

SEMESTER WISE COURSES

First Semester

No	Course No.	Title of Course	Credit
1	Agron.1.1	Introductory Agriculture and Principles of Agronomy	(2+1) 3
2	Agron.1.2	Field Crops-I (Kharif)	(2+1) 3
3	Ag.Chem.1.1	Introduction to Soil Science	(2+1) 3
4	Ag.Econ.1.1	Principles of Agricultural Economics	(2+0) 2
5	Pl.Path.1.1	Introductory Plant Pathology	(1+1) 2
6	Hort.1.1	Production Technology of Fruit Crops	(2+1) 3
7	PBG.1.1	Economic Botany	(1+1) 2
8	Maths.1.1	Biomathematics	(2+0) 2
9	Ag.Stat.1.1	Introduction to Computer Application	(1+1) 2
10	Eng.1.1	Comprehension and Communication Skills in English (Non credit course)	(1+1) 2*
11	PE.1.1	NSS / NCC / Physical Education (Non credit course)	(0+1) 1*
Total			22+3*

Second Semester

1	Pl.Path.2.2	Introductory Nematology	(1+1) 2
2	Ag.Engg. 2.1	Fundamentals of Soil Water Conservation and Engineering	(2+1) 3
3	Ag.Micro.2.1	Agricultural Microbiology	(2+1) 3
4	Ag.Stat.2.2	Agricultural Statistics	(2+1) 3
5	Ag.Chem.2.2	Soil Chemistry, Soil Fertility and Nutrient Management	(2+1) 3
6	PBG.2.2	Principles of Genetics	(2+1) 3
7	Agron.2.3	Field Crops-II (Rabi)	(2+1) 3
8	Ag.Met.2.1	Agricultural Meteorology	(2+1) 3
9	PE.2.2	NSS / NCC / Physical Education (Non credit course)	(0+1) 1*
Total			23+1*

Third Semester

1	Agron.3.4	Practical Crop Production I (<i>Kharif</i> crops)	(0+1) 1
2	Agron.3.5	Weed Management	(1+1) 2
3	PBG.3.3	Principles of Plant Breeding	(2+1) 3
4	Hort.3.2	Production Technology of Vegetables & Flowers	(2+1) 3
5	Pl.Phy.3.1	Crop Physiology -I	(2+1) 3
6	Ag.Extn.3.1	Dimensions of Agricultural Extension	(1+1) 2
7	Ag.Ento.3.1	Insect Morphology and Systematics	(2+1) 3
8	Pl.Path.3.3	Principles of Plant Pathology	(1+1) 2
9	Ag.Econ.3.2	Agricultural Marketing, Trade and Prices	(1+1) 2
10	Ag.Engg.3.2	Farm Power and Machinery	(1+1) 2
11	PE.3.3	NSS / NCC / Physical Education (Non credit course)	(0+1) 1*
Total			23+1*

Fourth Semester

1	Agron.4.6	Practical Crop Production II (<i>Rabi</i> crops)	(0+1) 1
2	Ag.Ento.4.2	Insect Ecology & Integrated Pest Management Including Beneficial Insects	(2+1) 3
3	LPM.4.1	Livestock Production and Management	(1+1) 2
4	Ag.Econ.4.3	Agricultural Finance and Co-operation	(1+1) 2
5	Hort.4.3	Production Technology of Spices, Aromatics Medicinal and Plantation Crops	(2+1) 3
6	PBG.4.4	Breeding of Field / Horticultural Crops	(2+1) 3
7	Ag.Extn.4.2	Fundamentals of Rural Sociology and Educational Psychology	(2+0) 2
8	Biochem.4.1	Biochemistry	(2+1) 3
9	Pl.Phy.4.2	Crop Physiology -II	(1+1) 2
10	Eng.4.2	English for Special Purpose (Non credit course)	(1+1) 2*
11	PE.4.4	NSS / NCC / Physical Education (Non credit course)	(0+1) 1*
Total			21+3*

Fifth Semester

1	Agron.5.7	Water Management Including Micro Irrigation	(2+1) 3
2	Ag.Ento.5.3	Pests of Field Crops and Stored Grain and Their Management	(2+1) 3
3	Hort.5.4	Post Harvest Management and Value Addition of Fruits and Vegetables	(1+1) 2
4	LPM.5.2	Dairy Cattle and Buffalo Production and Management	(2+1) 3
5	Pl.Path.5.4	Diseases of Field Crops and their Management	(2+1) 3
6	PBG.5.5	Principles of Seed Technology	(2+1) 3
7	Ag.Econ.5.4	Fundamentals of Agri Business Management (Including Product Development, Appraisal and Monitoring)	(1+1) 2
8	Ag.Engg.5.3	Protected Cultivation and Post Harvest Technology	(1+1) 2
9	Ag.Extn.5.3	Extension Methodologies for Transfer of Agricultural Technology	(1+1) 2
Total			23

Sixth Semester

1	Ag. Extn.6.4	Entrepreneurship Development	(1+1) 2
2	Envs.6.1	Environmental Science	(1+1) 2
3	Ag.Engg.6.4	Renewable Energy	(1+1) 2
4	Agron.6.8	Organic Farming	(1+1) 2
5	Agron.6.9	Farming Systems and Sustainable Agriculture	(1+1) 2
6	Ag.Chem.6.3	Manures, Fertilizers and Agrochemicals	(2+1) 3
7	PBG.6.6	Principles of Plant Biotechnology	(2+1) 3
8	Pl.Path.6.5	Disease of Horticultural Crops and Their Management	(2+1) 3
9	Ag.Econ.6.5	Production Economics and Farm Management	(1+1) 2
10	Ag.Ento.6.4	Pests of Horticultural Crops and Their Management	(1+1) 2
Total			22+2*

Seventh Semester

1	Courses for Experiential Learning	20
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Eighth Semester

1	RAWE	0+20
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DEPARTMENT WISE COURSES

Course No.	Disciplines	Credits	
I. AGRONOMY			
1	Agron.1.1	Introductory Agriculture and Principles of Agronomy	3 (2+1)
2	Agron.1.2	Field Crops-I (<i>Kharif</i>)	3 (2+1)
3	Agron.2.3	Field Crops-II (<i>Rabi</i>)	3 (2+1)
4	Agron.3.4	Practical Crop Production-I (<i>Kharif</i> Crops)	1 (0+1)
5	Agron.3.5	Weed Management	2 (1+1)
6	Agron.4.6	Practical Crop Production-II (<i>Rabi</i> Crops)	1 (0+1)
7	Agron.5.7	Water Management Including Micro-Irrigation	3 (2+1)
8	Agron.6.8	Organic Farming	2 (1+1)
9	Agron.6.9	Farming Systems and Sustainable Agriculture	2 (1+1)
		Total	20 (11+9)
II. PLANT BREEDING AND GENETICS			
1	PBG.1.1	Economic Botany	2 (1+1)
2	PBG.2.2	Principles of Genetics	3 (2+1)
3	PBG.3.3	Principles of Plant Breeding	3 (2+1)
4	PBG.4.4	Breeding of Field/ Horticulture Crops	3 (2+1)
5	PBG.5.5	Principles of Seed Technology	3 (2+1)
6	PBG.6.6	Principles of Plant Biotechnology	3 (2+1)
		Total	17 (11+6)
III. SOIL SCIENCE AND AGRICULTURAL CHEMISTRY			
1	Ag.Chem.1.1	Introduction to Soil Science	3 (2+1)
2	Ag.Chem.2.2	Soil Chemistry, Soil Fertility and Nutrient Management	3 (2+1)
3	Ag.Chem.6.3	Manures, Fertilizers and Agro-chemicals	3 (2+1)
		Total	9 (6+3)
IV. ENTOMOLOGY			
1	Ag.Ento.3.1	Insect Morphology and Systematics	3 (2+1)
2	Ag.Ento.4.2	Insect Ecology and Integrated Pest Management Including Beneficial Insects	3 (2+1)
3	Ag.Ento.5.3	Pests of Field Crops and Stored Grain and Their Management	3 (2+1)
4	Ag.Ento.6.4	Pests of Horticultural Crops and Their Management	2 (1+1)
		Total	11 (7+4)
V. AGRICULTURAL ECONOMICS			
1	Ag.Econ.1.1	Principles of Agricultural Economics	2 (2+0)
2	Ag.Econ.3.2	Agricultural Marketing, Trade and Prices	2 (1+1)
3	Ag.Econ.4.3	Agricultural Finance and Co-operation	2 (1+1)
4	Ag.Econ.5.4	Fundamentals of Agril. Business Management	2 (1+1)
5	Ag.Econ.6.5	Production Economics and Farm Management	2 (1+1)
		Total	10 (6+4)
VI. AGRICULTURAL ENGINEERING			
1	Ag.Engg.2.1	Fundamentals of Soil, Water and Conservation Engineering	3 (2+1)
2	Ag.Engg.3.2	Farm Power and Machinery	2 (1+1)
3	Ag.Engg.5.3	Protected Cultivation and Post Harvest Technology	2 (1+1)
4	Ag.Engg.6.4	Renewable Energy	2 (1+1)
		Total	9 (5+4)

VII. AGRICULTURAL METEOROLOGY			
1	Ag.Met.2.1	Agricultural Meteorology	3 (2+1)
			Total
			3 (2+1)
VIII. PLANT PATHOLOGY			
1	Pl.Path.1.1	Introductory Plant Pathology	2 (1+1)
2	Pl.Path.2.2	Introductory Nematology	2 (1+1)
3	Pl.Path.3.3	Principles of Plant Pathology	2 (1+1)
4	Pl.Path.5.4	Diseases of Field Crops and their Management	3 (2+1)
5	Pl.Path.6.5	Diseases of Horticultural Crops and their Management	3 (2+1)
			Total
			12 (7+5)
IX. HORTICULTURE			
1	Hort.1.1	Production Technology of Fruit Crops	3 (2+1)
2	Hort.3.2	Production Technology of Vegetables and Flowers	3 (2+1)
3	Hort.4.3	Production Technology of Spices, Aromatic, Medicinal and Plantation Crops	3 (2+1)
4	Hort.5.4	Post Harvest Management and Value Addition of Fruits and Vegetables	2 (1+1)
			Total
			11 (7+4)
X. AGRICULTURAL EXTENSION			
1	Ag.Extn.3.1	Dimensions of Agricultural Extension	2 (1+1)
2	Ag.Extn.4.2	Fundamentals of Rural Sociology and Educational Psychology	2 (2+0)
3	Ag.Extn.5.3	Extension Methodologies for Transfer of Agricultural Technology	2 (1+1)
4	Ag.Extn.6.4	Entrepreneurship Development	2 (1+1)
			Total
			8 (5+3)
XI. BIOCHEMISTRY / PHYSIOLOGY / MICROBIOLOGY / ENVIRONMENTAL SCIENCES* / BIO-MATHEMATICS			
1	Maths.1.1	Bio-Mathematics	2 (2+0)
2	Ag.Micro.2.1	Agricultural Microbiology	3 (2+1)
3	Pl.Phy.3.1	Crop Physiology-I	3 (2+1)
4	Pl.Phy.4.2	Crop Physiology-II	2 (1+1)
5	Biochem.4.1	Biochemistry	3 (2+1)
6	Envs.6.1	Environmental Science	2 (1+1)
			Total
			15 (10+5)
XII. STATISTICS AND COMPUTER APPLICATION			
1	Ag.Stat.1.1	Introduction to Computer Applications	2 (1+1)
2	Ag.Stat.2.2	Agricultural Statistics	3 (2+1)
			Total
			5 (3+2)
XIII. ANIMAL PRODUCTION			
1	LPM.4.1	Principles of Livestock Production and Management	2 (1+1)
2	LPM.5.2	Dairy Cattle & Buffalo Production & Management	3 (2+1)
			Total
			5 (3+2)
XIV. NON CREDIT COURSES			
1	Eng.1.1	Comprehension and Communication Skills in English	2 (1+1)*
2	Eng.4.2	English for Special Purpose	2 (1+1)*
3	P.E.1.1	Physical Education-I	1 (0+1)*
4	P.E.2.2	Physical Education-II	1 (0+1)*
5	P.E.3.3	NSS / NCC / Physical Education	1 (0+1)*
6	P.E.4.4	NSS / NCC / Physical Education	1 (0+1)*
			Total
			8 (2+6)*

COURSES FOR EXPERIENTIAL LEARNING DURING SEVEN SEMESTER (INTER DISCIPLINARY COURSES)

A student has to register total 20 credits with major load in one area of electives (12-15 credits) and rest from among one areas of electives (5-8 credits) in a relevant disciplines (Group wise) in the Seventh Semester.

Sr	Group	Disciplines
1	I	Crop Production and Commercial Agriculture
2	II	Crop Protection
3	III	Horticulture and Post Harvest Technology & Value Addition
4	IV	Agri-Business Management and Social Science
5	V	Basic Science

DISCIPLINE WISE COURSES

Sr. No.	Course No.	Title of Course	Credit
1. Crop Production			
	Agron.7.10	Seed Production Technology	3 (1+2)
	Ag.Met.7.2	Remote Sensing GIS and Land Use Planning	3 (1+2)
	Ag.Chem.7.4	Soil Management (Conservation, Problematic Soil, Soil Quality)	3 (2+1)
2. Crop Protection			
	Cr.Prot.7.1	IPM and IDM (Pest Disease Scouting)	4(2+2)
	Cr.Prot.7.2	Management of Post Harvest Insect- Pests and Diseases	3 (1+2)
	Cr.Prot.7.3	Bio-Control Agencies and Bio-Pesticide (Mass Multiplication and Uses)	3 (1+2)
	Ag.Ento.7.5	Non-Insect Pests and Their Management	3 (1+2)
	Ag.Ento.7.6	Apiculture	2 (0+2)
	Ag.Ento.7.7	Pesticides and Plant Protection equipment	3 (1+2)
	Pl.Path.7.6	Mushroom Cultivation	2 (0+2)
3. Horticulture			
	Hort.7.5	Commercial Vegetable Production	3 (1+2)
	Hort.7.6	Commercial Floriculture	3 (1+2)
	Hort.7.7	Commercial Fruit Production	3 (1+2)
	Hort.7.8	Nursery Management of Horticultural Crops	4 (1+3)
	Hort.7.9	Protected Cultivation of Horticultural Crops	3 (1+2)
	Hort.7.10	Seed Production of Vegetables and Flowers	3 (1+2)
	Hort.7.11	Processing and Value Addition of Horticultural Crops	3 (1+2)
4. Post Harvest Technology & Value addition			
	Ag.Pros.7.1	Post harvest Technology of Horticultural crops	3 (1+2)
	Ag.Pros.7.2	Unit operation for quality value addition processing and development of new products	4 (1+3)
	Ag.Pros.7.3	Post harvest technology of spices, plantation crops, medicinal and aromatic crops	4 (1+3)
	Ag.Pros.7.4	Integrated storage management of fruits, flowers and vegetables	3 (1+2)
	Ag.Pros.7.5	Post harvest handling of cut flowers and dry flowers	3 (1+2)
	Ag.Pros.7.6	Processing of cereals, pulses and oilseed crops including biodiesel	3 (1+2)

5. Agri-Business Management			
	Ag.Econ.7.6	Information & Communication Management	3 (1+2)
	Ag.Econ.7.7	Management of Agro-based industry	4 (1+3)
	Ag.Econ.7.8	Marketing Management (Agricultural Import-Export Policy of Govt. of India & Business Laws)	3 (1+2)
	Ag.Econ.7.9	Financial Management of Agri-Business	4 (1+3)
	Ag.Econ.7.10	Natural Resources Economics and Management	3 (1+2)
	Ag.Econ.7.11	Project formulation, Evaluation and Monitoring	3 (1+2)
6. Social Science			
	Ag.Extn.7.5	Agricultural Journalism	3 (2+1)
	Ag.Extn.7.6	Visuals and Graphic Communications	3 (2+1)
	Ag.Extn.7.7	Behavioral Skills	3 (2+1)
	Ag.Econ.7.12	Livestock, Poultry and Fish Marketing	3 (2+1)
	Ag.Econ.7.13	Farm Planning and Budgeting	3 (2+1)
	Ag.Econ.7.14	Government Policies and Programmes Related to Agriculture	2 (2+0)
7. Basic Science			
	PBG.7.7	Molecular Breeding	3 (1+2)
	PBG.7.8	Plant tissue culture	4 (1+3)
	PBG.7.9	Recombinant DNA Technology	3 (1+2)
	PBG.7.10	Bio informatics	3 (1+2)
	Biochem.7.2	Molecular Diagnostics	3(1+2)
	Ag.Micro.7.2	Microbial & Environmental Technology	4 (1+3)
8. Commercial Agriculture			
	Hort.7.11	Commercial floriculture	3 (1+2)
	Hort.7.12	Commercial fruit production	3 (0+3)
	Hort.7.13	Nursery management of horticultural crops	4 (1+3)
	Hort.7.14	Production technology of economic forest plants	3 (1+2)
	Agron.7.11	Cultivation of commercially important medicinal & aromatic plants	2 (1+1)
	Agron.7.12	Commercial spices production	3 (1+2)
	Agron.7.13	Commercial seed production technology	3 (1+2)

Rural Agricultural Work Experience (RAWE) (0+20) - 8th Semester- As Per following Model

Sr. No	Subject	CREDITS	Phase wise work (period-days)								TOTAL
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	
1	Agron.8.14	0+2	1	4	0	3	1	-	0		9
2	Hort.8.14	0+2	1	1	2	2	0	-	3		9
3	Ag.Chem.8.5	0+2	1	3	0	2	0	-	3		9
4	PBG.8.11	0+2	1	3	2	2	0	-	1		9
5	Ag. Engg.8.5	0+1	1	1	1	1	0	-	2		6
6	Pl. Path.8.7	0+2	1	3	0	3	0	-	1		8
7	Ag. Ento.8.8	0+2	1	3	0	3	0	-	1		8
8	LPM.8.3	0+1	0.5	0	0	2	1	-	1		4.5
9	Ag.Extn.8.8	0+2	1	1	1	1	3	-	1		8
10	Ag.Econ.8.15	0+1	1	1	0	1	0	-	2		5
11	Ag.Stat.8.3	0+1	0.5	0	4	0	0	-	0		4.5

12	Educational Tour	0+2						21			21
13	Exam. Evaluation									7	7
Total working days			10	20	10	20	5	21	15	5	106
Total Saturday for missed & extra work			2	4	2	4	1	-	3	1	17
Holidays			2	4	2	4	1	-	3	1	17
Total days			14	28	14	28	7	21	21	7	140

P₁ = Orientation, **P₂** = Research Station, **P₃** = High Tech Cell, **P₄** = Village Exposure, **P₅**= NGO
P₆= Educational Tour **P₇**= Industries and Cooperatives **P₈**=Report and Evaluation