



## 1. TEACHING ACTIVITIES

### A. Undergraduate level

| Sr. No. | Course No.    | Course title   | Credit |
|---------|---------------|--|--------|
| 1       | Maths 1.1     | Elementary Mathematics                               | 2+0    |
| 2       | Ag. Met. 1.1  | Introductory Agro meteorology & Climate Change       | 1+1    |
| 3       | Ag. Engg. 2.1 | Introductory Soil and Water Conservation Engineering | 1+1    |
| 4       | Ag. Engg. 3.2 | Farm Machinery and Power                             | 1+1    |
| 5       | Ag. Engg. 4.3 | Renewable Energy and Green Technology                | 1+1    |
| 6       | Ag. Engg. 5.4 | Protected Cultivation and Secondary Agriculture      | 1+1    |
| 7       | Ag. Engg. 7.5 | RAWE Programme                                       | 0+2    |

### B. Master's level (Meteorology & Engineering)

| Sr. No. | Course No. | Course title  | Credit |
|---------|------------|---|--------|
| 1       | AGM 501    | Fundamentals Of Meteorology And Climatology                           | 2+1    |
| 2       | AGM 502    | Fundamentals Of Agricultural Meteorology                              | 2+1    |
| 3       | AGM 503    | Micrometeorology  | 2+1    |
| 4       | AGM 504    | Agro-Meteorological Measurements And Instrumentation                  | 2+1    |
| 5       | AGM 505    | Soil Water Balance Climatology  | 2+1    |
| 6       | AGM 506    | Crop Weather Models   | 1+2    |
| 7       | AGM 507    | Weather modification and risk Management strategies                   | 2+0    |
| 8       | AGM 508    | Principles of remote sensing and its Applications in agriculture      | 2+1    |
| 9       | AGM 509    | Applied Agricultural Climatology                                      | 2+1    |
| 10      | SWE-501    | Watershed Hydrology   | 2+1    |
| 11      | PGS-506    | Disaster Management   | 2+0    |
| 12      | PGS-505    | Agricultural research, Research Ethics and Rural Development Program. | 2+0    |

## 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. Manjushree Singh   | 12936       |
| 2                        | Establishment of Agro Metrological cell at agriculture college                                     | Dr. P.K Parmar         | 12927       |
| <b>Other agency (02)</b> |  |                        |             |
| 7                        | GKMS (Gramin Krishi Mausam Sewa )  | Dr. P.K Parmar         | 18005-1     |
| 8                        | FASL (Forecasting of Agricultural Output using Space Agrometeorology and Land based observations ) | Dr. P.K Parmar         | 18993       |

## 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 *KrishiMela*, *KrishiMahotsav*, *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 Remotesensing & GIS and Hydrological Modelling lab and research farm through which knowledge strengthening amongst students, farmers, extension personnel as well as scientists.