## **B.Sc.** (Hons) Agriculture

Implemented from Academic Session2020-2025



Approved by : Academic Council ( DTBU )

### NATIONAL BACKWARD KRUSHI VIDYAPEETH DEEMED TO BE UNIVERSITY SOLAPUR - 413219

# Semester wise distribution of courses at the UG Degree Programme B.Sc.(Hons.)Agriculture Academic Council ( DTBU )

#### Implementedfromacademicsession2020-2025 as per the

S.N.	Title of Courses/Papers	Credits (Theory	<b>Course Codes</b>
9.11.	Title of Courses/Fapers	and Practical)	Course Coues
1	Fundamentals of Agronomy	3 (2+1)	AG-101
2	Fundamentals of Genetics	3 (2+1)	AG-102
3	Fundamentals of Soil Science	3 (2+1)	AG-103
4	Fundamentals of Horticulture	2 (1+1)	AG-104
5	Rural Sociology & Educational Psychology	2 (1+1)	AG-105
6	Introduction to Forestry	2 (1+1)	AG-106
7	Introductory Animal Husbandry	3(2+1)	AG-107
8	Comprehension & Communication Skills in	2 (1+1)	AG-108
	English		
Remed	ial Courses		
9	Agricultural Heritage	2(2+0)	AG-109
10	Introductory Biology	2 (1+1)	AG-110
11	Elementary Mathematics	2 (2+0)	AG-111
Non G	radial Courses		l
12	NSS/NCC/Physical Education & Yoga Practices	2 (1+1)	AG-112A/
		, ,	AG-112B/
			AG-112C
	TOTAL:-20+0	04 (forAgri)+02=26	
	20-	+04(for Bio)+02=26	

Note: 1.Agriculturebasestudents will study: Introductory Biology & Elementary Math

- 2. Biobase students will study: Agriculture Heritage & Elementary Math
- 3. Math base students will study: Agriculture Heritage & Introductory Biology

	B.Sc.(Hons.)Agriculture, Semester II			
S.N.	Title of Courses/Papers	Credits (Theoryand Practical)	Course Codes	
1	Fundamentals of Crop Physiology	3 (2+1)	AG-201	
2	Fundamentals of plant biochemistry	3 (2+1)	AG-202	
3	Fundamentals of Entomology-I	3 (2+1)	AG-203	
4	Fundamentals of Agricultural Economics	2 (1+1)	AG-204	
5	Principles of Organic Farming	2 (1+1)	AG-205	
6	Fundamentals of Plant Pathology	4 (3+1)	AG-206	
7	Production Technology for Vegetables and Spices	2 (1+1)	AG-207	
8	Fundamentals of Agricultural Extension Education	3 (2+1)	AG-208	
9	Food Processing and Safety Issues	3 (2+1)	AG-209	

10	Human Values& Ethics	1(1+0)	AG-210
11	Soil and Water Conservation Engineering	2 (1+1)	AG-211
	TOTAL	28 (18+10)	

S.N.	Title of Courses/Papers		Course Codes
		(Theory and Practical)	
1	Crop Production Technology-1(Kharif/crops)	2 (1+1)	AG-301
2	Practical Crop Production -1 (Khari f crops)	2 (0+2)	AG-302
3	Fundamentals of Plant Breeding	3 (2+1)	AG-303
4	Agricultural Microbiology	2 (1+1)	AG-304
5	Agricultural Finance and Co-Operation	3 (2+1)	AG-305
6	Farm Machinery and Power	2 (1+1)	AG-306
7	Principles of Integrated Disease Management	3 (2+1)	AG-307
8	Environmental Studies& Disaster Management	3 (2+1)	AG-308
9	Statistical Methods	2 (1+1)	AG-309
10	Dairy Science	3 (2+1)	AG-310
11	Fundamentals of Entomology-II	2 (1+1)	AG-311
	TOTAL	27(15+12)	

S.N.	Titleof Courses/Papers	Credits (Theory and Practical)	Course Codes
1	Crop Production Technology-II (Rabicrops)	2 (1+1)	AG-401
2	Practical Crop Production –II (Rabicrops)	2 (0+2)	AG-402
3	Principles of Seed Technology	3 (2+1)	AG-403
4	Problematic soils and their Management	2 (1+1)	AG-404
5	Renewable Energy and Green Technology	2 (1+1)	AG-405
6	Production Technology for Ornamental Crops, MAP and Landscaping	2 (1+1)	AG-406
7	Entrepreneurship Development and Business Communication	2 (1+1)	AG-407
8	Introductory Agro-meteorology &Climate Change	2 (1+1)	AG-408
9	Agri-Informatics	2 (1+1)	AG-409
10	Poultry Production & Management	3 (2+1)	AG-410
	TOTAL	22 (11+11)	

	B.Sc.(Hons.)Agriculture, Seme	esterV	
S.N.	Title of Courses/Papers	Credits (Theory and Practical)	Course Codes
1	Rainfed and dryl and Agriculture	2(1+1)	AG-501
2	CropImprovement-1(Khariferops)	2(1+1)	AG-502
3	Pests of Field Crops, Stored Grains and their Management	3(2+1)	AG-503
4	Agricultural Marketing Trade &Prices	3(2+1)	AG-504
5	Protected Cultivation and Secondary Agriculture	2(1+1)	AG-505
6	Diseases of Fieldand Horticultural Cropsandtheir Management-I	3(2+1)	AG-506
7	Production Technology for Fruit and Plantation Crops	2(1+1)	AG-507
8	Communication Skills and Personality	2(1+1)	AG-508
-	Development	1/1 0	A G. 500
9	Intellectual Property Rights	1(1+0)	AG-509
10	Principles of Food Science & Nutrition	3(2+1)	AG-510
11	Geo-informatics and Nanotechnology	2(1+1)	AG-511
12	Elective-I.(To be selected only one course from	3(2+1)	
	The following lective courses)		
	TOTAL	28(17+11)	
Electiv	e courses		
	1. Agribusiness Management	3(2+1)	AGE-51
	2. Agrochemicals	3(2+1)	AGE-52
	3. Commercial Plant Breeding	3(1+2)	AGE-53
	4. Landscaping	3(2+1)	AGE-54
	5. Food Safety and Standards	3(2+1)	AGE-55
	6. Biopesticides & Biofertilizers	3(2+1)	AGE-56

	B.Sc.(Hons.)Agriculture ,Ser	nesterVI	
S.N.	Title of Courses/Papers	Credits (Theory and Practical)	Course Codes
1	Farming System, Precision Farming& Sustainable Agriculture	2(1+1)	AG-601
2	Crop Improvement -II(Rabicrops)	2(1+1)	AG-602
3	Manures, Fertilizers and Soil Fertility  Management	3(2+1)	AG-603
4	Farm Management, Production & Resource Economics	2(1+1)	AG-604
5	Diseases of Field and Horticultural Crops And their Management-II	3(2+1)	AG-605
6	Post-harvest Management and Value Addition of Fruits and Vegetables	2(1+1)	AG-606
7	Watershed and Wastel and Management	2(1+1)	AG-607
8	Beneficial insects and Pest of Horticultural Crops and their Management	3(2+1)	AG-608
9	Elective-II.(To be selected only one	3(2+1)	
	Course from the following elective courses)		
10	Educational Tour	2(0+2)	AGT-609
	TOTAL	24(13+11)	
Electi	ve courses		
1.	Protected Cultivation	3(2+1)	AGE-61
2.	Hi-tech. Horticulture	3(2+1)	AGE-62
3.	Weed Management (Deptt .of Agronomy)	3(2+1)	AGE-63
4.	System Simulation and Agro-advisory (Soil Conservation)	3(2+1)	AGE-64
5.	Agricultural Journalism	3(2+1)	AGE-65
6.	Compositioncum Duck/(and)Quail/ (and) Rabbitculture.	3(2+1)	AGE-66

#### B.Sc.(Hons.)Agriculture ,SemesterVII AG-701- RAWE&AIA

## Rural Agricultural Work Experience and Agro-industrial Attachment (RAWE&AIA)

SN.	Activities	No .of weeks	Credit Hours
1	General orientation & on campus training by Different faculties	1	
2	Village attachment	8	
	Unit attachment in Univ. /College.KVK/ Research Station Attachment	5	14
3	Plant clinic	2	02
	Agro-Industrial Attachment	3	04
4	Educational Tour (Non-Gradial)		2
5	Project Report Preparation ,Presentation and Evaluation	1	
	Total weeks for RAWE&AIA	20	20 (0+20)

#### **Agro Industrial Attachment**

Studentsshallbeplacedin Agro-and Cottageindustries and Commodities Boards for 03 weeks. Industries include Seed/Sapling production, Pesticides insecticides, Post harvest-processing-value addition, Agri-finance institutions, etc.

#### Activities and Tasksduring Agro-Industrial Attachment Programme

Acquaintance with industry and staff. Study of structure, functioning, objective and mandates of theindustry. Study of various processing units and hands-on trainings undersupervision of industry staff. Ethics of industry, employment generated by the industry.

Contribution of the industry promoting environment, learning business network includingoutletsoftheindustry. Skilldevelopmentinallerucialtasksoftheindustry, documentation of the activities and task performed by the students, performance evaluation, appraisal and ranking of students

## B.Sc.(Hons.)Agriculture, SemesterVIII<sup>th</sup> AG-801 - STUDENT READY PROG

#### Experiential Learning Programme (ELP)Hand On Training (HOT)

#### Modules for Skill Development and Entrepreneurship:

Astudenthastochooseanytwomodulesof(0+10)creditseach(total20credits)from the following package of modules.

S. N.	Title of the module	Credits 20 (0+20)
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

#### **Evaluation of Experiential Learning Programme/ HOT(HandOnTraining)**

Project Planning, Writing and Presentation – 20 Marks

Regularity and Monthly Assessment —20Marks
Output delivery and Technical Skill Development —20Marks

EntrepreneurshipSkillsandBusinessnetworkingskills–20Marks

Report Writing Skills and Final Presentation – 20 Marks

**Total=100 Marks** 

Distribution of Credits in Differen	nt Semesters
Semesters	TotalCredits
1stsemester	26
2 <sup>nd</sup> semester	28
3 <sup>rd</sup> semester	27
4 <sup>th</sup> semester	22
5 <sup>th</sup> semester	28
<b>6</b> <sup>th</sup> semester	24
Up to 6th semester	155
7 <sup>th</sup> Semester (Student Ready Program.)	20
(Rural Agricultural Work Experience(RAWE)and	
Agri-Industrial Attachment (AIA) includes Educational	
Tour)	
Educational Tour(Non-Gradial)	2
8 <sup>th</sup> Semester (Student Ready Programme)	20
Experiential Learning Programme (ELP) Hand on	
Training (Hot)	
(Student has to choose any two Modules of0+10	
Credits Lod)	
Grand Total	(155+40)=195

#### **Abbreviations-**

B.Sc. (Hons.) A griculture - B.Sc. (Honours) A griculture

AG-101	-NBKVS(DTBU) Agriculture First paper of first semester
AG-201	- NBKVS(DTBU) Agriculture First paper of second semester
AG-301	- NBKVS(DTBU) Agriculture First paper of Third semester
AG-401	- NBKVS(DTBU) Agriculture First paper of fourth semester
AG-501	- NBKVS(DTBU) Agriculture First paper of fifth semester
AG-601	- NBKVS(DTBU) Agriculture First paper of sixth semester
AG-701	- NBKVS(DTBU) Agriculture RAWE&AIA(Rural Agricultural
	-Work Experience and Agro-industrial Attachment)
AG-801	Student Ready Programme (Modules for Skill Development and Entrepreneurship)