1st Semester

| **S No** | **Course Title** | **Credit hours** |
| --- | --- | --- |
| 1 | Fundamentals of Horticulture | 2 (1+1) |
| 2 | Fundamentals of Genetics | 3 (2+1) |
| 3 | Fundamentals of Soil Science | 3 (2+1) |
| 4 | Introduction to Forestry | 2 (1+1) |
| 5 | Comprehension & Communication Skills in English | 2 (1+1) |
| 6 | Fundamentals of Agronomy | 3 (2+1) |
| 7 | Introductory Biology\*/Elementary Mathematics\* | 2 (1+1)/ 2(2+0)\* |
| 8 | Agricultural Heritage\* | 1(1+0)\* |
| 9 | Rural Sociology & Educational Psychology | 2 (2+0) |
| 10 | Human Values & Ethics (non-gradial) | 1(1+0)\*\* |
| 11 | NSS/NCC/Physical Education & Yoga Practices\*\* | 2 (0+2)\*\* |
| **Total 17+04\*/03\*+03\*\*** |

**\*Remedial, \*\*Optional**

2nd Semester

| **S No** | **Course Title** | **Credit hours** |
| --- | --- | --- |
| 1 | Fundamentals of Plant Biochemistry and Biotechnology | 3 (2+1) |
| 2 | Agricultural Microbiology | 2 (1+1) |
| 3 | Soil and Water Conservation Engineering | 2 (1+1) |
| 4 | Fundamentals of Crop Physiology | 2 (1+1) |
| 5 | Fundamentals of Agricultural Economics | 2 (2+0) |
| 6 | Fundamentals of Plant Pathology | 4 (3+1) |
| 7 | Fundamentals of Entomology | 4 (3+1) |
| 8 | Fundamentals of Agricultural Extension Education | 3 (2+1) |
| 9 | Communication Skills and Personality Development | 2 (1+1) |
| 10 | Irrigation Water Management | 2 (1+1) |
| **Total 26 (17+9)** |

3rd Semester

| **S No** | **Course Title** | **Credit hours** |
| --- | --- | --- |
| 1 | Crop Production Technology – I (Kharif Crops) | 2 (1+1) |
| 2 | Fundamentals of Plant Breeding | 3 (2+1) |
| 3 | Agricultural Finance and Cooperation | 3 (2+1) |
| 4 | Agri- Informatics | 2 (1+1) |
| 5 | Farm Machinery and Power | 2 (1+1) |
| 6 | Production Technology for Vegetables and Spices | 2 (1+1) |
| 7 | Environmental Studies and Disaster Management | 3 (2+1) |
| 8 | Statistical Methods | 2 (1+1) |
| 9 | Livestock and Poultry Management | 4 (3+1) |
| **Total 23 (14+9)** |

4th Semester

| **S No** | **Course Title** | **Credit hours** |
| --- | --- | --- |
| 1 | Crop Production Technology –II (Rabi Crops) | 2 (1+1) |
| 2 | Production Technology for Ornamental Crops, MAP and Landscaping | 2 (1+1) |
| 3 | Renewable Energy and Green Technology | 2 (1+1) |
| 4 | Problematic Soils and their Management | 2 (2+0) |
| 5 | Production Technology for Fruit and Plantation Crops | 2 (1+1) |
| 6 | Principles of Seed Technology | 3 (1+2) |
| 7 | Farming System & Sustainable Agriculture | 1 (1+0) |
| 8 | Agricultural Marketing Trade & Prices | 3 (2+1) |
| 9 | Introductory Agro-meteorology & Climate Change | 2 (1+1) |
| 10 | Elective courses | 3 credits |
| **Total 19 (11+8) + 3 Credit Hours** |

5th Semester

| **S No** | **Course Title** | **Credit hours** |
| --- | --- | --- |
| 1 | Principles of Integrated Pest and Disease Management | 3(2+1) |
| 2 | Manures, Fertilizers and Soil Fertility Management | 3(2+1) |
| 3 | Pests of Crops and Stored Grain and their Management | 3(2+1) |
| 4 | Diseases of Field and Horticultural Crops and their Management -I | 3(2+1) |
| 5 | Crop Improvement-I (Kharif Crops) | 2 (1+1) |
| 6 | Entrepreneurship Development and Business Communication | 2 (1+1) |
| 7 | Geo-informatics and Nano-technology and Precision Farming | 2 (1+1) |
| 8 | Practical Crop Production – I (Kharif crops) | 2 (0+2) |
| 9 | Intellectual Property Rights | 1(1+0) |
| 10 | Elective Course | 3 credits |
| **Total 21 (12+9) + 3 Credit Hours** |

6th Semester

| **S No** | **Course Title** | **Credit hours** |
| --- | --- | --- |
| 1 | Rainfed Agriculture & Watershed Management |  |
| 2 | Protected Cultivation and Secondary Agriculture | 2 (1+1) |
| 3 | Diseases of Field and Horticultural Crops and their Management-II | 3(2+1) |
| 4 | Post-harvest Management and Value Addition of Fruits and vegetables | 2 (1+1) |
| 5 | Management of Beneficial Insects | 2 (1+1) |
| 6 | Crop Improvement-II (Rabi crops) | 2 (1+1) |
| 7 | Practical Crop Production –II (Rabi crops) | 2 (0+2) |
| 8 | Principles of Organic Farming | 2 (1+1) |
| 9 | Farm Management, Production & Resource Economics | 2 (1+1) |
| 10 | Principles of Food Science and Nutrition | 2 (2+0) |
| 11 | Elective Course | 3 Credits |
| **Total 21 (11+10) + 3 credits Hours** |

7th Semester

| **S No** | **Course Title** | **Credit hours** |
| --- | --- | --- |
| Rural Agricutural Work Experience (RAWE) andAgro Industrial Attachment (AIA) |
| 1 | Crop Production | 5 (0+5) |
| 2 | Crop Protection | 4 (0+4) |
| 3 | Rural Economics | 3 (0+3) |
| 4 | Extension Programme | 4 (0+4) |
| 5 | Research Station / KVK /DAATT Centreactivities and attachment to Agro based industries | 4 (0+4) |
|   |   | 20(0+20) |

**Rural Awareness Works Experience (RAWE) and Agro-Industrial Attachment (AIA)**
The programme will be undertaken by the students during the VII semester for atotal duration of 20 weeks with a weightage of 0+20 credit hours in two parts viz., RAWEand AIA. It will consist of general orientation and on campus training by different facultiesfollowed by village attachment/unit attachment in University/College/KVK or a Researchstation. The students will be attached with the agro-industries to get an experience ofthe industrial environment and working. Weightage in terms of credit hours will begiven depending upon the duration of stay of students in villages/agro-industries. Atthe end of RAWE/AIA, the students will be given one week for project report preparation,presentation and evaluation. The students would be required to record their observationsin field and agro-industries on daily basis and will prepare their project report based onthese observations.

8th Semester

| **S No** | **Course Title** | **Credit hours** |
| --- | --- | --- |
| 1 | Experiential LeariningProgramme (ELP) | 20 (0+20) |

**Experiential Learning Programme (ELP)**
This programme will be undertaken by the students preferably during the VIIIsemester for a total duration of 24 weeks with a weightage of 0+20 credit hours. Thestudents will register for any of two modules (of 0+10 credit hours each) listed below :

* **1. Production Technology for Bio-agents and Bio-fertilizers**
* **2. Seed Production and Technology**
* **3. Mushroom Cultivation Technology**
* **4. Soil, Plant, Water and Seed Testing**
* **5. Poultry Production Technology**
* **6. Hybrid Seed Production Technologies**
* **7. Floriculture and Landscaping**
* **8. Food Processing**
* **9. Commercial Horticulture**
* **10. Agriculture Waste Management**
* **11. Organic Production Technology**
* **12. Commercial Sericulture**