

B. Sc. (Hons) Agriculture
Semester wise Course Lay Out (Proposed)

Semester-I

Course No.	Courses	Credit		
		T	P	Total
A)	Core courses			
AGRO 111	Fundamentals of Agronomy-I	1	1	2
AGRO 112	Introductory Agro-meteorology and Climate change	1	1	2
AHDS 111	Livestock Production & Management	1	1	2
EXTN 111	Rural Sociology & Educational Psychology	2	0	2
HORT 111	Fundamentals of Horticulture	1	1	2
LANG 111	Comprehension & Communication Skills in English	1	1	2
MIBO 111	Introductory Microbiology	1	1	2
SSAC 111	Fundamentals of Soil Science	2	1	3
	Total Core Courses	10	7	17
B)	Remedial Courses (3 or 5 credit)			0
AGH 111	Agricultural Heritage ^{*1}	1	0	1
BIO 111	Introductory biology ^{*2}	1	1	2
MATH 111	Elementary Mathematics ^{*3}	1	1	2
	Sub total	3/4	0/1	3/5
C)	Non-Gradial Courses (4 credits)			0
HVE 111	Human Values & Ethics	1	0	1
DEG 111	Democracy, Elections and Good Governance	1	0	1
NCC 111/ NSS 111	NCC/ NSS **	0	1	1
PHEY 111	Physical Education and Yoga	0	1	1
	Sub total	2	2	4
	Total Credits (A+B+C)	15/16	9/10	24/26

* Remedial Courses (3/5 credit)

** Non-Gradial Courses (4 Credits)

*¹Compulsory to all students

*² Students who have Biology in XII std are exempted

*³Students who have MATH in XII std are exempted

** NCC or NSS

Semester –II

Course No.	Courses	Credit		
		T	P	Total
A)	Core Course			
AGRO-123	Fundamentals of Agronomy-II	1	1	2
BOT 121	Fundamentals of Crop Physiology	1	1	2
ECON 121	Fundamentals of Agricultural Economics	2	0	2
ENGG 121	Soil and Water Conservation Engineering	1	1	2
ENTO-121	Fundamentals of Entomology	1	1	2
EXTN 122	Fundamentals of Agricultural Extension Education	2	1	3
GPB 121	Fundamentals of Genetics	2	1	3
PATH 121	Fundamentals of Plant Pathology	2	1	3
	Total	12	7	19
B)	Non-Gradiual course			
FRST 121	Introduction to Forestry	1	1	2
EDNT 121	Educational Tour*	0	1	1
	Subtotal	1	2	3
C)	Common Course			
EXTN 123	Communication Skills and personality Developments	1	1	2
	Subtotal	1	1	2
	Total Credits (A+B+C)	14	10	24

* Educational Tour shall be organized after completion of Sem.II and before start of Sem.III

Semester-III

Course No.	Courses	Credit		
		T	P	Total
A)	Core Course			
AGRO234	Crop Production Technology-I (Kharif crops)	1	1	2
AGRO 235	Rainfed Agriculture and Watershed Management	1	1	2
BIOCHM 231	Fundamentals of plant biochemistry and biotechnology	2	1	3
ENGG 232	Farm Machinery and Power	1	1	2
ENTO 232	Insect Ecology and Integrated pest Management	1	1	2
GPB 232	Fundamentals of Plant Breeding	1	1	2
HORT 232	Production Technology for Vegetables and Spices	1	1	2
PATH 232	Principles of Integrated Disease Management	1	1	2
STAT 231	Statistical Methods	1	1	2
	Subtotal	10	9	19
B)	Common Courses			
COMP 231	Agri- Informatics	1	1	2
ESDM 231	Environmental Studies and Disaster Management	2	1	3
	Subtotal	3	2	5
	Total Credits (A+B)	13	11	24

Semester IV

Course No.	Courses	Credit		
		T	P	Total
A)	Core Course			
AGRO246	Crop Production Technology-II (Rabi crops)	1	1	2
AGRO 247	Farming System and Sustainable Agriculture	1	0	1
AGRO 248	Principles of Organic Farming	1	1	2
AHDS 242	Livestock Breeding and Nutrition	1	1	2
ECON 242	Agriculture Finance and Cooperation	2	1	3
ENGG 243	Renewable Energy and Green Technology	1	1	2
ENTO 243	Pest of Horticultural Crops and their Management	1	1	2
GPB 243	Principles of Seed Technology	1	2	3
HORT 243	Production Technology for Fruit and Plantation Crops	1	1	2
SSAC 242	Problematic Soils and their Management	1	1	2
	Subtotal	11	10	21
B)	Elective Courses (3 credits)			
ELE BOT 242	Micropropagation Technologies	1	2	3
ELE EXTN 244	Agricultural Journalism	2	1	3
ELE GPB 244	Commercial Plant breeding	1	2	3
ELE PATH 243	Bio-fertilizers, Bio-control Agents and Bio-pesticides	2	1	3
	Subtotal Elective	1	2	3
C)	Non-Gradiual Course			
EDNT 242	Study Tour*	0	1	1
	Total Credits (A+B+C)	12	13	25

* Educational Tour shall be organized after completion of Sem.IV and before start of Sem.V

Semester V

Course No.	Courses	Credit		
		T	P	Total
A)	Core Course			
AGRO359	Practical Crop Production-I (Kharif crops)	0	1	1
AHDS 353	Technology of Milk and Milk Products.	1	1	2
BOT 353	Intellectual Property Right	1	0	1
ECON 353	Agricultural Marketing Trade and Prices	2	1	3
ENTO 354	Pests of Crops and Stored Grain and their Management- I	1	1	2
GPB 355	Crop Improvement – I (Kharif Crops)	1	1	2
HORT 354	Production Technology for Ornamental Crops, MAP and Landscaping	1	1	2
PATH 354	Diseases of Field and Horticultural Crops and their Management	2	1	3
SSAC 353	Manures, Fertilizers and Soil Fertility Management	2	1	3
	Subtotal	11	8	19
B)	Common Courses			
EXTN 355	Entrepreneurship Development and Business Communication	1	1	2
	Subtotal	1	1	2
C)	Elective Course (3 credits)			
AGRO3510	Weed Management	2	1	3
ELE ECON 354	Agribusiness Management	2	1	3
ELE FST 351	Food Safety and Standards	2	1	3
ELE HORT 355	Protected Cultivation of Horticultural Crops	2	1	3
	Subtotal	2	1	3
	Total (A+B+C)	14	10	24

Semester VI

Course No.	Courses	Credit		
		T	P	Total
A)	Core Course			
AGRO 3611	Practical Crop Production-II(Rabi crops)	0	1	1
AGRO 3612	Geo-informatics and Nano-technology and Precision Farming	1	1	2
AHDS 364	Sheep Goat and Poultry Production	1	1	2
ECON 365	Farm Management, Production and Resource Economics	1	1	2
ENGG 364	Protected Cultivation and secondary Agriculture	1	1	2
ENTO 365	Management of Beneficial Insects	1	1	2
FST 362	Principles of Food Science and Nutrition	2	0	2
GPB 366	Crop Improvement – II (Rabi crops)	1	1	2
HORT 366	Post-harvest Management and Value Addition of Fruits and Vegetables	1	1	2
PATH 365	Diseases of Field and Horticultural Crops and their Management-II	2	1	3
	Subtotal	11	9	20
B)	Elective courses			
ELE AGM 361	System Stimulation and Agro-advisory	2	1	3
ELE HORT 368	Hi tech Horticulture	2	1	3
ELE HORTI367	Landscaping	2	1	3
ELE SSAC 364	Agrochemicals	2	1	3
	Subtotal	2	1	3
	Total (A+B)	13	10	23

Semester VII

Student READY Programme

(Rural and Entrepreneurship Awareness Development Yojana)

RAWE & AIA Programme

Rural Agricultural Work Experience and Agro-Industrial Attachment

Sr. No.	Activities	Number of weeks	Credits
1	General orientation and on campus training by different faculties	1	14
2	Village attachment/ Unit attachment in Univ./ College. KVK/ Research Station	8	
3	Agro-Industrial Attachment	10	06
4	Project Report Preparation, Presentation and Evaluation	1	
Total weeks for RAWE and AIA		20	20

- **Agro- Industrial Attachment:** The students would be attached with the agro-industries for a period of 10 weeks to get an experience of the industrial environment and working.

Semester VIII

Experiential Learning Modules

Sr. No.	Course No.	Credits	Course Title
1	ELM AGRO4813	10(0+10)	Organic Farming Production Technology
2	ELM AGRO 4814	10(0+10)	Commercial production of organic inputs
3	ELM AHDS 485	10(0+10)	Poultry production
4	ELM AHDS 486	10(0+10)	Processing of Milk and Milk Product
5	ELM BOT 481	10(0+10)	Seed Production and Technology
6	ELM BOT 484	10(0+10)	Tissue Culture Techniques
7	ELM ENGG 485	10(0+10)	Natural Resources Management
8	ELM ENTO 486	10(0+10)	Mass Production of Bio-agents and Bio-pesticides
9	ELM ENTO 487	10(0+10)	Commercial Beekeeping
10	ELM ENTO 488	10(0+10)	Silkworm cocoon production technology
11	ELM FST 483	10(0+10)	Food Processing
12	ELM HORT 489	10(0+10)	Commercial Horticulture
13	ELM HORT 4810	10(0+10)	Floriculture and Landscaping Gardening
14	ELM HORT 4811	10(0+10)	Nursery Management of Horticultural Crops
15	ELM HORT 4812	10(0+10)	Commercial Vegetable Production
16	ELM HORT 4813	10(0+10)	Protected Cultivation of Flowers and Vegetables
17	ELM HORT 4814	10(0+10)	Post-harvest Management and Value Additions of Horticultural Crops
18	ELM PATH 486	10(0+10)	Mushroom Cultivation Technology
19	ELM PATH 487/ ELM SSAC 487	10(0+10)	Biofertilizer Production Technology
20	ELM SSAC 485	10(0+10)	Soil, Water, Plant and Fertilizer Analysis
21	ELM SSAC 486	10(0+10)	Agricultural Waste Management

This program will be undertaken by the students preferably during the eighth semester for a total duration of **24 weeks** with a weightage of **0+20** credit hours. The students will register for any of two modules, listed as above, of **0+10** credit hours each.