



SRM
UNIVERSITY
DELHI-NCR, SONEPAT

COURSE CURRICULUM & SYLLABUS
OF
B.Sc. (H) AGRICULTURE (FOUR YEAR DEGREE
PROGRAMME)
(w.e.f. AY 2022-23 onwards)
Under the Choice Based Credit System (CBCS)



DEPARTMENT OF AGRICULTURE SCIENCE
FACULTY OF SCIENCE, HUMANITIES & SOCIAL SCIENCES
SRM UNIVERSITY DELHI-NCR, SONEPAT, HARYANA

Vision

SRM University Delhi-NCR, Sonapat, Haryana aims to emerge as a leading world-class university that creates and disseminates knowledge upholding the highest standards of instructions in Medicine & Health Sciences, Engineering & Technology, Management, Law, Science and Humanities. Along with academic excellence and skills, our curriculum imparts integrity and social sensitivity to mould our graduates who may be best suited to serve the nation and the world.

Mission

- To create a diverse community campus that inspires freedom and innovation.
- Promote excellence in educational and skill development processes.
- Continue to build productive international alliances.
- Explore optimal development opportunities available to students and faculty.
- Cultivate an exciting and rigorous research environment.

Agriculture Science Graduate Attributes

Successful completion of an undergraduate programme will endow the learners/ aspirants with the following attributes:

- Sound knowledge and understanding of the domain area
- Critical thinking, analytical mind and decision-making mindset
- Originality and creativity in formulating, evaluating and applying evidence-based arguments
- Ability to identify and draw synergy between/among events and/or aspects/theories to provide a wider, deeper and critical understanding and solution to problems
- Effective communication skills – Reading, Writing, Speech and thoughts
- Working on your own initiative.

Programme Educational Objectives (PEOs)

PEO 1 : Graduates of the program will accommodate insightful information of Agriculture principles necessary for the applications of Agriculture.

PEO 2 : Graduates of the program will acquire knowledge of recent trends in technology and solve problem in industry and farmers.

PEO 3 : Graduates of the program will have practical experience and interpersonal skills to work both in local and international environments.

PEO 4 : Graduates of the program will possess creative professionalism, understand their ethical responsibility and committed towards society.

PEO 5 : Graduates of the program shall be able to Critically evaluate and reflect learning and development throughout their career in agriculture sciences.

Programme Educational Outcomes (PEOs)

Agriculture Graduates will be

PLO 1: Able to evaluate critical and intricate agricultural related issues by using quantitative and qualitative research techniques and evolve effective solutions.

PLO 2 : Able to formulate solutions to field and scientific problems in crop production and cropping systems.

PLO 3 : Demonstrate ability for self-directed learning, time management and dedication to serve the community by working effectively individually as well as in teams. Display initiative, honesty, integrity and diligence by empathizing with farmers.

PLO 4 : Evaluate impact of globalization and liberalisation on the agriculture sector and farmers in particular. Ability to understand technological advancements and implications and applying them for developing adaptability and managing diversity in global complex situations.

PLO 5 : Analyze the role and impact of agriculture in society and the international community Learn to appreciate diversity and equality, demonstrate ethical and professional behaviours in all situations.

PLO 6 : Relate the value of linkages and networks with their importance in self-reliance and research. Linking learning to real world problems to stimulate professionalism in research.

Mapping Matrix of PEOs & PLOs:

| | PLO-1 | PLO-2 | PLO-3 | PLO-4 | PLO-5 | PLO-6 |
|-------|--------------|--------------|--------------|--------------|--------------|--------------|
| PEO-1 | √ | | | | | |
| PEO-2 | | √ | | | | |
| PEO-3 | | | √ | | | |
| PEO-4 | | | | √ | √ | |
| PEO-5 | | | | | | √ |

Restructuring of UG programs for increased practical / practice contents

Discipline-wise Courses

| Discipline/Course title | Credit Hours |
|---|---------------------|
| Agronomy | |
| Fundamentals of Agronomy | 4(3+1) |
| Introductory Agro-meteorology & Climate Change | 2(1+1) |
| Crop Production Technology – I (<i>Kharif</i> crops) | 2(1+1) |
| Crop Production Technology – II (<i>Rabi</i> crops) | 2(1+1) |
| Farming System & Sustainable Agriculture | 1(1+0) |
| Practical Crop Production - I (<i>Kharif</i> crops) | 2(0+2) |
| Practical Crop Production - II (<i>Rabi</i> crops) | 2(0+2) |
| Principles of Organic Farming | 2(1+1) |
| Geoinformatics and Nanotechnology and Precision Farming | 2(1+1) |
| Rainfed Agriculture & Watershed Management | 2(1+1) |
| Genetics & Plant Breeding | |
| Fundamentals of Genetics | 3(2+1) |
| Principles of Seed Technology | 3(1+2) |
| Fundamentals of Plant Breeding | 3(2+1) |
| Crop Improvement-I (<i>Kharif</i> crops) | 2(1+1) |
| Crop Improvement-II (<i>Rabi</i> crops) | 2(1+1) |
| Soil Science & Agricultural Chemistry | |
| Fundamentals of Soil Science | 3(2+1) |
| Manures, Fertilizers and Soil Fertility Management | 3(2+1) |
| Problematic soils and their Management | 2(2+0) |
| Entomology | |
| Fundamentals of Entomology | 4(3+1) |
| Pests of Crops and Stored Grain and their Management | 3(2+1) |
| Management of Beneficial Insects | 2(1+1) |

| | |
|---|--------|
| Agricultural Economics | |
| Fundamentals of Agricultural Economics | 2(2+0) |
| Agricultural Finance and Co-Operation | 3(2+1) |
| Agricultural Marketing Trade & Prices | 3(2+1) |
| Farm Management, Production & Resource Economics | 2(1+1) |
| Agricultural Engineering | |
| Soil and Water Conservation Engineering | 2(1+1) |
| Farm Machinery and Power | 2(1+1) |
| Renewable Energy and Green Technology | 2(1+1) |
| Protected Cultivation and Secondary Agriculture | 2(1+1) |
| Plant Pathology | |
| Fundamentals of Plant Pathology | 4(3+1) |
| Diseases of Field and Horticultural Crops and their Management-I | 3(2+1) |
| Diseases of Field and Horticultural Crops and their Management-II | 3(2+1) |
| Principles of Integrated Pest and Disease Management | 3(2+1) |
| Horticulture | |
| Fundamentals of Horticulture | 2(1+1) |
| Production Technology for Fruit and Plantation Crops | 2(1+1) |
| Production Technology for Vegetables and Spices | 2(1+1) |
| Production Technology for Ornamental Crops, MAP and Landscaping | 2(1+1) |
| Post-harvest Management and Value Addition of Fruits and Vegetables | 2(1+1) |
| Food Science & Technology | |
| Principles of Food Science & Nutrition | 2(2+0) |
| Agricultural Extension and Communication | |
| Fundamentals of Agricultural Extension Education | 3(2+1) |
| Rural Sociology & Educational Psychology | 2(2+0) |
| Entrepreneurship Development and Business Communication | 2(1+1) |
| Communication Skills and Personality Development | 2(1+1) |

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| Biochemistry / Physiology / Microbiology/ Environmental Sciences | |
|---|--------|
| Fundamentals of Plant Biochemistry and Biotechnology | 3(2+1) |
| Fundamentals of Crop Physiology | 2(1+1) |
| Agricultural Microbiology | 2(1+1) |
| Environmental Studies & Disaster Management | 3(2+1) |
| Introduction to Forestry | 2(1+1) |
| Statistics, Computer Application and I.P.R. | |
| Statistical Methods | 2(1+1) |
| Intellectual Property Rights | 1(1+0) |
| Agri- Informatics | 2(1+1) |
| Animal Production | |
| Livestock and poultry Management | 4(3+1) |
| Language | |
| Comprehension & Communication Skills in English (Gradiual course) | 2(1+1) |
| Remedial Courses | |
| Agricultural Heritage | 1(1+0) |
| Introductory Biology | 2(1+1) |
| Elementary Mathematics | 2(2+0) |
| Non-Gradiual Courses | |
| NSS/NCC/Physical Education & Yoga Practices | 2(0+2) |
| Human Values & Ethics | 1(1+0) |
| Educational Tour | 2(0+2) |

B.Sc. (Hons.) Agriculture
I- Semester

| S. No | Paper Code | Course Title | L | T | P | Cr |
|---|-------------------|---|----------|----------|----------|----------------------|
| 1. | 22AGBS101 | Fundamentals of Horticulture | 1 | 0 | 1 | 2 (1+1) |
| 2. | 22AGBS102 | Fundamentals of Plant Biochemistry and Biotechnology | 2 | 0 | 1 | 3(2+1) |
| 3. | 22AGBS103 | Fundamentals of Soil Science | 2 | 0 | 1 | 3(2+1) |
| 4. | 22AGBS104 | Introduction to Forestry | 1 | 0 | 1 | 2 (1+1) |
| 5. | 22AGBS109 | Comprehension & Communication Skills in English | 1 | 0 | 1 | 2 (1+1) |
| 6. | 22AGBS105 | Fundamentals of Agronomy | 3 | 0 | 1 | 4(3+1) |
| 7. | 22AGBS109 | Introductory Biology*/Elementary Mathematics* | 1/1 | 0/0 | 1/1 | 2 (1+1)*/ 2(2+0)* |
| 8. | 22AGBS106 | Agricultural Heritage* | 1 | 0 | 0 | 1(1+0)* |
| 9. | 22AGBS107 | Rural Sociology & Educational Psychology | 2 | 0 | 0 | 2 (2+0) |
| 10. | 22AGBS108 | Human Values & Ethics (non gradial) | 1 | 0 | 0 | 1(1+0)** |
| 11 | | NSS/NCC/Physical Education & Yoga Practices (non gradial) | 0 | 0 | 1 | 2 (0+2)** |
| 12 | | Overview of Artificial Intelligence, Ethics and Foundation of Data Analysis | 2 | 0 | 1 | 3(2+1) ** |
| TOTAL | | | 17 | 0 | 9 | 21+03*+03** |
| *R: Remedial course; **NC: Non-gradial courses | | | | | | |

B.Sc. (Hons.) Agriculture
II- Semester

| S. No | Paper Code | Course Title | L | T | P | Cr |
|---|-------------------|--|-----------|----------|----------|----------------|
| 1 | 22AGBS201 | Fundamentals of Genetics | 2 | 0 | 1 | 3(2+1) |
| 2 | 22AGBS202 | Agricultural Microbiology | 1 | 0 | 1 | 2(1+1) |
| 3 | 22AGBS203 | Soil and Water Conservation Engineering | 1 | 0 | 1 | 2(1+1) |
| 4 | 22AGBS204 | Fundamentals of Crop Physiology | 1 | 0 | 1 | 2(1+1) |
| 5 | 22AGBS205 | Fundamentals of Agricultural Economics | 1 | 0 | 0 | 2(2+0) |
| 6 | 22AGBS206 | Fundamentals of Plant Pathology | 3 | 0 | 1 | 4(3+1) |
| 7 | 22AGBS207 | Fundamentals of Entomology | 3 | 0 | 1 | 4(3+1) |
| 8 | 22AGBS208 | Fundamentals of Agricultural Extension Education | 2 | 0 | 1 | 3(2+1) |
| 9 | 22AGBS209 | Communication Skills and Personality Development | 1 | 0 | 1 | 2(1+1) |
| 10 | | Programming Language – Python | 2 | 0 | 1 | 3(2+1) ** |
| Total | | | 17 | 0 | 9 | 24+03** |
| *R: Remedial course; **NC: Non-gradual courses | | | | | | |

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III- Semester

| S. No | Paper Code | Course Title | L | T | P | Cr |
|---|-------------------|--|-----------|----------|-----------|-------------|
| 1 | 22AGBS301 | Crop Production Technology – I (<i>Kharif Crops</i>) | 1 | 0 | 1 | 2 (1+1) |
| 2 | 22AGBS302 | Fundamentals of Plant Breeding | 2 | 0 | 1 | 3 (2+1) |
| 3 | 22AGBS303 | Agricultural Finance and Cooperation | 2 | 0 | 1 | 3 (2+1) |
| 4 | 22AGBS304 | Agri- Informatics | 1 | 0 | 1 | 2(1+1) |
| 5 | 22AGBS305 | Farm Machinery and Power | 1 | 0 | 1 | 2 (1+1) |
| 6 | 22AGBS306 | Production Technology for Vegetables and Spices | 1 | 0 | 1 | 2 (1+1) |
| 7 | 22AGBS307 | Environmental Studies and Disaster Management | 2 | 0 | 1 | 3(2+1) |
| 8 | 22AGBS308 | Statistical Methods | 1 | 0 | 1 | 2(1+1) |
| 9 | 22AGBS309 | Livestock and Poultry Management | 3 | 0 | 1 | 4 (3+1) |
| 10 | | Probabilistic Modelling and Reasoning with Python | 2 | 0 | 1 | 3(2+1) ** |
| Total | | | 16 | 0 | 10 | 23+0 |
| *R: Remedial course; **NC: Non-gradial courses | | | | | | 3** |

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IV- Semester

| S. No | PaperCode | Course Title | L | T | P | Cr |
|---|------------------|---|-----------|----------|----------|----------------|
| 1 | 22AGBS401 | Crop Production Technology –II (<i>Rabi Crops</i>) | 1 | 0 | 1 | 2(1+1) |
| 2 | 22AGBS402 | Production Technology for Ornamental Crops, MAP and Landscaping | 1 | 0 | 1 | 2(1+1) |
| 3 | 22AGBS403 | Renewable Energy and Green Technology | 1 | 0 | 1 | 2(1+1) |
| 4 | 22AGBS404 | Problematic Soils and their Management | 2 | 0 | 0 | 2(2+0) |
| 5 | 22AGBS405 | Production Technology for Fruit and Plantation Crops | 1 | 0 | 1 | 2(1+1) |
| 6 | 22AGBS406 | Principles of Seed Technology | 1 | 0 | 2 | 3(1+2) |
| 7 | 22AGBS407 | Farming System & Sustainable Agriculture | 1 | 0 | 0 | 1(1+0) |
| 8 | 22AGBS408 | Agricultural Marketing Trade & Prices | 2 | 0 | 1 | 3(2+1) |
| 9 | 22AGBS409 | Introductory Agro-meteorology & Climate Change | 1 | 0 | 1 | 2(1+1) |
| 10 | 22AGBS410 | Elective Course | 3 | 0 | 0 | 3 credit |
| 11 | 22AGBS411 | Machine Learning and Pattern Recognition | 2 | 0 | 1 | 3(2+1) ** |
| Total | | | 16 | 0 | 9 | 22+03** |
| *R: Remedial course; **NC: Non-gradual courses | | | | | | |

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V- Semester

| S. No | PaperCode | Course Title | L | T | P | Cr |
|--------------|------------------|---|-----------|----------|-----------|----------------|
| 1 | 22AGBS501 | Principles of Integrated Pest and Disease Management | 2 | 0 | 1 | 3(2+1) |
| 2 | 22AGBS502 | Manures, Fertilizers and Soil Fertility Management | 2 | 0 | 1 | 3 (2+1) |
| 3 | 22AGBS503 | Pests of Crops and Stored Grain and their Management | 2 | 0 | 1 | 3 (2+1) |
| 4 | 22AGBS504 | Diseases of Field and Horticultural Crops and their Management -I | 2 | 0 | 1 | 3 (2+1) |
| 5 | 22AGBS505 | Crop Improvement-I (<i>Kharif Crops</i>) | 1 | 0 | 1 | 2 (1+1) |
| 6 | 22AGBS506 | Entrepreneurship Development and Business Communication | 1 | 0 | 1 | 2 (1+1) |
| 7 | 22AGBS507 | Geoinformatics and Nano-technology and Precision Farming | 1 | 0 | 1 | 2 (1+1) |
| 8 | 22AGBS508 | Practical Crop Production – I (<i>Kharif crops</i>) | 0 | 0 | 2 | 2 (0+2) |
| 9 | 22AGBS509 | Intellectual Property Rights | 1 | 0 | 0 | 1(1+0) |
| 10 | 22AGBS510 | Elective Course | 3 | 0 | 0 | 3 credit |
| 11 | 22AGBS511 | Data Visualization | 2 | 0 | 1 | 3(2+1) ** |
| Total | | | 17 | | 10 | 24+03** |

***R: Remedial course; **NC: Non-gradual courses**

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VI- Semester

| S. No | Paper Code | Course Title | L | T | P | Cr |
|---|-------------------|---|-----------|----------|-----------|----------------|
| 1 | 22AGBS601 | Rainfed Agriculture & Watershed Management | 1 | 0 | 1 | 2 (1+1) |
| 2 | 22AGBS602 | Protected Cultivation and Secondary Agriculture | 1 | 0 | 1 | 2 (1+1) |
| 3 | 22AGBS603 | Diseases of Field and Horticultural Crops and their Management-II | 2 | 0 | 1 | 3 (2+1) |
| 4 | 22AGBS604 | Post-harvest Management and Value Addition of Fruits and Vegetables | 1 | 0 | 1 | 2 (1+1) |
| 5 | 22AGBS605 | Management of Beneficial Insects | 1 | 0 | 1 | 2 (1+1) |
| 6 | 22AGBS606 | Crop Improvement-II (<i>Rabi crops</i>) | 1 | 0 | 1 | 2 (1+1) |
| 7 | 22AGBS607 | Practical Crop Production –II (<i>Rabi crops</i>) | 0 | 0 | 2 | 2 (0+2) |
| 8 | 22AGBS608 | Principles of Organic Farming | 1 | 0 | 1 | 2 (1+1) |
| 9 | 22AGBS609 | Farm Management, Production & Resource Economics | 1 | 0 | 1 | 2 (1+1) |
| 10 | 22AGBS610 | Principles of Food Science and Nutrition | 2 | 0 | 0 | 2(2+0) |
| 11 | 22AGBS611 | Elective Course | 3 | 0 | 0 | 3 credits |
| 12 | 22AGBS612 | IoT for Smart Farming | 2 | 0 | 1 | 3(2+1) ** |
| Total | | | 16 | 0 | 11 | 24+03** |
| *R: Remedial course; **NC: Non-gradual courses | | | | | | |

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VII- Semester

| S. No | Rural Agricultural Work Experience and Agro-industrial Attachment (RAWE &AIA) | | |
|---------------------------------------|---|--------------|--------------|
| | Activities | No. of weeks | Credit Hours |
| 1 | General orientation & On campus training by different faculties | 1 | 14 |
| 2 | Village attachment | 8 | |
| | Unit attachment in Univ./ College. KVK/ Research Station Attachment | 5 | |
| 3 | Plant clinic | 2 | 2 |
| | Agro-Industrial Attachment | 3 | 4 |
| 4 | Project Report Preparation, Presentation and Evaluation | 1 | |
| Total weeks for RAWE & AIA | | 20 | 20 |

- **Agro- Industrial Attachment:** The students would be attached with the agro-industries for a period of 3 weeks to get an experience of the industrial environment and working.
- Educational tour will be conducted in break between IV & V Semester or VI & VII Semester

RAWE Component-I

Village Attachment Training Programme

| Sl. No. | Activity | Duration |
|---------|--|----------|
| 1 | Orientation and Survey of Village | 1 week |
| 2 | Agronomical Interventions | 1 week |
| 3 | Plant Protection Interventions | 1 week |
| 4 | Soil Improvement Interventions (Soil sampling and testing) | 1 week |
| 5 | Fruit and Vegetable production interventions | 1 week |
| 6 | Food Processing and Storage interventions | 1 week |
| 7 | Animal Production Interventions | 1 week |
| 8 | Extension and Transfer of Technology activities | 1 week |

RAWE Component –II

Agro Industrial Attachment

- Students shall be placed in Agro-and Cottage industries and Commodities Boards for 03 weeks.
- Industries include Seed/Sapling production, Pesticides-insecticides, Post harvest-processing-value addition, Agri-finance institutions, etc.

Activities and Tasks during Agro-Industrial Attachment Programme

- Acquaintance with industry and staff
- Study of structure, functioning, objective and mandates of the industry
- Study of various processing units and hands-on trainings under supervision of industry staff
- Ethics of industry
- Employment generated by the industry
- Contribution of the industry promoting environment
- Learning business network including outlets of the industry
- Skill development in all crucial tasks of the industry
- Documentation of the activities and task performed by the students
- Performance evaluation, appraisal and ranking of students

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VIII- Semester

Modules for Skill Development and Entrepreneurship: A student has to register 20 credits opting for two modules of (0+10) credits each (total 20 credits) from the package of modules in the **VIII semester**.

| Sl. No. | Title of the module | Credits |
|-----------|---|---------|
| 1 | Production Technology for Bioagents and Biofertilizer | 0+10 |
| 2 | Seed Production and Technology | 0+10 |
| 3 | Mushroom Cultivation Technology | 0+10 |
| 4 | Soil, Plant, Water and Seed Testing | 0+10 |
| 5 | Commercial Beekeeping | 0+10 |
| 6 | Poultry Production Technology | 0+10 |
| 7 | Commercial Horticulture | 0+10 |
| 8 | Floriculture and Landscaping | 0+10 |
| 9 | Food Processing | 0+10 |
| 10 | Agriculture Waste Management | 0+10 |
| 11 | Organic Production Technology | 0+10 |
| 12 | Commercial Sericulture | 0+10 |

NOTE: In addition to above ELP modules other important modules may be given to the students by SAUs

Evaluation of Experiential Learning Programme/ HOT

| Sl. No. | Parameters | Max Marks |
|--------------|------------------------------|------------|
| 1 | Project Planning and Writing | 10 |
| 2 | Presentation | 10 |
| 3 | Regularity | 10 |
| 4 | Monthly Assessment | 10 |
| 5 | Output delivery | 10 |
| 6 | Technical Skill Development | 10 |
| 7 | Entrepreneurship Skills | 10 |
| 8 | Business networking skills | 10 |
| 9 | Report Writing Skills | 10 |
| 10 | Final Presentation | 10 |
| Total | | 100 |

Discipline-wise summary of credit hours

| S.N. | Group | Credits |
|-------------|--|---|
| 1 | Agronomy | 21(10+11) |
| 2 | Genetics & Plant Breeding | 13(7+6) |
| 3 | Soil Science & Agricultural Chemistry | 8(6+2) |
| 4 | Entomology | 9(6+3) |
| 5 | Agricultural Economics | 10(7+3) |
| 6 | Agricultural Engineering | 8(4+4) |
| 7 | Plant Pathology | 13(9+4) |
| 8 | Horticulture | 10(5+5) |
| 9 | Food Science | 2(2+0) |
| 10 | Agricultural Extension | 9(6+3) |
| 11 | Biochemistry / Physiology / Microbiology/ Environmental Sciences | 12(7+5) |
| 12 | Statistics, Computer Application and I.P.R. | 5(3+2) |
| 13 | Animal Production | 4(3+1) |
| 14 | English | 2 (1+1) |
| 15 | Remedial Courses | 03 (Biol/ Math); 01 (Agriculture) |
| 16 | NSS/NCC/Physical Education & Yoga Practices | 2(0+2) |
| 17 | Human Values and Ethics | 1(1+0) |
| 18 | Educational Tour | 2(0+2) |
| | Total | 126 + 3 (for Bio / Math)/ 01(Agri) + 5 NC 126+3+1+5+ 9 credits elective |
| | RAWE ELP | 20 +20 |
| | Grand Total | 144+20+20=184 |
| | New Courses | 24+4 (remedial)+1 (NC) |

NEW COURSES

| Sl. No. | Course Title | Credit Hours |
|----------------|--|---------------------|
| 1 | Geoinformatics, Nanotechnology and Precision Farming | 2(1+1) |
| 2 | Rainfed Agriculture and Watershed Management | 2(1+1) |
| 3 | Problematic Soils and their Management | 2(2+0) |
| 4 | Renewable Energy and Green Technology | 2(1+1) |
| 5 | Management of Beneficial Insects | 2(1+1) |
| 6 | Fundamentals of Horticulture | 2(1+1) |
| 7 | Introduction to Forestry | 2(1+1) |
| 8 | Agri- Informatics | 2(1+1) |
| 9 | Intellectual Property Rights | 1(1+0) |

| | | |
|----|---|----------|
| 10 | Principles of Food Science & Technology | 2(2+0) |
| 11 | Communication Skills and Personality Development | 2(1+1) |
| 12 | Principles of Integrated Pest & Diseases Management | 3(2+1) |
| 13 | Agricultural Heritage | 1(1+0)* |
| 14 | Introductory Biology | 2(1+1)* |
| 15 | Elementary Mathematics | 2(2+0)* |
| 16 | Human Values & Ethics (NG) | 1(1+0)** |

* Remedial courses ** Non-gradual courses

Elective Courses : A student can select three elective courses out of the following and offer during 4th, 5th and 6th semesters.

| Elective Courses, IV- Semester | | |
|---------------------------------------|---------------------------|---------------------|
| S.N. | Courses | Credit Hours |
| 1 | Agribusiness Management | 3(2+1) |
| 2 | Agrochemicals | 3(2+1) |
| 3 | Commercial Plant Breeding | 3(1+2) |
| 4 | Landscaping | 3(2+1) |

| Elective Courses, V- Semester | | |
|--------------------------------------|--------------------------------|---------------------|
| S.N. | Courses | Credit Hours |
| 1 | Food Safety and Standards | 3(2+1) |
| 2 | Biopesticides & Biofertilizers | 3(2+1) |
| 3 | Protected Cultivation | 3(2+1) |
| 4 | Micro propagation Technologies | 3(1+2) |

| Elective Courses, VI- Semester | | |
|---------------------------------------|-------------------------------------|---------------------|
| S.N. | Courses | Credit Hours |
| 1 | Hi-tech. Horticulture | 3(2+1) |
| 2 | Weed Management | 3(2+1) |
| 3 | System Simulation and Agro-advisory | 3(2+1) |
| 4 | Agricultural Journalism | 3(2+1) |

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| | Odd Sem Credits | Even Sem Credits | Total |
|--------------------|------------------------|-------------------------|--------------|
| First Year | 27 | 27 | 54 |
| Second Year | 26 | 25 | 51 |
| Third Year | 27 | 27 | 54 |
| Fourth Year | 20 | 20 | 40 |
| | | Total | 199 |