



**DEPARTMENT OF AGRICULTURAL STATISTICS
AND
COMPUTER CENTRE
N. M. COLLEGE OF AGRICULTURE
NAVSARI AGRICULTURAL UNIVERSITY,
NAVSARI**



Teaching

**Courses offered to M.Sc. and Ph.D. program
in Agricultural Statistics**

Major Courses (For M.Sc. programs)

Total Credits: 55

Major discipline /subject	Course Code	Course title & Credits	Semester#
Agricultural Statistics	STAT 551	MATHEMATICS - I (3+0)	I
	*STAT 552	PROBABILITY THEORY (2+0)	I
	*STAT 553	STATISTICAL METHODS (2+1)	I
	*STAT 563	DESIGN OF EXPERIMENTS (2+1)	II
	*STAT 564	SAMPLING TECHNIQUES (2+1)	II
	*STAT 572	REGRESSION ANALYSIS (1+1)	II
	*STAT 573	STATISTICAL COMPUTING (1+1)	III
	*STAT 571	MULTIVARIATE ANALYSIS (2+1)	III
	*STAT 562	STATISTICAL INFERENCE (2+1)	III
	STAT 591	SEMINAR (1+0)	III
	STAT 599	RESEARCH (0+30)	II-IV

*Core courses, # tentatively course offer in

Major Courses (For Ph.D. programs)

Total Credits: 89

Major discipline /subject	Course Code	Course title & Credits	Semester#
Agricultural Statistics	*STAT 604	ADVANCED STATISTICAL METHODS (2+1)	I
	*STAT 603	LINEAR MODELS (2+0)	I
	*STAT 601	ADVANCED DATA ANALYTICS (1+2)	II
	*STAT 602	SIMULATION TECHNIQUES (1+1)	II
	*STAT 611	BAYSIAN INFERENCE (2+0)	III
	STAT 591	SEMINAR I (1+0)	III
	STAT 592	SEMINAR II (1+0)	IV
	STAT 699	RESEARCH (0+75)	II-VI

*Core courses, # tentatively course offer in

Courses offered to other discipline of M.Sc. and Ph.D. program

1. Supporting Courses (For M.Sc. programs of other disciplines)

Major discipline/subject	Course Code	Course title & Credits	Semester
(Group I) Agronomy, Soil Science & Agril. Chemistry, Agril. Entomology, Plant Pathology, Nematology	STAT 511	EXPERIMENTAL DESIGNS (2+1)	I
(Group II) Genetics and Plant Breeding, Seed Science & Technology, Biochemistry, Microbiology, Plant Physiology, Plant Molecular Biology & Biotechnology	STAT 511	EXPERIMENTAL DESIGNS (2+1)	II
Food Processing & Technology & BE			
Agril. Engineering & Technology			
College of Forestry and College of Horticulture, Fruit Science, Vegetable Science, Floriculture & Landscape Architecture			

2. Supporting Courses (For M.Sc. Agril. Economics/ Agril. Extn. & Comm.)

Major discipline/subject	Course Code	Course title & Credits	Semester
Agricultural Economics Agricultural Extension & Communication	STAT 502	STATISTICAL METHODS FOR APPLIED SCIENCES (3+1)	I
	STAT 512	BASIC SAMPLING TECHNIQUES (2+1)	II

3. Supporting Courses (For M.Sc. Agril. Meteorology)

Major discipline/subject	Course Code	Course title & Credits	Semester
Agricultural Meteorology	STAT 511	EXPERIMENTAL DESIGNS (2+1)	I
	STAT 521	APPLIED REGRESSION ANALYSIS (2+1)	II
	STAT 522	DATA ANALYSIS USING STATISTICAL PACKAGES (2+1)	II

4. Supporting Courses (For Ph.D. programs of other disciplines)

Major discipline/subject	Course Code	Course title & Credits	Semester
All other discipline	STAT 521	APPLIED REGRESSION ANALYSIS (2+1)	II

5. Supporting Courses (For Ph.D. Agril. Meteorology)

Major discipline/subject	Course Code	Course title & Credits	Semester
Agricultural Meteorology	STAT 521	APPLIED REGRESSION ANALYSIS (2+1)	II
	STAT 522	DATA ANALYSIS USING STATISTICAL PACKAGES (2+1)	II

6. Supporting Courses (For Ph.D. Agril. Economics)

Major discipline/subject	Course Code	Course title & Credits	Semester
Agricultural Economics	*STAT 601	ADVANCED DATA ANALYTICS (1+2)	II
	STAT 571	MULTIVARIATE ANALYSIS (2+1)	III

7. Supporting Courses (For Ph.D. Agril. Extn. & Comm.)

Major discipline/subject	Course Code	Course title & Credits	Semester
Agricultural Extension & Communication	STAT 521	APPLIED REGRESSION ANALYSIS (2+1)	II
	STAT 522	DATA ANALYSIS USING STATISTICAL PACKAGES (2+1)	II
	#STAT 512	BASIC SAMPLING TECHNIQUES (2+1)	II

for those who studied STAT 521 earlier

8. Minor Courses (For M.Sc. Agril. Economics)

Major discipline/subject	Course Code	Course title & Credits	Semester
Agricultural Economics	STAT 502	STATISTICAL METHODS FOR APPLIED SCIENCES (3+1)	I
	STAT 574	TIME SERIES ANALYSIS (1+1)	II
	STAT 522	DATA ANALYSIS USING STATISTICAL PACKAGES (2+1)	III

9. Minor Courses (For Ph.D. Agril. Economics)

Major discipline/subject	Course Code	Course title & Credits	Semester
Agricultural Economics	STAT 553	STATISTICAL METHODS (2+1)	I
	STAT 564	SAMPLING TECHNIQUES (2+1)	II
	STAT 601	ADVANCED DATA ANALYTICS (1+2)	II
	STAT 615	ADVANCED TIME SERIES ANALYSIS (2+0)	II
	STAT 613	ADVANCED SAMPLING TECHNIQUES (2+1)	III@

@optional

Research

The departmental staff involved in guiding & attending all the PG seminar, make contribution in publishing College/university Magazine every year. Also acting as statistician in AGRESKO of different sub-committees. The department provide the facility for experimental data analysis of P.G. students & various research projects of NAU. Involved in the planning of research experiments, guidance and advice in all regards to scientists and all P.G. students of NAU, Navsari.

At the state agricultural university level on the platform Agricultural Research Sub Committee (AGRESKO) for Social Science, the department has submitted and presented the report of the research programme undertaken in the previous year as well as propose New Technical Programmes for the next year. Department also looking forward for other agency projects.

List of research projects since 2014

Sr. No.	PI / Co-PI	Title of Research Project / Experiment	Year	Duration	Completed / On-going	Recommendation Item No.
1	Y.A. Garde (PI), Vishal Thorat (Co-PI)	Pre harvest forecasting of Ragi (Hill Millet) in Dang district	2014	3 years	Completed	
2	Y.A. Garde (PI), Vishal Thorat (Co-PI)	Forecasting of rice (<i>Oriza sativa</i>) yield using ordinal logistic regression	2016	2 years	Completed	14.6.2.11
3	Y.A. Garde (PI), Alok Shrivastava, Vishal Thorat (Co-PI)	Crop yield forecast models using different linear and nonlinear approach	2017	1 year	Completed	
4	Y.A. Garde (PI), A. P. Chaudhary, Dr. K. G. Modha, Dr. H. R. Pandya, (Co-PI)	Construction of selection indices using different economic coefficients to select optimum selection index in Indian bean (<i>Lablab purpureus</i> L. sweet)	2019	2 years	Completed	17.6.2.22
5	Alok Shrivastava (PI), Y.A. Garde (Co-PI), Dr. K. G. Modha, <i>et al.</i>	Stability of sorghum genotype through AMMI model in Gujarat	2019	2 years	Completed	17.6.2.23
6	Nitin Varshney (PI), Y.A. Garde (Co-PI), <i>et al.</i>	Estimation of Cotton Yield using Two Phase sampling approach	2020	3 years	Completed	19.9.2.23
7	Alok Shrivastava (PI), Abhishek Shukla, Y.A. Garde (Co-PI), <i>et al.</i>	Population growth study of sheath mites in different rice cultivars using statistical models	2021	1 year	Completed	18.9.2.13
8	A P Chaudhary (PI), Y.A. Garde (Co-PI), <i>et al.</i>	Evaluation and development of yardstick of CV% for	2021	2 years	Completed	19.9.2.24

		mango crop experiments for south Gujrat region				
9	Y.A. Garde (PI), Vishal Thorat, Alok Shrivastava, (Co-PI), <i>et al</i>	Application of different statistical tools for survey data analysis	2021	3 years	Completed	
10	Alok Shrivastava (PI), Abhishek Shukla, Y.A. Garde (Co-PI), <i>et al.</i>	Assessing and interpreting the spatial distributions of insect populations in paddy crop in Navsari	2022	2 years	On going	
11	Nitin Varshney (PI), Y.A. Garde (Co-PI), <i>et al.</i>	Determination of sample size and sampling techniques in Agricultural Research	2022	2 years	On going	
12	Alok Shrivastava (PI), S M Chauhan, Y.A. Garde (Co-PI), <i>et al.</i>	Population dynamics and patterns of mango hopper and fruit fly through the statistical models	2023	2 years	On going	
13	Nitin Varshney (PI), Y.A. Garde (Co-PI), <i>et al.</i>	Estimation of 305-day milk yield from cumulative monthly and bimonthly test day records in Surti Buffalo	2023	2 years	On going	
14	Y.A. Garde (PI), Vipul Shinde (Co-PI), Dr. Vishal Thorat, <i>et al.</i>	Trends and Geostatistical Interpolation of Spatio-Temporal Variability of Precipitation in Gujarat	2024	1 year	On going	