



Navsari Agricultural University

**Department of Agricultural Engineering**  
**N. M. College of Agriculture**  
**Navsari Agricultural University, Navsari - 396 450**



**A. Undergraduate Level**

1	Maths1.1	Introductory Mathematics	1+0
2	VAC-1	Environmental study and disaster management	2+1
3	-	Farm Machinery and Power	2+1
4	-	Renewable Energy in Agriculture and Allied sector	1+1
5	-	Introduction to Agro -Meteorology	1+1

**B. PG Course (Meteorology &Engineering**

1	SWCE 501	Advanced Soil and Water Conservation Engineering	2+1
2	SWCE 502	Applied Watershed Hydrology2	2+1
3	SWCE 503	Soil and Water Conservation Structures3	2+1
4	SWCE 505	Watershed Management and Modeling4	2+1
5	SWCE 507	Remote Sensing and GIS For Land and Water Resource Management	2+1
6	SWCE 508	Climate Change and Water Resources	3+0
7	SWCE 591	Numerical Methods in Hydrology	2+0
8	SWCE 509	Master's Seminar	1+0
9	MATH -501	Finite Element Methods	2+1
10	AGM-501*	Fundamentals of Meteorology	2+1
11	AGM-502*	Fundamentals of Agricultural Meteorology	2+1
12	AGM-503	Crop Weather Relationships	2+0
13	AGM-504*	Agro Meteorological Measurements and Instrumentation	1+2
14	AGM-505	Crop Micrometeorology	2+1
15	AGM-506	Evapotranspiration and Soil Water Balance	2+1
16	AGM-507	Crop Weather Models	1+2
17	AGM-508	Applied Agricultural Climatology	1+2
18	AGM-509	Weather Forecasting	2+1
19	AGM-510	RS And GIS Applications in Agricultural Meteorology	2+1
20	AGM-511	Strategic Use of Climatic Information	2+1
21	AGM-512	Weather and Climate Risk Management	2+0
22	AGM-513	Aero biometeorology	2+1
23	AGM-591	Master's Seminar	1+0
24	AGM-599	Master's Research	-

**C. Ph.D Course (Meteorology )**

1	AGM-601*	Climate change and sustainable development	2+1
2	AGM-602	Meteorology of air pollution	2+2
3	AGM-603	Livestock and fisheries meteorology	2+2
4	AGM-604	Hydrometeorology	2+1
5	AGM-605	Analytical tools and methods for Agro- meteorology	1+1
6	AGM-606	Research and publication ethics	2+0
7	AGM-607	Environmental Physics for Agricultural Meteorology	3+0

8	AGM-608*	Computer Programs and Software for Agrometeorological data Management	1+1
9	AGM-691	Doctor's seminar	1+0
10	AGM-692	Doctor's seminar	1+0
11	AGM-699	Doctor's research	-

## 2. RESEARCH ACTIVITIES

### A. Current Research Projects

Sr. No.	Title of Project	Principle Investigator	Budget Head
<b>Plan (03)</b>			
1	Research on Tillage Technology for crops of South Gujarat	Dr. V. T. Shinde	12936
2	Establishment of Agro Metrological cell at agriculture college	Dr. P. K. Parmar	12927
3	Research on Zero Energy Farm in South Gujarat	Dr. V. T. Shinde	12078
<b>Other agency (03)</b>			
1	GKMS (Gramin Krishi Mausam Sewa)	Dr. P. K. Parmar	18005-1
2	FASAL (Forecasting of Agricultural Output using Space Agrometeorology and Land based observations)	Dr. P. K. Parmar	18993
3	Natural Resource Management for Climate Smart Sustainable Agriculture	Dr. V. T. Shinde	18275/ SLFA

## 3. EXTENSION ACTIVITIES

- Need based training to the extension workers / officers of Department of Agriculture Gujarat State, Officers / Field Staff of Sugar Factories; and farmers bring by various NGOs to strengthen their knowledge about Agril. meteorology.
- Staff is actively participating in *Krishi Mela*, *Krishi Mahotsav*, *Khedut Din*, *KhedutShibir*, Seminar programme etc.
- Department is also imparting training to the students of various rural academic institutes.
- This department is also guiding farmers through various means of extension on the advanced technology like GIS and GPS as well as different farm equipments and their management.
- Department has well established laboratories for students, farmers, extension workers as well as scientists.
- Department has Remote sensing & GIS and Hydrological Modelling lab and research farm through which knowledge strengthening amongst students, farmers, extension personnel as well as scientists.