AP Innovation Society appreciated and gave cash prizes to the tune of Rs. 20,000/- and allowed them for further guidance from them.

h) Incubation Centre

- Established with the main objective of encouraging students and alumni to share their ideas to solve chosen problems which are local centric and to validate, refine and nurture the ideas. The center shall provide an ecosystem to convert the ideas into proof of concept and upgrade them to a level of commercial value. After successful incubation, encourage and lead the teams towards setting up a business enterprise. It Provides support services to entrepreneurs.
- ➤ The companies registered with incubation center are:
 - Ennovator Ingineering, 7INQ, VENUSGEO, CANTERCADD
- i) Professional Chapters / Memberships in Professional Societies Student Chapters of the professional societies like: IEEE, IETE, IE(I), CSI, ICE etc. are actively functioning.

Students: IEEE – 16, ISTE – 114, IAENG – 29, IACSIT – 11, CSI – 116

Individual departments have encouraged their students to enroll as members with various professional societies and have formed chapters of few societies. In association with such chapters, the departments have been organizing various technical events like symposia, project exhibition, workshops etc. and also planning to conduct few more events.

➤ <u>Innovation Chapter:</u> Innovation chapter of AITS::TIRUPATI was inaugurated on 23rd March 2017. Dr. Geetha Sree, Programme Manager of A.P innovation society delivered a motivational speak and 50 teams from students side presented their ideas in the colloquium held on the same day.

j) Sports & Games / Extra-Curricular Activities

We offer facilities for a variety of extracurricular activities. Sports and games are the key ones here. Our students and staff participate in them regularly. The annual sports meet was held on 23rd March to 26th March 2017.

We have many student clubs that organize different cultural events in the campus during the evenings providing a great deal of entertainment and relaxation.

k) Important Celebrations

Days of National importance like Independence Day, Republic Day, Teachers Day, Engineers' Day etc. are being celebrated. In addition, other important events like Freshers' Day, Sports Day, etc. are also being celebrated in a befitting manner besides College Annual Day. A variety of events and competitions are organized on these occasions.

: 15th August 2016 > INDEPENDENCE DAY : 05th September > TEACHERS DAY : 08th September > FRESHERS' DAY : 15th September ➤ ENGINEERS' DAY : 15th October ➤ WORLD STUDENTS' DAY : 15th October ➤ GLOBAL HANDWASH DAY : 31st October 2016 > RASHTRIYA EKTA DIWAS : 03rd November 2016 VIGILANCE AWARENESS : 12th January 2017 > SANKRANTI SAMBARALU : 26th January 2017 > REPUBLIC DAY : 08th October 2016 ➤ ALUMNI MEET : 23rd -26th March 2017 > SPORTS DAY ➤ WOMEN EMPOWERMENT DAY: 08th March 2017

1) Alumni Association Meet

The college is maintaining high time relationships with alumni students by organizing alumni meetings every year. The alumni are also coming down to the campus to deliver valuable sessions to the students on technology, ethics, Industrial needs and career guidance.

Members of Alumni are in constant touch through internet and other social networking media. Annual General Meeting is held towards the end of Academic Year to have close interaction with students, faculty and alumni who have been holding responsible positions in various industries and educational Institutions. This year's meeting was held on 8th October 2016. More than 120 alumni reported on the day and shared their ideas for further strengthening alumni association.

m) Social Work & Extension Activities / Institute Social Responsibility

This Social Service activity was initiated by our affiliating university JNTUA, with the motto of "**NOT ME, BUT YOU**" to bring awareness on cleanliness among public. Our students, staff both teaching and non-teaching had actively participated in the cleaning drive at various locations in the surrounding villages in Renigunta Mandal.

The NSS unit of AITS is actively functioning with annual membership of 100 student volunteers. The NSS activities are broadly categorized into **Regular Activities**, **and Special Camp Activities**. The NSS unit is offering various kinds of charity oriented works in the nearby villages by conducting several social service activities like: awareness camps, Free Medical Camps (01), Blood Donation Camps (05), Tree Plantation in rural areas (2 times, 1000 plants each time) and also One Week Special Camp by adapting one village locally.

We hope the co-curricular and extra-curricular activities will further increase in the years to come and earn laurels to the institution.