



SCHOOL OF AGRICULTURE

Programme Educational Objectives (PEOs)

Program Outcomes (POs)

Program Specific Outcomes (PEOs)

Course Outcomes (COs)

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Vision and Mission

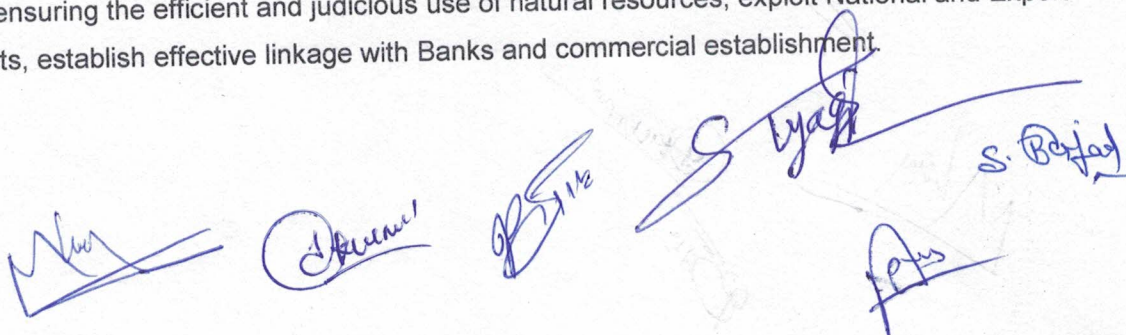
Vision

Now a days, challenges of global warming, food security, nutritional security, sustainable development, degradation of natural resources and low profitability to small and marginal farmers demand attention towards global economy. Therefore, the research vision of University has been targeted towards:

- Generating technologies to provide food and nutrition security by using crop improvement and genetic engineering for high productivity and quality traits; conservation and development of bio-diversity
- Conservation and optimal utilization of natural resources with focus on soil health, input use efficiency, production technique to mitigate climate change, cropping and farming system development under resource constraints focusing on water resource management, organic pest and disease management, crop modeling, use of remote sensing and Geographical Information System (GIS)
- Postharvest process and value addition of crops, fruit and vegetables to minimize losses and enhance commercialization of products through appropriate packaging, handling and storage techniques.
- Enhancing profitability of small land holders through appropriate techniques, farming system and processes, service and commercialization of agriculture by involving entrepreneurs, minimizing of market chain and emphasis on patent, IPR management, International trade and exports.
- Developed ICT based extension and communication networks for farmers and extension personnel and for knowledge based agricultural development.

Mission

- To contribute to the improvement of livelihoods of the rural and urban communities in Madhya Pradesh by enhancing food and nutritional security and improving livelihoods through research to achieve sustainable increases in agricultural productivity and income, while ensuring the efficient and judicious use of natural resources, exploit National and Export markets, establish effective linkage with Banks and commercial establishment.



PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

- PEO1 Imparting subject-related knowledge along with developing a connection between practical solutions and theory
- PEO2 Encourage personal growth among students and boost their self-confidence, which will give them opportunities to be an integral part of the agro-industry
- PEO3 Making the agriculture-related subjects interesting through scientific and experimental evidence.
- PEO4 Develop problem-solving skills through practical applications and research

PROGRAMME OUTCOMES (POs)

- PO1 Imparting detailed knowledge of Agriculture and its allied branches
- PO2 Facilitating detailed study of various agriculture forestry, Livestock and other allied branches required to raise the income of farmers
- PO3 Providing detailed knowledge of agriculture in India and Indian farmers income generating enterprises
- PO4 Knowledge dissemination regarding various technique of farming and farming system in India
- PO5 Study of market and marketing of agricultural produce

PROGRAM SPECIFIC OUTCOMES (PSOs)

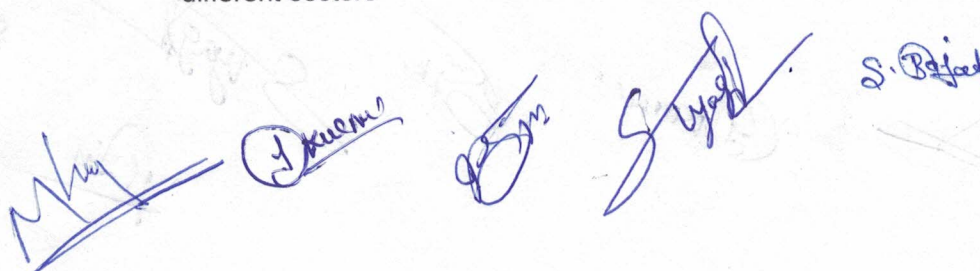
- PSO1 Understand the impact of the professional agricultural solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development
- PSO2 To demonstrate research based knowledge of the legal and ethical environment impacting agriculture organizations and exhibit an understanding and appreciation of the ethical implications of decisions
- PSO3 To demonstrate an understanding of and appreciation for the importance of the impact of globalization and diversity in modern agriculture organizations. Understanding of globalization, and NGO working

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- PSO4** To demonstrate an ability to engage in critical thinking by analyzing situations and constructing and selecting viable solutions to solve problems. Ability to work effectively with others. To develop analytical ability and team work spirit
- PSO5** To understand and analyze the current events and issues that are occurring in agriculture and how they affect futuristic agriculture
- PSO6** Enable to recognize and examine the relationships between inputs and outputs in their agricultural field to make effective and profitable decisions. To understand mechanics of agripreneurship.
- PSO7** Understand how all aspects of agriculture combine and are used by scientists, marketers, producers and understand how employer characteristics and decision-making at various levels enhance the success of an agricultural enterprise. To understand components of agri business and economics of market.
- PSO8** Able to demonstrate critical thinking and problem solving skills as they apply to a variety of animal and or plant production systems .To understand problem solving skills in crop production and animal husbandry.
- PSO9** Knowledge of Weather codes and Symbols, Reading and Recording of weather and climatic data. To get trained for climatologically records, Soil data, and Plant nutrition.
- PSO10** To develop critical and self-critical opinion and approach aiming at solving the most important practical problems in the field of plant protection by applying gained competencies and in accordance with high standards of academic integrity (ethics and moral) both in the profession and in society as a whole. To develop competence to work in Government, public and private sectors.
- PSO11** Demonstrate knowledge and understanding in the horticulture section: The breadth and depth of the profession of horticulture. Basic horticulture biology: taxonomy, anatomy, morphology, and physiology. The characteristics of the environment and their influence on plant growth and development. Current applications of horticultural principles and practices: propagation, pest management, production, maintenance, and business practices. Comprehensive knowledge of horticultural production.
- PSO12** This programme will also help students to enhance their employability for jobs in different sectors



SCHEME

The structure of the course will comprise following-papers in Semester.

SEMESTER-VII			
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	02
	Agro-Industrial Attachment	3	04
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 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

S.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

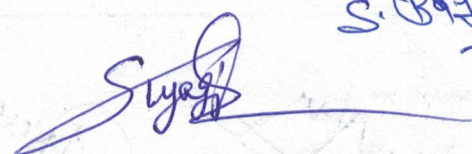
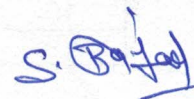
Agro Industrial Attachment

- 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

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**.

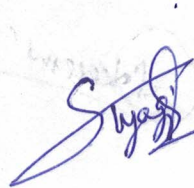
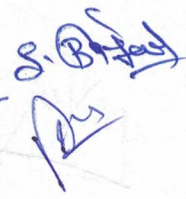
SEMESTER-VIII		
S. No.	TITLE OF THE MODULE	CREDITS
1.	Production Technology for Bioagents and Biofertilizer	0+10
2.	Seed Production and Technology	0+10
3.	Mushroom Cultivation Technology	0+10
4.	Soil, Plant, Water and Seed Testing	0+10
5.	Commercial Beekeeping	0+10
6.	Poultry Production Technology	* 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

S. 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



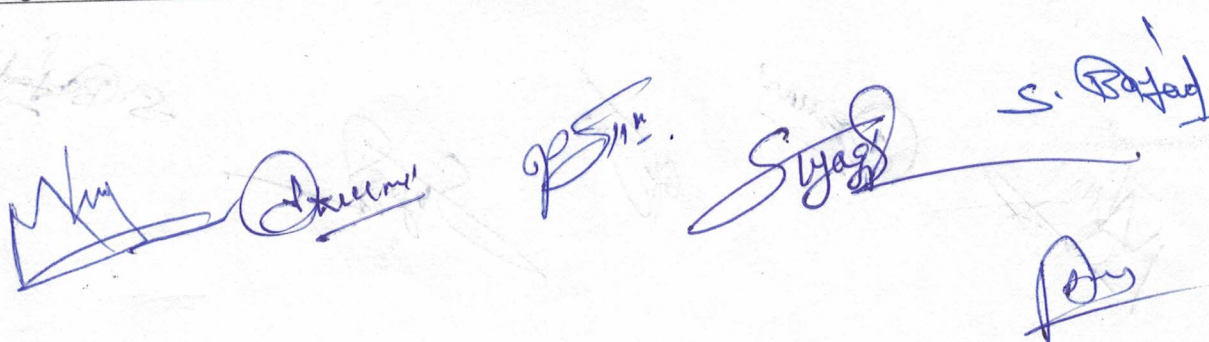




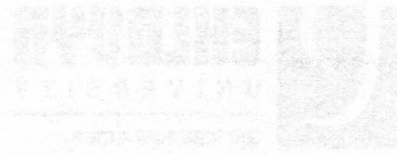
Discipline-wise summary of credit hours

S.No.	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, NC126 +3+ 1+5+ 9 credits elective
RAWE +ELP		20 +20
Grand Total		144+20+20=184
New Courses		24+4 (remedial)+1 NC)

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

S. No.	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)
5.	Food Safety and Standards	3(2+1)
6.	Bio pesticides & bio fertilizers	3(2+1)
7.	Protected Cultivation	3(2+1)
8.	Micro propagation Technologies	3(1+2)
9.	Hi-tech. Horticulture	3(2+1)
10.	Weed Management	3(2+1)
11.	System Simulation and Agro-advisory	3(2+1)
12.	Agricultural Journalism	3(2+1)





Discipline - the amount of credit hours

CREDITS	COURSE	NO.
3-0-3	Plant Pathology	1
3-0-3	Plant Entomology	2
3-0-3	Plant Breeding	3
3-0-3	Plant Physiology	4
3-0-3	Plant Biochemistry	5
3-0-3	Plant Ecology	6
3-0-3	Plant Genetics	7
3-0-3	Plant Microbiology	8
3-0-3	Plant Biotechnology	9
3-0-3	Plant Nutrition	10
3-0-3	Plant Water Relations	11
3-0-3	Plant Growth and Development	12
3-0-3	Plant Systematics	13
3-0-3	Plant Anatomy	14
3-0-3	Plant Ecology	15
3-0-3	Plant Physiology	16
3-0-3	Plant Biochemistry	17
3-0-3	Plant Biotechnology	18
3-0-3	Plant Nutrition	19
3-0-3	Plant Water Relations	20
3-0-3	Plant Growth and Development	21
3-0-3	Plant Systematics	22
3-0-3	Plant Anatomy	23
3-0-3	Plant Ecology	24
3-0-3	Plant Physiology	25
3-0-3	Plant Biochemistry	26
3-0-3	Plant Biotechnology	27
3-0-3	Plant Nutrition	28
3-0-3	Plant Water Relations	29
3-0-3	Plant Growth and Development	30
3-0-3	Plant Systematics	31
3-0-3	Plant Anatomy	32
3-0-3	Plant Ecology	33
3-0-3	Plant Physiology	34
3-0-3	Plant Biochemistry	35
3-0-3	Plant Biotechnology	36
3-0-3	Plant Nutrition	37
3-0-3	Plant Water Relations	38
3-0-3	Plant Growth and Development	39
3-0-3	Plant Systematics	40
3-0-3	Plant Anatomy	41
3-0-3	Plant Ecology	42
3-0-3	Plant Physiology	43
3-0-3	Plant Biochemistry	44
3-0-3	Plant Biotechnology	45
3-0-3	Plant Nutrition	46
3-0-3	Plant Water Relations	47
3-0-3	Plant Growth and Development	48
3-0-3	Plant Systematics	49
3-0-3	Plant Anatomy	50
3-0-3	Plant Ecology	51
3-0-3	Plant Physiology	52
3-0-3	Plant Biochemistry	53
3-0-3	Plant Biotechnology	54
3-0-3	Plant Nutrition	55
3-0-3	Plant Water Relations	56
3-0-3	Plant Growth and Development	57
3-0-3	Plant Systematics	58
3-0-3	Plant Anatomy	59
3-0-3	Plant Ecology	60
3-0-3	Plant Physiology	61
3-0-3	Plant Biochemistry	62
3-0-3	Plant Biotechnology	63
3-0-3	Plant Nutrition	64
3-0-3	Plant Water Relations	65
3-0-3	Plant Growth and Development	66
3-0-3	Plant Systematics	67
3-0-3	Plant Anatomy	68
3-0-3	Plant Ecology	69
3-0-3	Plant Physiology	70
3-0-3	Plant Biochemistry	71
3-0-3	Plant Biotechnology	72
3-0-3	Plant Nutrition	73
3-0-3	Plant Water Relations	74
3-0-3	Plant Growth and Development	75
3-0-3	Plant Systematics	76
3-0-3	Plant Anatomy	77
3-0-3	Plant Ecology	78
3-0-3	Plant Physiology	79
3-0-3	Plant Biochemistry	80
3-0-3	Plant Biotechnology	81
3-0-3	Plant Nutrition	82
3-0-3	Plant Water Relations	83
3-0-3	Plant Growth and Development	84
3-0-3	Plant Systematics	85
3-0-3	Plant Anatomy	86
3-0-3	Plant Ecology	87
3-0-3	Plant Physiology	88
3-0-3	Plant Biochemistry	89
3-0-3	Plant Biotechnology	90
3-0-3	Plant Nutrition	91
3-0-3	Plant Water Relations	92
3-0-3	Plant Growth and Development	93
3-0-3	Plant Systematics	94
3-0-3	Plant Anatomy	95
3-0-3	Plant Ecology	96
3-0-3	Plant Physiology	97
3-0-3	Plant Biochemistry	98
3-0-3	Plant Biotechnology	99
3-0-3	Plant Nutrition	100

Students should select their courses out of the following and enter during the 8th and 9th semester.

CREDIT HOURS	COURSES	NO.
3-0-3	Plant Pathology	1
3-0-3	Plant Entomology	2
3-0-3	Plant Breeding	3
3-0-3	Plant Physiology	4
3-0-3	Plant Biochemistry	5
3-0-3	Plant Ecology	6
3-0-3	Plant Genetics	7
3-0-3	Plant Microbiology	8
3-0-3	Plant Biotechnology	9
3-0-3	Plant Nutrition	10
3-0-3	Plant Water Relations	11
3-0-3	Plant Growth and Development	12
3-0-3	Plant Systematics	13
3-0-3	Plant Anatomy	14
3-0-3	Plant Ecology	15
3-0-3	Plant Physiology	16
3-0-3	Plant Biochemistry	17
3-0-3	Plant Biotechnology	18
3-0-3	Plant Nutrition	19
3-0-3	Plant Water Relations	20
3-0-3	Plant Growth and Development	21
3-0-3	Plant Systematics	22
3-0-3	Plant Anatomy	23
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3-0-3	Plant Nutrition	64
3-0-3	Plant Water Relations	65
3-0-3	Plant Growth and Development	66
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3-0-3	Plant Nutrition	73
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EKALAVYA UNIVERSITY, DAMOH (M.P.)

Scheme of Examination B.Sc. (Hons.) Agriculture I Year

/For batch in Admitted in Academic Session 2023-24/

Semester - I

S. No.	Subject Code	Subject Name	Sessional				Contact Periods Per Week			Credit	
			Theory	Mid Sem.	Class Assignment	Practical	Total	L	T		P
1	BAGRI20S101	Fundamentals of Horticulture	50	30	5	15	100	1	0	1	2(1+1)
2	BAGRI20S102	Fundamentals of Plant Biochemistry and Biotechnology	50	30	5	15	100	2	0	1	3(2+1)
3	BAGRI20S103	Fundamentals of Soil Science	50	30	5	15	100	2	0	1	3(2+1)
4	BAGRI20S104	Introduction to Forestry	50	30	5	15	100	1	0	1	2(1+1)
5	BAGRI20S105	Comprehension & Communication Skills in English	50	30	5	15	100	1	0	1	2(1+1)
6	BAGRI20S106	Fundamentals of Agronomy	50	30	5	15	100	3	0	1	4(3+1)
7	BAGRI20S107(A)	Elementary Mathematics*	50	40	10	0	100	2	0	0	2(2+0)
	BAGRI20S107(B)	Introductory Biology*	50	30	5	15	100	1	0	1	2(1+1)
8	BAGRI20S108	Agricultural Heritage*	50	40	10	0	100	1	0	0	1(1+0)*
9	BAGRI20S109	Rural Sociology & Educational Psychology	50	40	10	0	100	2	0	0	2(2+0)
10	BAGRI20S110	Human Values & Ethics (non gradial)	50	40	10	0	100	1	0	0	1(1+0)**
11	BAGRI20S111	NSS/NCC/Physical Education & Yoga Practices**	0	0	0	100	100	0	0	2	2(0+2)**
Total											26(17+9)

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