

# Dr. Annasaheb Shinde College of Agricultural Engineering & Technology, Rahuri- 413 722, Dist. Ahmednagar, MS MPKV, Rahuri-413 722, Dist. Ahmednagar (MS)



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### **History:**

The Government of Maharashtra established the College of Agricultural Engineering as one of the constituent colleges of Mahatma Phule Krishi Vidyapeeth, Rahuri, Dist. Ahmednagar on 29/03/1968 at its Pune Campus. The college was subsequently shifted to the central campus of the University at Rahuri in 1972 which is 160 km from Pune. Subsequently, in the year 1996 it was named after the former Union Minister of State for Agriculture and architect of green revolution in India, Late Dr. Annasaheb Shinde, as Dr. Annasaheb Shinde College of Agricultural Engineering. The name of the college was extended as Dr. Annasaheb Shinde College of Agricultural Engineering and Technology in the year 2017.

Initially, the college offered the undergraduate programme in Agricultural Engineering leading to B. Tech. (Agril. Engg.) Degree with intake capacity of 20, which was increased phase wise to the current capacity of 64. The Masters programmes leading to M. Tech. (Agril. Engg.) in four different disciplines

viz. Agricultural Process Engineering, Irrigation and Drainage Engineering, Soil and Water Conservation Engineering and Farm Machinery and Power were started in 1982 with intake capacity of 2 in each discipline which was subsequently increased to the current capacity of 4 in 2005. The M. Tech. programme in FMPE was suspended 2014-15; however, Academic Council of the university has provided permission to restart the M. Tech. programme in FMPE from the academic year 2018-19.

The college started doctoral programmes leading to Ph.D. (Agril. Engg.) in 2011 in three disciplines of Agricultural Engineering viz. Agricultural Process Engineering, Irrigation and Drainage Engineering, Soil and Water Conservation Engineering with intake capacity of 2 in each discipline. The Ph. D programme in Agricultural Process Engineering was suspended since 2014-15. However, Academic Council of the university has provided permission to restart the Ph. D. programme in APE and start the Ph. D. programme in FMPE from the academic year 2018-19.

# In nutshell, college offers graduate and postgraduate degree programmes in agricultural engineering as below

- 1. B.Tech. (Agril. Engg.)
- 2. M. Tech. (Agril. Engg.)
  - a. Processing and Food Engineering
  - b. Farm Machinery and Power Engineering
  - c. Irrigation and Drainage Engineering
  - d. Soil and Water Conservation Engineering
- 3. Ph. D. (Agril. Engg.)
  - a. Processing and Food Engineering
  - b. Irrigation and Drainage Engineering
  - c. Soil and Water Conservation Engineering
  - d. Farm Machinery and Power Engineering (from 2018-19)
  - e.

#### Mandate:

Agricultural Engineering concerns with the application of engineering and technological approaches to agriculture in order to increase the agricultural productivity optimally on sustainable basis; and efficiently utilize and conserve the natural resources for achieving the betterments of farming community and providing the quality food to the end users at affordable prices.

The college intends to enhance its teaching, research and extension functions by actively pursuing engineering and technological innovations in agriculture. Accordingly, the college has formulated the mandates to fulfill the above responsibilities of the agricultural engineers through teaching, research and extension as below.

### **Teaching**

• To promote education and training in all disciplines of agricultural engineering to the perspective students and learners at all levels.

- To provide high-quality, interactive learning environment that includes a variety of in-class, on-field, on-line and other media technologies for individualized and group learning.
- To support the design, development, implementation and evaluation of effective teaching and learning experiences.
- To encourage and assist the resource persons to explore students' abilities, capacity and capability for building innovation and creativity the students and to convert the students to graduates who can independently take the decisions, implement the plans and provide the meaningful outcome.
- To produce the graduates having ability to contribute the Nation's development and become "job providers" instead of "job seekers".

#### Research

- To promote research in the area of agricultural process and food engineering, soil and water conservation engineering, irrigation and drainage engineering, water management, farm power and machinery and renewable sources of energy.
- To plan, undertake, aid, promote and co-ordinate research in agricultural engineering and its application to agriculture for enhancing efficiency, productivity and economy.
- To develop the technologies that enable the use of natural resources including land and water on sustainable basis
- To accomplish the farm mechanization and automation by developing the machineries and equipments that aid the farming community for ease in farming operations, increase the productivity and lead to produce high quality food at affordable costs.
- To induce the research culture amongst the students and enable them to act independently and innovatively.

#### Extension

- To promote extension in the area of agricultural engineering through training programmes, farmers' rallies, agricultural exhibitions, TV and Radio programmes, popular publications, demonstrations etc.
- To take the farm implements, machineries, and technologies developed for the conservation of natural resources to the farmers' fields for the demonstration and effective use and implementation.
- To promote the extension and development activities through innovative approaches such as agro-advisories, custom hiring.
- To train the trainers' and farmers' in adoption of the agricultural engineering technologies.

### **Objectives**

• To impart education and entrepreneurial skills in engineering and design, development, manufacturing and operation of equipments and technologies for farm operations for crop production, processing and value addition and efficient use of agricultural inputs and natural resources including land, water and different forms of energy in agriculture.

- To conduct research on development of machines/technologies with an aim to mechanize various farm and post harvest/product processing operations, optimum and sustainable conservation, utilization and management of land, water and energy.
- To adopt the ICT technologies for imparting education and disseminating the research outcomes to the farmers along with the conventional means.
- To give emphasis on practical oriented teaching, experiential learning and in plant training as per the V Deans' Committee, and expose the students to actual learning environment as per the philosophy of the Students' READY programme.
- To equip the students with the advanced skills that will enable them to compete in national and international scenarios of globalization, intellectual property rights, world trade, good agricultural practices, climate changes, etc.
- To develop the entrepreneurial skills amongst the students to enable them to harness the self
  employment opportunities in the age of farm mechanization, irrigation automation and value
  added products.
- To contribute to National mission of "doubling farm income in next five years"

### **Future Objectives:**

- To strengthen Ph. D. programmes in Irrigation and Drainage Engineering and Soil and Water Conservation Engineering; and start Ph. D. programs in Farm Machinery and Power and Agricultural Process Engineering.
- To start the master (M. Tech.) programme in Electrical and Other Energy Sources (EOES).
- To make efforts to admit international students to this college
- To collaborate with national and international organizations for joint studies so that the students of this college are exposed to varied learning and working environments.
- To undertake the short duration certificate and training programmes on new challenges posed by agriculture such as climate change, automation, precision and climate smart agriculture and globalization.
- To provide the farmers with the suitable and appropriate technologies at affordable cost with the help of information technology.

### **Faculty Strength**

The sanctioned faculty strength of UG degree programme is given below. This staff is being used to conduct all three degree programmes i.e. B. Tech., M. Tech. and Ph.D.

Sr.No.	Designation	Sanctioned	Filled	Vacant
1	Dean	01	01	00
2	Professor	10	02	08
3	Associate Professor	06	04	02
4	Assistant Professor	09	06	03
	Total	26	13	13

# Technical and supporting staff

Sr. No.	Name of the post	<b>Sanctioned posts</b>	Posts filled in	Posts vacant			
A	Establishment / Administrative Staff						
1	P.A./P.S./T.O. to Dean	00	00	00			
2	Assistant Registrar	01	00	01			
3	Office Superintendent	01	01	00			
4	Assistant Superintendent	01	01	00			
5	Senior Clerk	04	04	00			
6	Junior Clerk	04	04	00			
7	Stenographer	01	01	00			
8	Steno Typist	01	01	00			
9	Driver	01	01	00			
В	<b>Technical and Supporting Sta</b>	aff					
1	Agriculture Assistant	09	09	00			
2	Draftsman	01	00	01			
3	Sr. Mechanic	02	01	01			
4	Jr. Mechanic	01	00	01			
5	Welder	02	01	01			
6	Fitter	02	02	00			
7	Turner	02	02	00			
8	Foundry Man	02	01	01			
9	Carpenter	01	01	00			
10	Surveyor	01	01	00			
11	Wireman	01	01	00			
12	Tracer	01	00	01			
13	Plumber	01	01	00			
14	Civil Mistry	01	01	00			

15	Lab Attendant	08	06	02
16	Peon	06	02	04
17	Watchman	02	01	01
18	Majoor / Labour	03	03	00
19	Workshop Majoor / Labour	04	03	01
	<b>Total Sanctioned Posts</b>	63	48	15

Dep	Department wise Faculty Profile														
No		Dean			Profes	sor		Associ	ate Pro	fessor		Assist	ant Prof	fessor	
	Departments	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Pooled	Sanctioned	Filled	Vacant	Pooled
	Dean's Office	01	01	00											
1	Agricultural Process Engineering				01	01	0	01	01	00	01	00	00	00	00
2	Farm Machinery and Power Engineering				01	00	1	2	1	01	01	01	1	0	0
3	Irrigation and Drainage Engineering				01	01	0	0	2	01	01	00	1	1	0
4	Soil and Water Conservation Engineering				01	00	1	1	1	00	00	00	0	0	0
5	Other (Civil/Mech/ Comp/ Elect. Engg/ Agronomy/ Phy/ English/ Maths/ PTI)				06		6				00	08	3	2	1
	Total	01	01	0	10	02	8	6	4	02	01	9	5	3	1

### **Academic Programme:**

The under graduate programme in Agricultural Engineering was started in the year 1969 in Mahatma Phule Krishi Vidyapeeth, Rahuri. There was trimester system of education with five-year degree programme. After first year of agriculture. During the year 1976-77, the education system was changed to semester system. After 1977, with shifting to new (10+2) education pattern, the B. Tech. (Agril. Engg.) degree programme was changed to four-year degree programme with semester system. Until 1990, syllabus of under graduate degree programme used to be decided by the University through its Academic Council. In 1990, the syllabus of B. Tech. (Agril. Engg.) was discussed commonly by four Agricultural Universities and common syllabus was adopted for the degree programme. In 1998, new ICAR syllabus was implemented, which was modified according to IV Deans' Committee Report in 2007-08. Since 2017-18, syllabus suggested by V Deans' Committee is being implemented.

This college offers graduate and postgraduate degree programmes in agricultural engineering as below,

- 4. B.Tech. (Agril. Engg.)
- 5. M. Tech. (Agril. Engg.) in
  - a. Agricultural Process Engineering
  - b. Farm Machinery and Power
  - c. Irrigation and Drainage Engineering
  - d. Soil and Water Conservation Engineering
- 6. Ph. D. (Agril. Engg.) in
  - a. Agricultural Process Engineering
  - b. Irrigation and Drainage Engineering
  - c. Soil and Water Conservation Engineering

#### Students' intake

### B.Tech. (Agril. Engg.)

Initially, the duration of B.Tech. (Agril. Engg.) programme was 5 years and there was prerequisite to complete first year B.Sc. (Agri.) with A or B grade in the subject viz. Physics, Chemistry and Mathematics for further admission to B.Tech.

The student had to complete 15 trimesters in 5 years. Then pattern was changed to 4 year degree programme in 1978 consisting of eight semesters. Admission to this programme is strictly on the basis of merit of aggregate marks obtained at XII standard having 10+2 pattern of education with Mathematics, Physics, Chemistry and English as compulsory subjects. Initially the intake capacity was 20 students every year (1969-1997) and has been raised to 64 in phases as detailed below.

The Government of Maharashtra has decided to start Common Entrance Examination for the admission to B. Tech (Agril. Engg) from the academic year 2018-19

### **Approved intake capacity**

Year	Approved intake capacity
1969	20
1978	25
1983	30
1984	50
2004	64
2018	64

The statutory reservations and reservations provided by the Central and State Governments from time are strictly followed for entry into all the academic programmes by the college. Out of the total intake capacity of students, thirty per cent seats are reserved for girl students.

The students have to complete 185 credits and are required to undergo summer placement training at various industries for a minimum period of four weeks at the end of IV and VI semester. Further, they have to complete Agricultural Engineering Project of 6 (0+6) credits during the VII Semester in the final year. While, In-Plant Training of 25 (0+25) credits needs to be completed by the students in industries, commercial organizations, NGOs, training institutes, etc during the VIII semester. The duration of in-plant training programme is minimum 4 months.

Up to the period under report, total 1809 students of this college have passed B. Tech (Agril. Engg.) degree programme

### M. Tech. (Agril. Engg.)

The post graduate programme leading to Master of Technology in Agricultural Engineering was started in the year 1982. Candidates possessing B.Tech. (Agril. Engg.) degree or its

equivalent is eligible to take admission for M.Tech. in following four disciplines through Common Entrance Examination (CET) conducted by Maharashtra Council of Agricultural Education and Research, Pune.

- 1. Agricultural Process Engineering
- 2. Farm Machinery and Power
- 3. Irrigation and Drainage Engineering
- 4. Soil and Water Conservation Engineering

The initial intake capacity of eight (2 in each discipline) has been increased to sixteen (4 in each discipline) from the year 2005. The students admitted to M. Tech. (Agril. Engg.) courses have to complete 55 credit courses including project and 6 non-credit compulsory courses during the period of 4 semesters. They have to attend Industrial / Institute training for a period of minimum 3 weeks at the end of II Semester.

Up to the period under report, total 302 students of this college have passed M. Tech. (Agril. Engg.) degree programmes in four disciplines.

### Ph.D. (Agril. Engg.)

The Ph.D. programme in following three disciplines was started during the year 2011-12.

- 1. Agricultural Process Engineering
- 2. Irrigation and Drainage Engineering
- 3. Soil Water Conservation Engineering

### Each department has intake capacity of two students.

The students for Ph.D. programme are admitted strictly on the basis of merit of CGPA/Marks obtained at M.Tech. (Agril. Engg.) in respective disciplines. During the Ph.D. programme, the students have to complete 75 credits courses out of which 30 credits are for course work and 45 for doctoral research.

Up to the period under report, total 14 students of this college have passed Ph. D. (Agril. Engg.) degree programmes in three disciplines.

### 1.5 Present status of the institution

Currently the college implements the graduate degree programme in Agricultural Engineering, masters degree programmes in four disciplines namely Agricultural Process Engineering, Farm Machinery and Power, Irrigation and Drainage Engineering and Soil and Water Conservation Engineering and doctoral degree programmes in three disciplines namely Agricultural Process Engineering, Irrigation and Drainage Engineering and Soil and Water Conservation Engineering.

The college has sanctioned teaching and non teaching staff positions of 26 and 117, respectively. Currently 15 and 87 teaching and non teaching staff positions are filled in. 5 teaching staff positions have been pulled from other units to strengthen the current academic programmes and 1 is pulled to other units.

### The college has four departments:

- 1. Department of Agricultural Process Engineering
- 2. Department of Farm Machinery and Power
- 3. Department of Irrigation and Drainage Engineering
- 4. Department of Soil and Water Conservation Engineering

The departments are not full fledged. The senior academic staff member acts as the Head of the Department for statutory purpose and fulfills the responsibility of academic and educational activities of the department.

During the current academic year 2017-18, the students enrolment for B. Tech. (Agril. Engg.), M.Tech. (Agril. Engg.) and Ph. D. (Agril. Engg.) programmes are as under (Table 1.2),

Table 1.2. The students' enrolment for the academic year 2017-2018

Year	No. of students					
	B.Tech. (Agril. Engg.)	M.Tech. (Agril. Engg.)	Ph.D. (Agril. Engg.)			
I	64	12	02			
II	65	06	02			
III	68	00	02			

IV	59	00	00	
Total	256	18	06	
Grand Total	280			

### **Details of Instructional Farm of College**

Sr. No.	Name of the Department	Facilities on Farm	Total Area (ha)	Purpose (Remarks
1	Irrigation and	Subsurface drainage system,	11.25	Irrigation
	Drainage	Farm ponds, drip, sprinkler and		Engineering,
	Engineering	rain gun system, Centrifugal and		Drainage
		Submersible Pumps, Open well and		Engineering,
		Borewell recharge system		Advanced Irrigation
		Solar photovoltaic pumping system		System Design,
		Set up of peizometers and observation		Ground Water
		well		Wells & Pumps,
		ET monitoring Station,		
		Hydraulic study drip system		
		Polyhouse Shadnet houses		
2	Soil and Water	Rainfall simulator runoff plots	0.75	Soil and Water
	Conservation	Field plot with multi slot divisor		Conservation
	Engineering			Engineering

### **NCC Unit**

The National Cadets Corps (NCC) movement has been a pioneer movement working tirelessly for improvising the discipline of the future generation and keeping their activities in the service of the nation by improving their character, qualities and motivating the youth to get involved in national building projects. The aim of National Cadets Corps (NCC) is to develop Qualities of character, Courage, Commandership, Leadership, Secular outlook, Spirit of adventure, Sportsmanship and to create human

resources in organized, trained and motivated youth always available for the service of the nation.

The NCC programme of three years duration is offered to the I, II and II year B. Tech (Agril. Engg) students. Half the company of 54 cadets and one Associate NCC Officer (ANO) is sanctioned in September 1982 by the 17 Maharashtra NCC Battalion, Ahmednagar. In the month of July the cadets are enrolled for I year NCC depending up on the vacancies available. The cadets have to attend at least 75 per cent parades. During one-year training programme 40 hours of parades are supposed to be completed at college level. For completing "B" certificate examination cadets have to complete two years training with 75 per cent parades with one annual training camp. For "C" certificate examination cadets have to complete three years training with 75 per cent attendance in parades with two camps. During last five years (2008 to 2012) 130 cadets were enrolled for NCC out of which six cadets were dropped due to personal reasons. One cadet at the rank of Junior under officer (JUO), one cadet at the rank of Sergeant (SGT), three cadets at the rank of Corporal (CPL) and six cadets at the rank of Lance Corporal (L/CPL) were promoted every year. One ANO having rank of Captain is linked between military and civil cadets. Result of certificate examination is 100 % for year. From 2009 onwards 33 per cent girls students are admitted for I year NCC as per the policy of Defense Ministry.

The cadets were educated in the area of Civil defense, Adventure training, Para sailing, Riffle drill, Bouynet fitting, Map reading etc. during the regular parades and during various camps. The ANO and the cadets are well trained to handle any disaster situation. The unit has successfully organized seven Annual training camp (ATC), one Thal sena camp (TSC), one Social service camp (SSC) and one National integration camp (NIC) at the central campus of this university. Blood donation, tree plantation activities were carried out by the cadets and ANO as and when need arises.

During last five years 6 NCC cadets were qualified for **CDS** examination and successfully completed **SSB** interview and also selected as Assistant Commandant in **BSF** and in Indian Army as **Officers.** Cadets get military training during the NCC carrier, which inculcate a sense of devotion for the country and also make them disciplined citizens.

This sub-unit has organized four Investiture Ceremonies for former and acting Vice - Chancellor of this University. Top military officers including Additional Director General (ADG), Commandant MIRC and Commanding Officer had visited this sub-unit on the event of conferring and bestowing prestigious rank of Colonel upon the acting Vice- Chancellor of this University.



**Gurukul Teaching** 



Tent preparation competition



Waste management (Decomposting)



Tree Plantation



Investiture Ceremony



Presentation of Baton



Speech by Registrar



Speech by ADG Maj Gen Gejendra Prasad, YSM, VSM

Details of first year admission, certificate examination result and the achievements

Year	Enrolled cadets in first year		Total	Cadets passed 'B' certificate	Cadets passed 'C' certificate	Achievement
	SD	SW		exam	exam	
2013-14	14	03	17	17	17	During last five years 5 NCC
2014-15	15	03	18	18	18	cadets successfully completed
2015-16	15	03	18	18	18	SSB interview and also selected
2016-17	16	03	19	19	19	as Assistant Commandant in
2017-18	14	05	19	19	19	BSF and in Arm Forces as Officers.

This sub-unit has organized three Investiture Ceremonies for former Vice - Chancellor of this University. Top military officers including Additional Director General (ADG), Commandant MIRC and Commanding Officer visited this sub-unit on the event of conferring and bestowing prestigious rank of Colonel upon the acting Vice- Chancellor of this University.

Table: 102. Details of NCC camp

Year	Students Enrolled for NCC Camp	Dates	Activities carried out during the camp
2013-14	25	2013	Regular pared and drills
2014-15	25	2014	Firing skills
2015-16	25	2015	Tent preparation
2016-17	25	19 to 28 Aug. 2016	Map reading
2017-18	25	15-24 Jan. 2017	

### **NSS Unit**

The College has 50 students' Unit in each year and 25 students' Unit is going on NSS Special Camp in every Year. The overall objective of this scheme is to promote in the students a sense of working for service to the community. This enables the students to understand the community, identify its needs and their role for providing solutions, and develops a sense of civic responsibility, team spirit, leadership qualities, and problem solving capacity and to practice national integration.

The students are to put in a minimum time of 120 hours in each academic year for service week. They are also required to attend NSS Camps, Special Camps National Integration Camp organized by the University. The NSS activities are running with the financial support from Govt. of India and Maharashtra State Govt. A separate Programme Officers for each unit is looking after the NSS activities. The NSS Co-ordinator and Students' Welfare Officer is controlling all the activities at University level.

Seven students of this college were awarded as Best Volunteer and NSS porgramme office was awarded with Best Programme Officer at state level.

Every year Shramasanskar Shibir i.e. NSS camp is organized. Through this camp various activities like tree plantation, cleaning campaign, awareness programmes and rallies are organized. Experts lectures are organized for NSS volunteers during the camp.

Blood donation camp and blood group checking camp are organized by Dr. AS CAET, MPKV Rahuri on 26 January every year in collaboration with Civil Hospital, Ahmednagar.

### • Special Winter Camp Activities

The seven days residential summer camp is organized every year in the adopted village. Where, various programmes are undertaken as follows,

- o Cleaning of roads, schools, temples and gram panchayat premises.
- o Guest lectures on various topics.
- o Tree plantation programme
- o Awareness programme on agriculture related activities.
- o Rallies for awareness on various social issues among the public.
- o Cultural programme on social theme.
- O Visits to different places for social development of volunteers.

### • Regular Activities

- Lecture series on various topics are organized for the overall social personality development of the NSS volunteers.
- Celebration of various days from time to time Viz., International Yoga day, Teachers day, World
  AIDS day, NSS Foundation day, Independence day, Republic day, International women day,
  birth/ death anniversaries of national heroes.etc.
- o Every year the tree plantation programme is organized during the month of June and July.
- O Undertaking Shramadan /cleaning campaign from time to time under the "Swachh Bharat Mission" in which the college campus, hostel premises, lecture halls, roads, etc. are kept clean and tidy and the collected dried leaves and other biomass is used for composting.
- o Collection of glass and plastic is done regularly and collect plastic is sent for recycling.
- o Every year blood donation programme is organized and volunteers donate blood enthusiastically.

### Benefits to the Student Development

The students when they complete the all NSS activity they get awareness about environment and about natural resources.

- o Students develop the communication skill and Personality.
- Students learn affinity towards the society and historical places.
- o They learn importance of cleaning in their day today life.
- o They learn how the things with discipline do and how to maintain it.
- o They also develop Co-cooperativeness among themselves.
- o Doing the Blood donation, they know the importance of it concern with society.
- Students also develop affinity to minor, Old people, Disabled people in society, by doing different Campaigns.
- o Students learn about disaster management by attaining the special
- o They also develop respect to words women while cooperatively working with girls.

### **Details of NSS camp**

Year	Students Enrolled for NSS Camp	Dates	Activities carried out during the camp
2013-14	25	12-18 March 2014	Lecture series, Celebration of various days
2014-15	25	15-22 March 2015	Shramadan /cleaning campaign
2015-16	25	22-28 March 2016	Collection of glass and plastic
2016-17	25	22-29 March 2017	Awareness rallies, Visits to different places
2017-18	25	22-28 March 2018	for social development of volunteers. Cultural programme on social theme.

### **Language Laboratory**

Being aware of the fact that any language is learnt primarily by listening, practical classes for the course Comprehension and Communication in English (LANG-111) were being used in the classroom since 2013. As per the new syllabus of V Deans Committee LANG-111 this subject is excluded from the syllabus. However, as per the new syllabus Communication Skills and Personality Development (AS EXTN-111) this subject has been introduced. The classrooms are well equipped with projectors. Teachers use laptops, and speakers to show videos, speech practice and power point presentations. The placement cell is will equipped with projector and a room for Group Discussions. Students are taken to placement cell during practical's for sessions on Group Discussions. Interview techniques are also taught and practiced in placement cell.

Besides this, a set of 8+1 Language Lab software is available in the computer lab which is used for practical's. A quality practical manual has been prepared by the university faculty and published by the Mahatma Phule Krishi Vidyapeeth, Rahuri under the Publication Number 169.

In accordance with the V Deans Committee Report, the manual covers the following topics

	in accordance with the v Deans Committee	Report, the manual covers the following topics.
1.	Learning by listening	10. Writing CV
2.	English Pronunciation	11. Group Discussion
3.	English Vowels and Consonants	12. Grammar: Articles
4.	Intonation and Stress	13. Grammar: Prepositions
5.	Oral Communication (Conversation)	14. Grammar: Subject-Verb Agreement
6.	Reading Comprehension	15. Vocabulary: Synonyms and Antonyms
7.	Paragraph Writing	16. Vocabulary: Homonyms and Homophones
8.	Precis Writing	17. Review
9.	Interviews	

While the efforts to provide reasonable instruction, training, and practice are carried out as sincerely as possible, there are certain difficulties and intricacies in teaching communications skills: (1) The rural background of the majority of the students distracts them from focused attention while Videos are shown. (2) Faculties are entrusted with the work of supervision, paper evaluation, moderation, paper

setting, team managers during sports and such other duties. In order to provide state of the art communication skills, a proposal for a full fledged laboratory for 40 students is being prepared.

#### **Cultural Centre**

Dr. Annasaheb Shinde College of Agricultural Engineering & Technology has its own cultural center as well as the university cultural and sports center in the university campus. The cultural center is well equipped with musical instruments necessary for the dramas and songs such as Octopad, Electronic Key Board, Gitar, Drums, Dholak, Harmonium, Flute, Synthesizers, and mouth organs. Also sound system in built in the cultural center and Auditorium. Experts in different musical instruments and Dance masters are hired from local nearby town and used to train the students time to time. Trained students participate in the different cultural programmes on state and national level just like Indradhanushya and competitions and cultural festivals. Students also perform musical programs on different occasions in the college and university campus. Some of our students have been awarded in different state and national level programmes.

Some of our staff is also availing the opportunity to learn musical instruments and perform in different cultural programmes organized in the college and university campus.

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Details of students' participation in Inter University, state level elocution competitions, Avishkar, Indradhanushya and ICAR Youth festivals

Sr. No	Name of the Event	Academic Year wise selection of students in Interuniversity, State level Elocution, Indradhanushya, Avishkar and ICAR Youth Festivals					
		2013-14	2014-15	2015-16	2016-17	2017-18	
1	AVISHKAR	04	04	04	05	05	
3	Debate &	02	04	00	01	04	
	Elocation						
4	Utkrshya	03	05	03			
5	Indradhanushya	02	08	06			
6	Agri-Uni-Fest	02	04	07	01		

### **Personality Development**

The college plays an important role in the personality development of students and staff. The trainings, workshops, and lectures on personality development are organized regularly. These includes various innovative and informative trainings lectures by the experts on personality development, Stress Management, Time Management, Yoga exercise, entrepreneurship and Skill Development, etc.

The college has all the facilities for training the students in the communications skills and personality development. Assistant Professor of English conducts regular theory and practical classes for students. Regularly Group Discussions are organized at placement cell. Placement committee conducts interview sessions, mock interviews and arranges mock tests for third and final year students. In order for students

to acquire organizational and leadership skills, various functions, ceremonies, events seminars, rallies and camps are regularly organized at the college.

Details of Study tour/field visit/industrial visits

Year	Study tour/field visit/industrial visit	No of Study tour/field visit/industrial visit	Places/Address	Organized by
2013-14	Field visit	1	RCDP on Cattle, MPKV, Rahuri	Dept. of FSRE
2014-15	Field visit	1	Visit to Industrial state for waste water disposal, Kurkum	
2015-16	-	-	-	-
	Field visit	1	Installation of lysimeter on AICRP on IWM farm, Rahuri	Dept . of IDE
2016-17	Field visit	1	Visit to Ralegan Sidhi and Hiware Bazar	Dept. of SWCE
	Field visit	1	Bhatghar hydro power project, Bhatghar	Dept. of FSRE
2017-18	Field visit	2	Installation of subsurface drainage system an IDE Farm, Rahuri. Installation of mole drain system an IDE Farm, Rahuri	Dept . of IDE
	Field visit	1	Visit to Ralegan Sidhi and Hiware Bazar	Dept. of SWCE

### **Expert Lectures/ personality Development programmes**

Subject experts along with the passed out students who are engaged in Research, Public Services, Government Services, Banks, Private sector are invited to interact with the students on Saturday and Sunday through Placement and Competitive cell, NCC, and NSS regularly.

The following Training/ Seminars/ Campus recruitment/ of campus, awareness programme have been organized for the students during 2013-14 to 2017-18 for personality development.

### Details of lectures / personality development programmes

Year	Name of the Expert	Subject	Organized by
2014-15	Rajeeb Roy, Managing Director, Agriplast, Tech India, Pvt. Ltd. Bangolore.	Anything is Possible	Dept . of IDE on 28.09.2015
2016-17	Dr. H. M. Galgale, Arjun InfoTech PTY Ltd., Cambridge, UK.	"Global Challenges and Opportunities in	Dept . of IDE on 04.09.2017



		The state of the s	
		Precision Agriculture	
		and Water Management"	
	Prof. Ian Smout, Ex- Director, Water	"International	Dept . of IDE
2015-16	Engineering Development center, UK.	Perspective on Water	on 20.11.2017
		Security"	
	Dr. S.A. Kulkarni, Secretary at the	World Water Day-2015 (	Dept . of IDE
	Maharashtra Water Resources	Water and Sustainable	24 March 2015
2015-16	Regulatory Authority (MWRRA),	Development	
	Mumbai and Dr. T. A. More, Ex-Vice	_	
	Chancellor, MPKV, Rahrui		
	Shri. S.V. Patil, A. P. Pargaonkar and	World Water Day-2016	Dept . of IDE
	S. P. Jadhav, Vice President, , Jain	on the theme "Water and	22 March 2016
2016-17	group of Industries, Jalgaon and	Job"	
	Dr. K. P. Viswanatha Vice Chancellor,		
	MPKV, Rahuri		
	Er. Anand Zambre, Exective Director,	World Water Day-2017	Dept . of IDE
	NCPAH, New Delhi.	on the theme "Water and	22 March 2017
	Er. M.A. Fuke, Area Manager, Jain	Waste Water	
	Irrigation Systems. Ltd. Jalgaon		
	Dr. K. P. Viswanatha, Hon. Vice		
	Chancellor, MPKV, Rahrui		
	Dr. N. K. Gontia	Narmada Project	Department of
		Scenario	SWCE
2017-18	Dr. Ashwini Kumar Goel	How to present power	Department of
		point effectively	SWCE March 7,
			2018
<b>TO</b>			
Physical Fa	acilities		
	Dr. Akshilesh Kumar	How to prepare one self	Department of
		for Campus Placement.	SWCE January
			23, 2018

# Hostels

### Students hostel for boys and girls

The college is having well-furnished hostels, which accommodate all students registered in the college. The Dean of this college with the help of a Rector and three Monitors including one Lady Monitor and one full time Agril. Assistant looks after the hostel administration. The details of the boys and girls hostels are given below.



### No. of hostels and area

Parti	culars	Availa	bility			
		No.of u	unit Plinth Area (sq.ft.)		Details Hostel capacity	
Boy's	hostel	3		22598		
Sr.	Name the	Hostel	Total	No. of students	students	UG/PG/Ph.D
No			Rooms	Accommodated	per room	
1.	Boys Hoste	el 'E'	97	79	01	Final Year B.Tech & All
						M.Tech Students
2.	Boys Hoste	el 'F'	97	65	01	T.Y.B.Tech, & Ph.D
						Students
3.	BoysHoste	1	51	86	02	F.Y.B.Tech & S.Y.B.Tech
	'Vishwesh	warrya'				
4.	Girls Hoste	:1-1	19	47	03	T.Y & Final Year B.Tech
	( Ladies Ho	ostel)				girls Students
5.	Girls Hos	stel- 2	18	44	02	F.Y & S.Y.B.Tech girls
	(Varsha Ho	stel)				
6.	Ph.D. Host	el	06	20	03	M.Tech and Ph.D girls

### Details of hostel facilities provided

Sr. No.	Name of Hostel	Facilities at Hostel
1.	'E & F' Hostel	T.V. Hall, Solar water heating system, Water Purifier & Cooler, Reading Hall, Internet Facility, Inverter system and Gymnasium hall. Equipped with CCTV camera
2.	Vishweshwarrya Hostel	T.V. Hall, Solar water heating system, Water Purifier & Cooler, Internet Facility. Equipped with CCTV camera
3.	Ladies Hostel	T.V. Hall, Solar water heating system, Water Purifier & Cooler, Internet Facility, Inverter system. Biometric attendance machine and equipped with CCTV camera
4.	Varsha Hostel (Girls)	T.V. Hall, Solar water heating system, Water Purifier & Cooler, Inverter system, Sanitory pad vending machine and disposal machine, Biometric attendance machine and equipped with CCTV camera

### Mess

The Co-operative mess is run by students under supervision and control of hostel authorities. All the hostelites take their food from this mess. Hostel authorities frequently check the food quality. The detailed information is as follow.

### Details of mess facility provided

Sr.	Name the Hostel	Facilities	Capacity	
No.			Seating	Total Mombon
			Capacity	Member
1.	Boys Hostel	Kitchen room, Dining Hall, Storage	50	200
	'Vishveshwarayya'	room with Chest Cooler, Water Cooler.		
2.	Girls Hostel	Kitchen room, Dining Hall, Storage	32	110
		room with Chest Cooler, Water Cooler		

### **Details of hostel authorities:**

1- Rector 3- Monitors 1- Agril. Asst.

The access to the internet facility is provided in the boys hostel through optical fiber cable (*OFC*) and in girls hostel through Wi-Fi. There are two messes one each for boys' and girls' operated by students themselves on cooperative basis. A reading room facility created in the hostels provides leading newspaper both in English and Marathi. A well-developed TV hall is available in boys' and girls' hostel. Water coolers, solar heaters, stage for recreation and students functions, wall compound around hostel to provide security, multi tool bar gym etc. are additional facilities provided to the hostilities to make their stay comfortable.

#### **Medical Facilities**

All facilities are provided to the students through the University Medical Officer, MPKV, Rahuri. One dispensary is available in the campus. Multispecialty hospitals are available in Rahuri which is 4 km away from campus and at Ahmednagar which is 30 km away from campus. The college administration, especially the Rector and monitors are in contact with physicians in the vicinity of hostel and medical facilities are provided to students as per requirements.

The health insurance scheme for medical treatment (Rs. 10000/-) and accident (Rs. 100000/-) are implemented at all the colleges and the premium is paid every year to provide medical insurance cover to all the students of colleges. The process to initiate cashless group health insurance policies is in progress.

### **Transport facility**

In case of emergency, the college vehicle is made available for immediate medication to the student. MH-17-1756 sumo jeep is available 24x7 for students and kept in hostels. The college has a 52 seater bus for sports, cultural tours, field visits, educational tours and exposure visits.



### **Examination hall**

College has a separate examination hall of 500 seating capacity. The examination hall is well equipped with internet facility, CCTV cameras and furniture. There are three rooms besides the examination hall for doing prior and post work of examination.



### Details of examination hall and lectures halls

Sr. No	Name of the hall	No	Area Sq.	Seating	Facilities Available
		Units	Mtr	Capacity	
1	Main Examination hall	01	2000	500	Single seater benches High definition CCTVs
2	Lecture Halls	04	221	80	Benches, CCTV LCD projectors

Additionally, for semester wise theory examinations and midterm examinations college class rooms are also used as per the requirement.

### 6.5.5.3. Sports and Recreation Facilities

The college is situated in central campus. Hence, all the university facilities of sports and games are used by the college students

The college students use university playground and a well-equipped gymnasium building. The ground has been developed for the outdoor games viz., cricket, khokho, kabbadi, volleyball, basketball, etc. In addition to this, indoor games like table tennis, badminton are also available in the gymnasium building. Sports facilities/ Equipments for encouragement of the students and faculty



Sports and Games Infrastructure	Facilities available	Area (sq.ft.)
Outdoor sport		
The Gymkhana Building	GYM Badminton Court Table Tennis	11556
The total land area of the University Gymkhana premises	Following grounds available with flood lights	

Football	Football ground-1	
1 0 0 10 111		
Kho-Kho	Kho-Kho ground-1	
Hockey	Hockey ground-1	
Cricket	Cricket ground-1	
Kabbadi	Kabbadi ground-1	965522
Volley ball	Court-1	
Athletics	Ground-1 400mtr track	
Basket ball	Court-1	
Indoor sport		
Chess	Hall -1	
Wrestling	Mats with cover-6	
Table Tennis	Tables-2	
Badminton	Hall-2	
Gymkhana	Well equipped one for girls and one for	
	boys.	

### **Student Performance in National Examinations**

Table: 128. Details about success in national examinations

Year	JRF	SRF	NET	ARS	GATE	Inspire / Rajiv Gandhi National Fellowship
2013-14	02	00	02	00	06	02
2014-15	04	03	10	01	05	00
2015-16	03	03	03	00	06	02
2016-17	02	00	00	00	02	00
2017-18					06	00
Total	11	06	15	01	25	04

### **Students Placement Profile**

The college has its own Placement Unit. The students are guided for recruitments and higher education through the placement cell. The faculty member is appointed as a placement advisor for looking after the placement activities *viz*. calling for the various industries personnel for the campus interviews, sending the biodata of the students to the various organizations for recruitment and selection, conducting the campus interviews etc. Guest lectures are given by the various staff members (subject matter specialist) for giving guidelines to MPSC/UPSC/ NET/JRF/SRF examinations.



Our students thrive for continuous improvement, suitable for changing environment and ready to take up any challenge. As a result, they regularly secure placements in the reputed organizations. The

students of this college have secured the jobs in top positions through on and off campus interviews in private tractor industries- John Deere, Mahindra, New Holland, Escorts, TAFE and Sonalika; irrigation companies- Jain Irrigation, Plastro Plassan, Nagarjuna-Palma, Netafim, Agriplast, DHI, EPC, Premier, Finolex, Supreme, Kissan, Kirloskar, Crompton, KSB, Texmo etc; NGOs- BAIF, WOTR, Indo German Watershed Development Programme, banks- SBI, HDFC, AXIS, Dena, Union Bank of India, Bank of Badoda, IDBI, Kotak Mahindra, ICICI; Bank of India; retail sectors- Reliance, Subhiksha, Spinach etc. Our students are also working in software companies-Infosys, IBM, TCS, Wipro, MBT etc. The students' recruitment through placement cell over previous 5 years. The students' recruitment through placement cell over previous 5 years.

### Details of students placement in various companies

Sr. No	Name of the Institute/ Company	Post	No.of students selected
Campus I	nterview		
Year-2013	-14	Total	03
01	Mahindra & Mahindra Ltd.	Sales & service	02
02	TAFE	Sales & Service	01
Year-2014	-15	Total	03
01	Mahindra & Mahindra R & D.	Sales & service	01
02	HDFC	Sales & service	01
03	AF FARM	Manager	01
Year-2015	-16	Total	03
01	John Deere Equipment Pvt. Ltd.	Research Engineer	01
02	Mahindra & Mahindra Ltd.	Sales & Service	02
Year-2016	-17	Total	05
01	Mahindra And Mahindra (AFS)	Sales & service	02
02	Captain tractor	Sales & service	02
03	SAME DEUTZ FAHR	Sales & service	01
<b>Year 2017</b>	-18	Total	03
01	Mahindra & Mahindra Ltd	Sales & service	03

In addition to this, the students of this college excelled in MPSC and UPSC examinations and obtained the high positions including IAS and IPS in State and Central Governments' administrative and development departments. We are very glad to state that the following ex-students of this college have passed UPSC examination in recent years with grand success.

### Details about success in competitive examinations

Year	UPSC	MPSC	Banking	STI	CEO	PSI
2013-14						
2014-15						
2015-16	03	30	22	02	02	
2016-17		04		03		02
2017-18	02	10	10		01	02
Total	05	44	32	05	03	04

### Students' Awards

### Details about success of students in extracurricular competitions

Sr. No.	Name of Student	Organization Providing award	Level Regional/State /National/International	Event During when award received	Date of receipt of award
Year	2013-14				
1	Swapnil Patil & Sujitkumar Kshirsagar	Pemraj Sarda Arts, Commerce & Science, College, Ahmednagar	State Level	Dnyaneshwar Karandak Elocution Competition	2013
Year-	2014-15				
1	Tejal Abhang	Institution of Engineers	National Level	Research Grant 80,000/-	2014
2	Sujitkumar Kshirsagar & Sachin Jagdale	Pemraj Sarda Arts, Commerce & Science, College, Ahmednagar	State Level	Dnyaneshwar Karandak Elocution Competition	2014
Year -	<b>- 2015-16</b>				
Year-	2016-17				
1	Saurabh Jaiswal	AIU, New Delhi	National Level	National Research Competition- Anveshan- 2017 held at Annamali University, Tamilnadu	

2	Snehal Vetal	Mumbai Univeristy	State Level	PC Alexander Elocution competition held at Mumbai University	2017
3	Aniket Jagtap & Himanshu Shriwastav	VAMINICOM, Pune	National Level	Acting and dancing Competition	2017
Year	2017-18				

# **Sports Awards**

## Details about success of students in extracurricular competitions

Year	Event	Winner	Runner	Third
2013- 14	Avishkar -2013			
	HLFA -UG	Winner		
	Pure Science- UG	Winner		
	AAH- PG	Winner		
	Medicine & Pharmacy	Winner		
	Athletic 4 x100 Mtrs. Relay	Winner		
	High Jump Runner		Runner	
	Debate			
	Hindi	Winner		
	English	Winner		
	Elocution-PC Alexander		Runner	
	Anti-dowry		Winner	
2014-15	Badminton (M)	Winner		
	Debate- CooperativeHindi	Winner		
	For and Against	Winner		
	Debate- Population and Env.		Runner	
	For and Against		Runner	
	Debate- Agril. Science Congress	Winner	Runner	
	Elocution Competition Shikshamandal Wardha		Runner	
	Elocution- PC Alexander Marathi	Winner		
	Elocution- PC Alexander English	Winner		
	Elocution- Anti-Dowry Mumbai	Winner		
	Football		Runner	
	Athletic – 4 X100mtr	Winner		
	High Jump		Runner	

	A:-1-1			
	Avishkar- Research Convention			
	HLFA-UG	Winner		
	HLFA-PPG	Winner		
	CML-UG	Winner		
	AAH-PG	Winner		
	MP-UG		Runner	
2015-16	Badminton (M)		Runner	
	Badminton (W)		Runner	
	Table Tennis (W)		Runner	
	Table Tennis (M)	Winner		
	Avishkar-			
	Research Convention			
	1) HLFA-UG	Winner		
	2) HLFA-UPPG	Winner		
	3) CML-UG	Winner		
	4) AAH-PG	Winner		
	5) MP-UG		Runner	
2016-17	Badminton (W)		Runner	
	Kho-Kho (W)			Third
	Table Tennis (B)	Winner		
	Volleyball (B)			Third
	Elocution Anti Dowry		Runner	
	Movement Mumbai		1100111111	
	Avishkar-			
	Research Convention			
	CML-UG	Winner	Runner	
	PS- UG	Winner	ramie	
	AAH-UG	Winner		
	ET-PPG	Winner	Runner	
	MP-UG	Winner	13011101	
2017-18	Volley Ball (M)		Runner	
201. 10	Athletic Running 400mtr			Third
	200 mtr Running		Runner	
	100 mtr Running		Runner	
	Avishkar-			
	Research Convention			
	HLFA-PG	Winner		
	AAH-TH	Winner		
	AAH-UG	Winner		
	ET-UG	VV IIIIIOI	Runner	
	MP-UG	Winner	Kuillei	
	MP-PG	Winner		
	1111 1 0	** IIIIC1		

# All India University Sports/ Ashwamedh / ICAR Sports

Details about success of students in Inter University sports

Year	2013-14		4	2014-15		2015-16		2016-17			2017-18				
Events	AIU	Ashw / State	ICAR	AIU	Ashw / State	ICAR	AIU	Ashw / State	ICAR	AIU	Ashw / State	ICAR	AIU	Ashw State	ICAR
Cricket		Jiale 		01	State		02	Jiale 		01	State		01		
Basket Ball					01			01		03	03			02	
Table Tennis	01		01				04			03			01		
Badminton	02		01	02			03		01	02					
Volley Ball					01			01			02			04	01
Hockey				01											
Kabaddi		01			01			01				01			
Kho-Kho		01	01		02			03			02				
Chess										01					
Athletics			01		01			02						01	
Foot Ball	03				03		01			01					
Debate		02		04	02			01							
Elocution		02			05			02							
Agril University Festival			02			04			07			01		09	
Youth festival Indradhanushya		02			08	04		07						07	
Utkarshya		03			05			03				01			01
Avishkar		07			05			08			07			06	
Anveshan											01			01	





**Avishkar Research Convention** 

**Agriculture Educaiton Day** 



**Installation of Students Council** 



जनमहोत्सव व कृषि विन-१०३६ अत्र मामको व कृष्ण विन-१०३६

**Blood Donation Camp** 

**Tree Plantation Programme** 





NCC regular parade

Cleaning Awareness rally by NSS