

# **SELF STUDY REPORT**

## **FOR ACCREDITATION OF**

**Dr N.T.R. COLLEGE OF AGRICULTURAL ENGINEERING  
BAPATLA**



**ACHARYA N.G. RANGA AGRICULTURAL UNIVERSITY**

**Dr N.T.R. COLLEGE OF AGRICULTURAL ENGINEERING  
BAPATLA - 522 101**



**2020**







# **Self Study Report 2020**

**B.Tech. Programme**



**Dr N.T.R. College  
of Agricultural  
Engineering,  
Bapatla - 522 101  
Andhra Pradesh**

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## **ACCREDITATION REPORT – TASK COMMITTEE**

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# **Self Study Report 2020**

**B.Tech. Programme**



**Dr N.T.R. College  
of Agricultural  
Engineering,  
Bapatla - 522 101  
Andhra Pradesh**

**SELF STUDY REPORT FOR ACCREDITATION OF  
PROGRAMME  
B.Tech. (Agricultural Engineering)  
Dr NTR College of Agricultural Engineering, Bapatla**

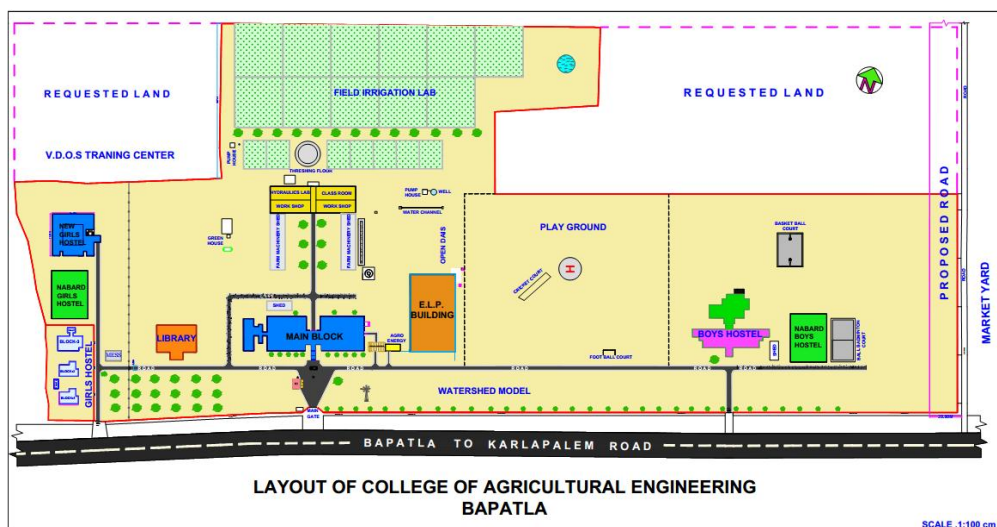
**6.4.1 Brief History of the Degree Programme**

B.Tech. (Agricultural Engineering) undergraduate (UG) degree programme was started in August, 1983 with an intake of 20 students in the Department of Agricultural Engineering, Agricultural College, Bapatla. From the next year onwards, the seats were increased to 30. The UG programme was upgraded as the College of Agricultural Engineering (CAE), Bapatla in 1990 based on the recommendations of a high level committee appointed by the Government of Andhra Pradesh. It is the first college of agricultural engineering in Acharya N.G. Ranga Agricultural University. It was started with the aim of imparting knowledge and skills to the students in the disciplines of agricultural engineering education to serve the farming community and the rural people of the combined state of Andhra Pradesh and to make agriculture more remunerative to the farmers by bringing in the engineering interventions in agriculture. The College was shifted to its new premises in May, 1994. Since then, the College expanded rapidly both academically and physically. Many infrastructural facilities were added in terms of buildings and equipment for improving the academic status in agricultural engineering. The College celebrated its Silver Jubilee in the year 2008 during which a silver jubilee building was constructed for a spacious digital library, book library and two classrooms. This college was accredited by Indian Council of Agricultural Research, New Delhi during 1999-2000 in the first phase itself based on ICAR's Review Team Report and during the subsequent phases also. The latest accreditation of ICAR for this College was in 2014-2015. The College was under the faculty of Agriculture until 2010 when a new Faculty of Agricultural Engineering and Technology was established by the University as per the provisions of the University Act. The College was renamed as Dr N.T.R. College of Agricultural Engineering (Dr NTRCAE) in the year 2018 in memory of Late Dr N.T. Rama Rao the then Chief Minister of combined Andhra Pradesh and who was the person laid foundation stone for the College building on 24-02-1988. Today, Dr NTRCAE is widely recognized for its quality education; need based research and transfer of technology in service of farming community.





Dr N T Rama Rao, Chief Minister, AP laying the foundation stone of the College Building on 24.2.1988



## Andhra Pradesh Government Order for Establishing College of Agricultural Engineering, Bapatla

12.11.1980

GOVERNMENT OF ANDHRA PRADESH  
1360/ICAD.1/80

**Subj:** N.M.U. - Separation of B.Tech. (Ag. Engrg.) Programme from Agricultural College, Bapatla - Elevation of the programme to the status of a College of Agricultural Engineering, Bapatla - Orders - Issued.

**REF:** 1. Lr. No. 51031/Agri. III/82 dated 13.7.83 from the Regional Agri. Dept., Govt. of Andhra Pradesh, Hyderabad.  
2. Lr. No. 1360/ICAD.1/80 dt. 1.7.80.  
3. Lr. No. 1360/ICAD.1/80 dt. 1.7.80.

Through the reference 1st cited, the Government have accorded permission during the year 1982-83 to start a B.Tech. (Agri. Engrg.) programme at Agricultural College, Bapatla with minimum supporting infrastructure facilities already available in the Agricultural College, Bapatla as follows:

1. Associate Professors	4 posts
2. Assistant Professors	3 posts
3. Lecturers	1 post
4. Workshop Supervisor	1 post
5. Technicians (Mechanic Grade-I)	2 posts
6. Technicians (Mechanic Grade-II)	2 posts
7. Senior Assistants	1 post
8. Watchman	1 post

Subsequently, in the Lr. No. 1360/ICAD.1/80, orders have also been issued relating to the B.Tech. (Agri. Engrg.) Programme from the Agricultural College, Bapatla and the Officer-in-charge, B.Tech. (Ag. Engrg.) Programme would exercise the duties of a Principal with immediate effect.

In the G.O. 3rd cited, the Government have accorded sanction for the separation of B.Tech. (Ag. Engrg.) Programme from the Agricultural College, Bapatla and to elevate it as College of Agricultural Engineering, Bapatla.

In view of the above, sanction is accorded for the separation of B.Tech. (Ag. Engrg.) Programme from the Agricultural College, Bapatla and to elevate it to that of College of Agricultural Engineering at Bapatla with immediate effect.

The Officer-in-charge, B.Tech. (Agri. Engrg.) Programme will continue to discharge the duties of the Principal, College of Agricultural Engineering, Bapatla till a Principal is appointed. The staff sanctioned for the B.Tech. (Agri. Engrg.) Programme in the reference 1st cited as indicated at para one above, except Workshop Supervisor, is also transferred under the Administrative and technical control of the Principal, College of Agricultural Engineering, Bapatla with pre-audit and treasury functions.

The post of Workshop Supervisor sanctioned to the B.Tech. (Agri. Engrg.) Programme in the reference 1st cited is transferred to the College of Agricultural Engineering, Bapatla along with the incumbent. The post of Workshop Supervisor is also transferred to the College of Agricultural Engineering, Bapatla along with the incumbent. The post of Workshop Supervisor is also transferred to the College of Agricultural Engineering, Bapatla along with the incumbent.

In addition to the staff sanctioned exclusively to the B.Tech. (Agri. Engrg.) Programme, in the reference 1st cited, the following staff sanctioned to the incumbent on the establishment of Department of Agricultural Engineering, Bapatla are also transferred under the Administrative and technical control of the Principal, College of Agricultural Engineering at Bapatla with immediate effect:-



1. Professor
2. Associate Professor
3. Assistant Professors/Instructors
4. Draftsman
5. Mechanical Engineer-1
6. Cartographers
7. Blacksmith
8. Welder
9. Cooks
10. Workshop helpers
11. Turner
12. Foulder
13. L.D. Clerk (Stores)
14. Record Assistant
15. Attenders

1 post  
1 post  
7 posts  
1 post  
1 post  
1 post  
1 post  
2 posts  
2 posts  
1 post  
1 post  
1 post  
1 post  
2 posts

The Principal, College of Agriculture, Baran, has requested withdrawing the salaries, powers and perquisites to draw the allowances of the staff who are transferred to the College of Agricultural Engineering from the existing Budget provision of the Agricultural College till the end of the financial year 1980-81 and furnish the particulars every month to the Principal, Agricultural College, Baran, under copy to the Controller, Agricultural Engineering, Baran. The Principal, College of Agricultural Engineering, Baran, shall responsible for the proper maintenance of budget and accounts of the College.

The Principal, Agricultural College, Baran, is also requested to draw the pay and allowances of the Workshop supervisor from the provision of the College of Agricultural Engineering, Baran till the end of the financial year 1980-81 and furnish expenditure particulars monthly to the Principal, College of Agricultural Engineering, Baran, copy to the Controller, A.E. Agricultural University, Hyderabad.

Both the Principals are requested to send separate copy to the Controller, A.E. Agricultural University, Hyderabad, separately from the next financial year.

To  
The Principal, Agricultural College, Baran.  
The Officer-in-charge, B.Tech. (Agricultural) Programme,  
Agricultural College, Baran.  
Agricultural College of A.P. U.

Copy to all ~~xxxxxx~~ Principals of Research.  
Copy to all Associate Directors.  
Copy to all Senior Scientists.  
Copy to all Junior Scientists.  
Copy to all Officers/Sections in the Adm. Office.  
Copy to Budget Section for necessary action.  
Copy to S.R./C. (K).

// M.L.U. //

/-/- true copy /-/-

*[Signature]*

9/11/92



**Andhra Pradesh Government Order for Renaming of College of Agricultural Engineering,  
Bapatla to Dr NTR College of Agricultural Engineering, Bapatla**

**GOVERNMENT OF ANDHRA PRADESH  
ABSTRACT**

Agriculture & Cooperation Department - Renaming of the College of Agricultural Engineering, Bapatla and College of Food Science & Technology, Bapatla as Dr. Nandamuri Taraka Rama Rao College of Agricultural Engineering, Bapatla and Dr. Nandamuri Taraka Rama Rao College of Food Science & Technology, Bapatla-Orders-Issued.

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**AGRICULTURE & COOPERATION (AGRI.III) DEPARTMENT**

G.O.MS.No. 116

Dated: 10-10-2018

Read:

From the Registrar, ANGRAU, Lr.No.1189/AE&T/2018, dated:02.07.2018.

\*\*\*\*\*

**ORDER:**

In the reference read above, the Registrar, Acharya N.G.Ranga Agricultural University has reported that Sri A. Satish Prabhakar, MLC, Bapatla and some of the farmers of different Villages in Bapatla (Mandal), Guntur (District) have represented the University, for renaming of the College of Agricultural Engineering, Bapatla as Dr. Nandamuri Taraka Rama Rao College of Agricultural Engineering, Bapatla and College of Food Science & Technology, Bapatla as Dr. Nandamuri Taraka Rama Rao College of Food Science & Technology, Bapatla, in the honor of the late legendry statesman of State of Andhra Pradesh, Dr. Nandamuri Taraka Rama Rao, the then Chief Minister of Andhra Pradesh, since he has inaugurated the College Home Science (Presently College of Food Science & Technology) on 24.02.1988 and laid down the foundation stone for the building of College of Agricultural Engineering, Bapatla on the same date.

2. The Registrar, ANGRAU has further reported that, the Board of Management of ANGRAU, during the 285<sup>th</sup> meeting held on 26.05.2018 at RARS, Chintapalle has resolved to approve the above proposal and advised the University to get concurrence of the Government of Andhra Pradesh.

3. The Registrar, ANGRAU has therefore requested the Government to permit the University to rename the College of Agricultural Engineering, Bapatla as Dr. Nandamuri Taraka Rama Rao College of Agricultural Engineering, Bapatla and College of Food Science & Technology Bapatla as Dr. Nandamuri Taraka Rama Rao College of Food Science & Technology, Bapatla, based on the resolution taken by the Board of Management of ANGRAU.

(P.T.O.)

-2-

4. Government after careful examination of the matter, hereby permit the ANGRAU to rename the College of Agricultural Engineering, Bapatla as Dr. Nandamuri Taraka Rama Rao College of Agricultural Engineering, Bapatla and College of Food Science & Technology Bapatla as Dr. Nandamuri Taraka Rama Rao College of Food Science & Technology, Bapatla, as resolved by the Board of Management of ANGRAU.

5. The Registrar, ANGRAU, Guntur shall take further necessary action in the matter, accordingly.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF ANDHRA PRADESH)

B.RAJSEKHAR  
SPECIAL CHIEF SECRETARY TO GOVERNMENT (FAC)

To

The Registrar, ANGRAU, LAM, Guntur.

Copy to:

The Vice-Chancellor, ANGRAU, Guntur.

The College of Agricultural Engineer, Bapatla  
through the Registrar, ANGRAU.

The College of Food Science and Technology, Bapatla  
through the Registrar, ANGRAU.

P.S. to Special Chief Secretary to Hon'ble Chief Minister.

P.S. to Minister for Agriculture.

P.S. to Special Chief Secretary to Government,  
Agriculture & Cooperation Department.

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//FORWARDED : : BY ORDER//

SECTION OFFICER



## Andhra Pradesh Government Order for Sanction of 9 Additional Posts to Dr NTR College of Agricultural Engineering, Bapatla

### GOVERNMENT OF ANDHRA PRADESH

#### ABSTRACT

Agriculture Department –Acharya N.G.Ranga Agricultural University - Sanction of nine (9) additional teaching faculty posts to College of Agricultural Engineering, Bapatla – Orders - Issued.

#### AGRICULTURE & COOPERATION (AGRI.III) DEPARTMENT

G.O.MS.No. 30

Dated: 19-02-2019

Read :

From the Registrar, ANGRAU, Lr.No.6987/AE&T/2017, Dt.19.04.2017.

\*\*\*\*

#### ORDER:-

In the reference read above, the Registrar, Acharya N.G.Ranga Agricultural University (ANGRAU) has reported that, the College of Agricultural Engineering (CAE), Bapatla is functioning under ANGRAU and stands as a Pioneer College in Agricultural Engineering programme. The College is offering the courses of B.Tech (Agricultural Engineering), M.Tech (Agricultural Engineering) and Ph.D courses and contributing to the development of Agriculture in the State of Andhra Pradesh in various aspects in the area of Farm Mechanization, Irrigation and Water Management as well as Agro Processing by value addition to Agriculture and allied sectors.

2. The Registrar, ANGRAU has further reported that, the College of Agricultural Engineering (CAE), Bapatla is presently running with only 15 (Fifteen) teaching posts and 7 (Seven) barrowed posts, shouldering heavy burden on the existing staff to place the college as a pioneer institute of academic excellence. As per requirement of V Deans Committee, the minimum faculty required to offer B.Tech (Agricultural Engineering) programme is 45.

3. The Registrar, ANGRAU has therefore, requested the Government to sanction the following additional teaching posts to the College of Agricultural Engineering, Bapatla, for training of the man power in Agriculture to support its cause of bringing engineering intervention like Farm Mechanization, Irrigation and Value addition processing in to agriculture for sustainability and profitability and the budget will be met from the annual block grant to the University.

S. No.	Category	Required Posts
1	Associate Dean	1
2	Professor	5
3	Associate Professor	3
4	Assistant Professor	7
Total		16

4. The Government after careful examination of the matter, hereby accord sanction for the following additional (9) teaching faculty posts to the College of Agricultural Engineering, Bapatla, subject to meeting the expenditure from the annual block grant of ANGRAU only.

S. No.	Name of the Post	No. of additional posts sanctioned
1	Associate Dean	1
2	Professor	4
3	Associate Professor	2
4	Assistant Professor	2
Total		9

5. The Registrar, ANGRAU shall take further necessary action to fill the additional posts sanctioned above as per service rules and recruitment procedure in vogue.

6. This orders issues with the concurrence of the Finance Department vide their U.O.No. Fin.U.O.No.FIN-32021/21/2017-SO(HR.III), Dated.18.02.2019.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF ANDHRA PRADESH)

B. RAJSEKHAR  
PRINCIPAL SECRETARY TO GOVERNMENT

To  
The Registrar, ANGRAU, Lam, Guntur.

(P.T.O)

// 2 //

**Copy to:**

The Finance Department.

The General Administration (Cabinet) Department.

P.S. Additional Secretary to Hon'ble C.M.

OSD to Minister for Agriculture.

P.S. to Chief Secretary to Government.

P.S. to Principal Secretary to Government, Agriculture & Cooperation Department.

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// FORWARDED :: BY ORDER //

SECTION OFFICER

The courses being offered are based on ICAR's V Deans' Committee recommended syllabus to gear up towards equipping the students to meet the challenges that are being faced by the agricultural sector. The College has state-of-the-art infrastructure and facilities and the academic environment which combines academic rigor with high level of interaction with government departments in serving the farming community of the nation in general and the present state of Andhra Pradesh after bifurcation in particular. The driving force behind the high level of academic excellence and quality education is the dedicated team of over twenty core faculty drawn from different specializations.

B.Tech. (Agricultural Engineering) degree programme is supported by 6 departments as follows:

- A. Farm Machinery and Power Engineering
- B. Processing and Food Engineering
- C. Irrigation and Drainage Engineering
- D. Soil and Water Conservation Engineering
- E. Renewable Energy Engineering
- F. Basic Engineering and Applied Sciences

Number of the students completed graduation from the College so far: 1046

The College is strategically located at Bapatla, Guntur District, Andhra Pradesh very nearer to National Highway 214A and Vijayawada-Chennai main railway line and is well connected by rail and roads. The lush green campus is spread over 25 ac with good infrastructure.

### **VISION**

To make Dr NTR College of Agricultural Engineering, Bapatla an integrated center for academic excellence of agricultural engineering education known for its contribution to agriculture and allied fields in making agriculture more remunerative to farmers

## MISSION

To serve the farming community and enhance their quality of life through excellence in education, research, development and transfer of agricultural technologies

### 6.4.2 Faculty Strength

College is having a sanctioned strength of 26 at present. There are 6 additional posts deployed from College of Agricultural Engineering, Madakasira and College of Food Science and Technology, Pulivendula (not shown in Table). Apart from 17 filled in posts of the College, there are 4 Teaching Associates working in the College and 1 Scientist of AICRP on FIM to cater the needs of the academic requirement.

#### Sanctioned and In-Position Faculty at Dr NTR CAE, Bapatla

Sl. No.	Position	Sanctioned Faculty	Faculty in Place	Vacant Positions	Faculty Recommended by ICAR
1	Associate Dean	1	1	0	1
2	Professor	5	4	1	7
3	Associate Professor	7	2	5	13
4	Assistant Professor	13	10	3	24
<b>Total</b>		<b>26</b>	<b>17</b>	<b>9</b>	<b>45</b>

#### Sanctioned and In-Position Faculty at Dr NTR CAE, Bapatla

Sl. No.	Department	Assistant Professor		Associate Professor		Professor		Total	
	Faculty / Department	SS	IP	SS	IP	SS	IP	SS	IP
		<b>10+1<sup>^</sup>+2 =13</b>		<b>5+2= 7</b>		<b>1+5 =6</b>		<b>26</b>	<b>17</b>
1	Associate Dean	-	-	-	-	1	1	1	1
2	Farm Machinery and Power Engineering	3	3	2	1	1	-	6	4
3	Processing and Food Engineering	3	3	2	-	1	1	6	4
4	Irrigation and Drainage Engineering	2	2	1	-	1	1	4	3
5	Soil and Water Conservation Engineering	2	2	1	-	1	1	4	3
6	Renewable Energy Engineering	1	1	-	-	1	-	2	1
7	Basic Engineering and Applied Sciences	2*	1	1**	-	-	-	3	1
	<b>Total number of posts</b>	<b>13</b>	<b>12</b>	<b>7</b>	<b>1</b>	<b>6</b>	<b>4</b>	<b>26</b>	<b>17</b>
<sup>^</sup> Asst. Professor Post of Agricultural College, Bapatla redeployed with stocks *Assistant Professor in Electrical, Electronics & Instrumentation and Agronomy/Soil Sciences ** Associate Professor in Mathematics SS - Sanctioned Strength IP - In Position Out of 9 vacant posts of faculty, 4 Teaching Associates (2 full-time and 2 part-time) are engaged.									



### 6.4.3 Technical and Supporting Staff

#### Sanctioned and In-Position Office Staff at Dr NTRCAE, Bapatla

Sl. No.	Sanctioned Post / Category	Sanctioned Strength	In-Position	Vacant Positions	Office Staff Recommended by ICAR
1	Administrative Officer	1	1	-	1
2	Superintendent	1*	1	-	12 Clerks
3	Senior Assistant	2	1	1	
4	JACT	2**	-	2	
5	Record Assistant	1	1	-	
6	Office Subordinate	2	2	-	
7	Watchman	1	1	-	
8	PA/Steno	-	-	-	8
9	Messenger/Peon	-	-	-	8
<b>Total</b>		<b>10</b>	<b>7</b>	<b>3^</b>	<b>29</b>

\* The post was Re-deployed of Superintendent

\*\* One post was Re-deployed of JACT (1 + 1 = 2)

^Out of 3 vacant positions of Office Staff, 2 posts are supported by out-sourcing employees.

#### Sanctioned and In-Position Laboratory Staff at Dr NTRCAE, Bapatla

Sl. No.	Sanctioned Post / Category	Sanctioned Strength	In-Position	Vacant Positions	Laboratory Staff Recommended by ICAR
1	Workshop Supervisor	1	-	1	27 Workshop Staff, Computer Operator, Driver, Technicians
2	Technician (Mech.Gr.I)	3	-	3	
3	Technician (Mech.Gr.II)	2	-	2	
4	Draughtsman Grade III	1	-	1	
5	Carpenter Grade II	1	-	1	
6	Welder	1	-	1	
7	Blacksmith	1	-	1	
8	Turner	1	-	1	
9	Driver	1	-	1	
10	Workshop Helper	2	-	2	
11	Luskar	2	-	2	
12	Laboratory Assistant	-	-	-	14
<b>Total</b>		<b>16</b>	<b>0</b>	<b>16*</b>	<b>41</b>

\*Out of sixteen posts, thirteen posts of Laboratory Staff are filled with out-sourcing employees.

### 6.4.4 Classrooms and Laboratories

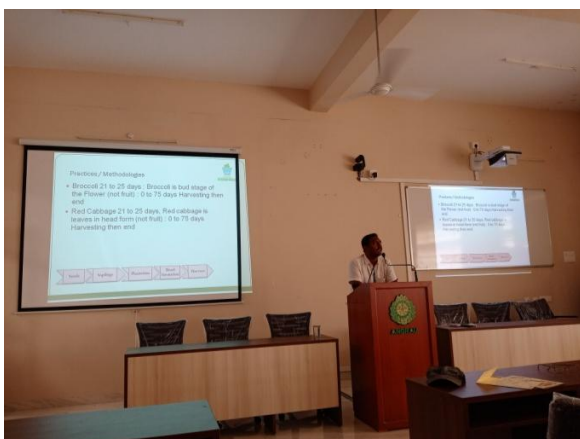
There are 4 dedicated classrooms with good lighting and ventilation being used for B.Tech. (Agricultural Engineering) degree programme for conducting theory classes. These classrooms are equipped with short-thro LCD projector, chalk board, furniture, etc. First, second and third year classrooms are converted into Smart Classrooms with audio systems, etc.



**LCD projector**



**Interactive board**



**Virtual class room**



**Class room**

Each department is having different laboratories to conduct the practical classes regularly. Each class is made into 2 batches (Batch A and Batch B) for the purpose of conducting practical separately. Accordingly, the class Time-Table is set.

Each department of the College is having dedicated laboratories. Department-wise distribution of laboratories is furnished here under:

**A. Department of Farm Machinery and Power Engineering**

1. Farm Power Laboratory
2. Farm Machinery Laboratory
3. Advanced Workshop
4. Soil Dynamics Laboratory
5. Ergonomics Laboratory

- B. Processing and Food Engineering
  - 1. Instrumentation Laboratory
  - 2. Process Engineering Laboratory
  - 3. Food Analysis Laboratory
  - 4. Food Microbiology Laboratory
  - 5. Environmental Control Laboratory
- C. Irrigation and Drainage Engineering
  - 1. Filed Irrigation Laboratory
  - 2. Field Solar Pump Laboratory
  - 3. Wells and Pumps Laboratory
- D. Soil and Water Conservation Engineering
  - 1. Watershed
  - 2. Soil and Water Conservation Laboratory
- E. Renewable Energy Engineering
  - 1. Renewable Energy Laboratory
- F. Basic Engineering and Applied Sciences
  - 1. Workshop with equipment of all manufacturing processes
  - 2. Thermodynamics Laboratory
  - 3. Central Computer Center
  - 4. Soil Mechanics Laboratory
  - 5. Engineering Drawing Laboratory
  - 6. Theory of Machines Laboratory
  - 7. Strength of Materials Laboratory
  - 8. Engineering Physics Laboratory
  - 9. Applied Electronics Laboratory
  - 10. Electrical Engineering Laboratory
  - 11. Hydraulics and Fluid Mechanics Laboratory
  - 12. Surveying and Leveling Laboratory



**Multi-crop Combine Harvester**



**Wear Testing Apparatus**



**Unibloc Moisture Analyzer**



**Hollow Fiber Ultra-Filtration**



**Soil Moisture Probe**



**Digital Planimeter**

### **6.4.5 Conduct of Practical and Hands-on Training**

Practical classes are conducted in respective laboratories as per class Time-Table with the instruments, equipment, machinery, etc. available. B.Tech. (Agricultural Engineering) degree programme is supported by following hands-on training courses additionally:

1. SRDY 281 Skill Development Training - I (4 weeks)
2. SRDY 381 Skill Development Training - II (4 weeks)
3. SRDY 481 Industrial Attachment/Internship (10 weeks)
4. SRDY 482 Experiential Learning (10 weeks)
5. SRDY 483 Educational Tour (2 weeks)
6. SRDY 484 Project Work and Report Writing (20 weeks)

SRDY 281, SRDY 381 and SRDY 481 are organized in ICAR Research Institutes (CIPHET, Ludhiana; IIHR, Bangalore; CIAE, Bhopal; IISWC, Ooty, Bellary, Koraput, Kota, Vasad; NAARM, Hyderabad; CRIDA, Hyderabad; CTRI Regional Station, Kandukur; etc.), Central Government Organizations (CFMTTI, Budni; SFMTTI, Garladinne; NFMTTI, Hissar; NIPHM, Hyderabad; IIP, Hyderabad; CIPET, Vijayawada; IGSi, Hyderabad; IMD, Pune; NIH,

Roorkee and Kakinada; etc.), State Government Organizations (WALAMTARI., Hyderabad; APSAC, Vijayawada; AICRP on FIM, Hyderabad; Telangana Foods, Hyderabad; DWMA, Ongole etc.), industries (Global Green Group, Sadasivapet; Pioneer Seeds, Hyderabad; Srini Food Park Pvt. Ltd. Chittoor; Food Tropicals, Tirupati; Konark Frozen Foods, Vijayawada; Jaya Lakshmi Rice Mill, Bapatla; Karanam Technologies, Kakinada; Farm Implements (India) Pvt. Ltd, Chennai; ASPEE, Mumbai; TAFE Ltd, Chennai; Escorts, Faridabad; VST, Bangalore; Jain Irrigation Systems, Hyderabad; ITC, Guntur and Mysore; Kumar Pumps, Tenali; etc.), NGOs (WASSAN, Secunderabad; Dhan Foundation, Madurai and Punganur; Krushi Agri Development Training Centre under AC&BC, Kothagudem etc.), etc. for training in the application of latest technologies. After training, a presentation will be given by the students and viva-voce will be conducted by panel of experts. These trainings will help the students in placements in those organizations.

SRDY 482 is conducted in the College itself in various modules, namely, farm machinery (manufacturing of garden tools, groundnut stripper, monocycle weeder-cum-furrow cleaner, tractor components, tillage implements, weeder rakes, solar power operated sprayer, manual drawn cultivator, multipurpose manual drawn implements, manual drawn multipurpose cycle weeder), mushroom cultivation, leafy vegetables cultivation, cultivation of commercial and floricultural crops, development of manual fruit harvester, production of low-cost air cooler, ANGRAU possessed foods (*ragi* malt, *ragi* biscuits, sorghum *laddu*, oat cookies, mango Jam, etc.), survey on farm mechanization in Andhra Pradesh etc.

SRDY 483 is held for final year students and they cover most of the organizations in South India, namely, Indian Institute of Horticultural Research, Bangalore; University of Agricultural Sciences, Bangalore; IISWC, Ooty; TNAU, Coimbatore; CMFRI, Kochi; Kanan Devan Hills Plantations Company (P) Ltd., Munnar; CTCRI, Thiruvananthapuram; House of Kalam, Rameshwaram; IIFPT, Tanjavur; etc. After the students return back to College, they submit a detailed Tour Report to the College. Students are evaluated based on the Tour Report, seminar presentation and followed by Viva-Voce Examination in front of the Evaluation Committee.





**Students visiting ICAR-IISWC-RC, Ooty**



**Students visiting TNAU, Coimbatore**



**Students visiting GKV, Bangalore**

SRDY 484 is a research project in which each group of 4-5 students conduct experiments on various researchable topics and develop new items for the benefit of the farming community. Students will prepare a Project Report and present their work in front of the Evaluation Committee and, then, Viva-Voce Examination will be held for evaluation.



**Students Conducting Experiments for Research Project**

#### **6.4.6 Supervision of Students in UG Programmes**

All classrooms, laboratories, examination hall, all premises of the College, etc. are connected with surveillance CC cameras to monitor the teaching activities and being monitored continuously. Video of each camera is recorded in the system.

#### **6.4.7 Feedback of Stakeholders (Students, Parents, Industries, Employers, Farmers, etc.)**

Students are very happy with the conduct of the B.Tech. (Agricultural Engineering) academic programme being handled at Dr N.T.R. College of Agricultural Engineering, Bapatla.

### **Feedback of B.Tech. (Agril Engg) Passed Out Students**

I Ravuri Sai Prasanth (BE-13-037) studied B.Tech in Agricultural Engineering during 2013 – 2017 at College of Agricultural Engineering, Bapatla and currently I am studying II year Masters degree in Department of Farm Machinery and Power Engineering at Tamil Nadu Agricultural University, AEC & RI Kumulur. It was a good opportunity to share my feelings towards the teaching faculty of my B.Tech study period. The way of teaching has made my mind to feel as a comfortable environment in classroom. The practical knowledge and theoretical knowledge they have shared. Irrespective of subjects, I have learnt many things like discipline, ethics and also the way of solving problems in critical situations in my personal life also. I have an immense gratitude towards each and every faculty staff who made my B.Tech a fruitful period in my career. I would like to acknowledge each faculty who raised me up in my growth.

Yours Sincerely,



(RAVURI.SAI PRASANTH)



I N. Anusha (BE-15-005) studied B.Tech in Agricultural Engineering during 2015-2019 at college of Agricultural Engineering, Bapatla and now I am pursuing II year Masters degree in the Department of Farm Machinery and Power Engineering at Dr. NTR college of Agricultural Engineering, Bapatla. I feel honour to express my gratitude towards our university. The quality of education and the way of teaching of faculty has created an interest to me towards the subject of machinery. Even we ask insightful questions, the way of clarifying our doubts made me to interact with the faculty. The Internship programmes organised by our college has made me to apply my theoretical knowledge in a practical way. I have learnt many things such as a decent behaviour ethics etc. I particularly want to acknowledge all the teaching faculty for their responsibility towards students and would like to thank all the faculty, staff and administration for their hardwork and commitment. I particularly selected this institution because they recognizes our strength and makes us to focus on it.


Yours Sincerely,

*Anusha* 11/9/20

(NAGAVARAPU ANUSHA)

I Kollipara Venkata Naga Hemanth (BE-15-057) studied in Agricultural engineering during 2015-19 at CAE, Bapatla. Currently I'm pursuing my Post Graduate Diploma in Agri-Business Management from Vaikunth Mehta National Institute of Cooperative Management, Pune. It feels an immense pleasure to share what my college had taught to me in 4-years. Overall experience in these whole graduation was enlightening & moreover the guidance which I got from my faculty was absolutely commendable. College taught things theoretically as well as practically too by which many hands of experience was given. Not only in academics many others parts like Cultural, sports we got exposed & been learnt how to be & what to be. My heartfelt gratitude to each & every faculty and to my college (CAE) for giving me such a great experience.

Yours sincerely,

 .. /11/09/2020

(KVN Hemanth)

BE - 15 - 057

Bapatla.

When I am in final year of Diploma in Agricultural Engineering it was my dream to get seat in college of Agricultural Engineering, Bapatla. After I had joined the college I just experienced what I had been listening during my diploma. The teaching and student teacher relationship was excellent. I really appreciate university and college authorities for providing global exposure to the students by sending them across the globe for training as a part of IDP program and I am thankful to the university and college by changing the curriculum to meet the present day need by including Experiential Learning on campus (ELP) to incorporate Entrepreneur skills in the students. Accommodation and sports facilities are good. Some the areas to be improved are, Lab facilities, placements, because most of the labs were old fashioned and placements were below par. Gate problems and JRF bikes should be taught along with the lectures so that the students will reach new heights.

R. Subrahmanya

ID No: BED17-84



### Feedback of Parents of B.Tech. (Agril Engg) Passed Out Students

My son A. Jagadeesh had completed his graduation in Agricultural Engineering in most Reputated Dr. N.T.R. College of Agricultural Engineering, Bapatla, in ANGRAU. After completion of his graduation, I observed a lot of change in him physically as well as mentally. As I am a farmer, Now my son is giving adequate suggestions and advices to do farming effectively. Now I am very happy about my son.

I think the management and professors in the college are excellent in teaching and are able to mould the student in effective way and they are very good at knowledge related to Agriculture and other aspects. and my son was motivated by teachers in college that now he can decide himself about his future without the help from others. and the environment provided by the management in college made him as a diamond.

So I thank everyone in the college ie professors and management for making my son as a dynamic person.

Signature of parent:- A. Naga Bhushanam

## Feedback of Progressive Farmers

18. 10.6.18.  
 Participating Gentlen (2018)  
 (29) in members visited farm mechanisation  
 wing and learned about different  
 farm implements and machinery, its  
 efficiency, cost and availability.  
 This wing is useful to the near farmers  
 apart from the Eng. Students  
 D. PAPI REDDY  
 9849568212  
 Facilitator (DAES)  
 Gentlen 2017-18

FARM MACHINERY TECHNICAL SERVICES SUPPORT TO OUR  
 CHERUVU-JAMMULAPALEM VILLAGE, BAPATLA MANDAL, GUNTUR DIST  
 BY DR. N.T.R COLLEGE OF AGRICULTURE ENGINEERING, BAPATLA

WE ARE A GROUP OF FARMERS MAKING USE OF  
 CUSTOMER HIRING SERVICES FROM DR. N.T.R COLLEGE OF  
 AGRICULTURE ENGINEERING, ANGRAU, BAPATLA SINCE LAST  
 5 YEARS.

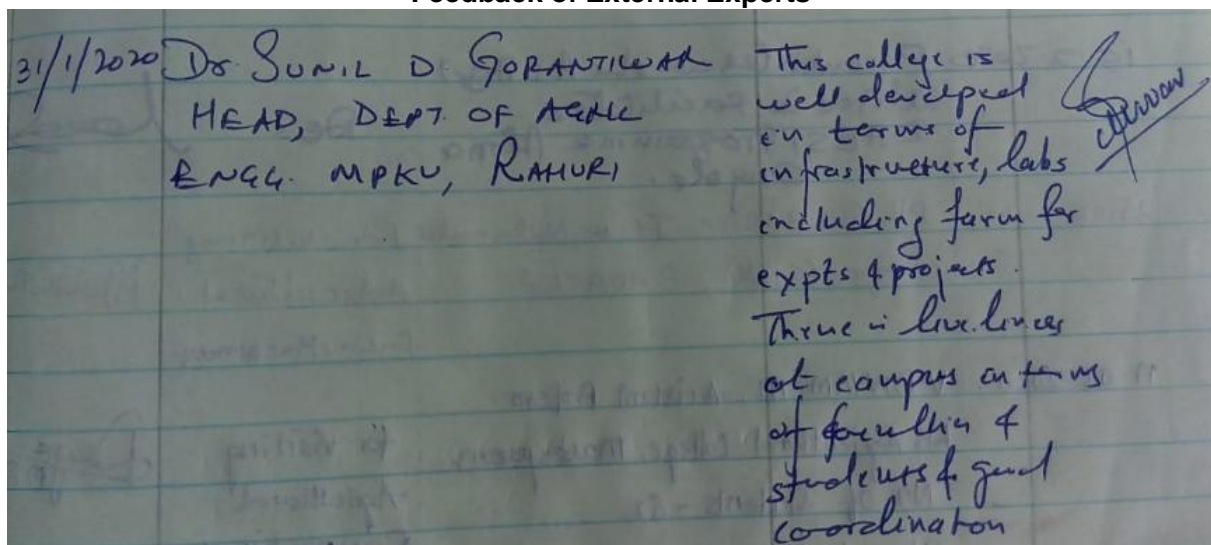
APART FROM THE ABOVE SERVICES, THE SCIENTISTS  
 ARE GUIDING OUR GROUP REGARDING "PADDY CROP  
 MECHANISATION TOTAL SOLUTIONS"

WE ARE VERY MUCH HAPPY ABOUT THE  
 SERVICES EXTENDED BY "DR. N.T.R COLLEGE OF  
 AGRICULTURE ENGINEERING, ANGRAU, BAPATLA."

WE EXPECT THE SAME CO-OPERATION  
 WILL BE CONTINUED FURTHER IN FUTURE ALSO

K. Pundarik  
 KUNDA PUNDARI KAKSHORU  
 98470-34565  
 FARMER, CHERUVU-JAMMULAPALEM  
 BAPATLA MANDAL, GUNTUR DIST  
 ANDHRA PRADESH

### Feedback of External Experts



### Feedback of Training Institutes/Organizations



Tele -Fax : 040-24015374  
E-mail : [niphm@nic.in](mailto:niphm@nic.in)  
<http://niphm.gov.in>

### राष्ट्रीय वनस्पति स्वास्थ्य प्रबंधन संस्थान National Institute of Plant Health Management

कृषि, सहकारिता एवं किसान कल्याण विभाग  
Department of Agriculture, Cooperation & Farmers Welfare  
कृषि, सहकारिता एवं किसान कल्याण मंत्रालय, भारत सरकार  
Ministry of Agriculture & Farmers Welfare, Government of India



रा. व. स्वा. प्र. सं.  
NIPHM

Rajendranagar  
Hyderabad - 500 030.  
Telanagana, INDIA

### TO WHOMSOEVER IT MAY CONCERN

National Institute of Plant Health Management, Hyderabad started the In-plant training since 2014 for the third year students from Dr. NTR College of Agricultural Engineering, earlier known as College of Agricultural Engineering, Bapatla. The students from the above mentioned college are very punctual and sincere during their training period at NIPHM. The students were involved in the on-going research projects of the institute during the training period and have actively participated in the institute activities and also dedicated towards the completion of the tasks assigned.

Udaya Bhanu M.

Er. M Udaya Bhanu  
Scientific Officer (PHE)



## Feedback of Recruiting Organizations



### 6.4.8 Student Intake and Attrition in the Programme for Last Five Years

Admission into First Year B.Tech. (Agricultural Engineering) programme is being done through AP state EAMCET ranks through common counseling of the state. Intake is for 60 seats. Out of 60 seats, 60% (36) of the seats are filled by EAMCET Convener, whereas remaining 40% (24) seats are filled under farmers' quota duly following the reservation policy of the state. There are 15% additional seats over and above 60 available for students of ICAR

quota nominated by ICAR, New Delhi. Those who have completed 3-year Diploma in Agricultural Engineering have facility of entering into Second Year B.Tech. (Agricultural Engineering) through AGRIENGGCET conducted by ANGRAU every year. There are 15% seats over and above 60 are reserved for these lateral entry students.

B.Tech. (Agril Engg)									
Academic Year	First Year		Second Year		Third Year		Final Year		Total Students
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	
2014-15	37	30	36	42	41	26	42	26	280
2015-16	32	28	40	33	35	41	41	26	276
2016-17	40	33	39	31	39	32	40	35	289
2017-18	42	25	48	36	38	30	40	32	291
2018-19	42	26	47	29	47	35	38	30	294
2019-20	29	38	49	28	44	27	47	31	293
<b>Total</b>	<b>222</b>	<b>180</b>	<b>259</b>	<b>199</b>	<b>244</b>	<b>191</b>	<b>248</b>	<b>180</b>	<b>1723</b>

B.Tech. (Agril Engg)										
Particulars	2014-15		2015-16		2016-17		2017-18		2018-19	
	Enrolled	Passed	Enrolled	Passed	Enrolled	Passed	Enrolled	Passed	Enrolled	Passed
UG - Male	45	42	40	36	40	34	40	32	44	30
UG - Female	27	26	30	27	34	39	32	40	26	38
<b>Total</b>	<b>72</b>	<b>68</b>	<b>70</b>	<b>63</b>	<b>74</b>	<b>73</b>	<b>72</b>	<b>72</b>	<b>70</b>	<b>68</b>

#### 6.4.9 ICT Application in Curricula Delivery


All the teachers use LCP projector and deliver the curriculum through Power Point Presentation. Teachers play educational videos using multimedia for benefit of the students.

#### 6.4.10 SSR of the B.Tech. (Agricultural Engineering) Degree

Self study report of the B.Tech. (Agricultural Engineering) programme of Dr N.T.R. College of Agricultural Engineering, Bapatla is here with submitted.

#### 6.4.11 Certificate

I, the Associate Dean of the Dr NTR College of Agricultural Engineering, Bapatla, Andhra Pradesh hereby certify that the information contained in Sections 6.4.1 to 6.4.9 are furnished as per the records available in the college and degree awarding university.

  
 30/09/2020  
 Signature of the Associate Dean with Date and Seal  
 Associate Dean  
 Dr NTR College of Agril. Engineering  
 BAPATLA-522 101, A.P.