UNIVERSITY OF AGRICULTURAL SCIENCES, BANGALORE Directorate of Post Graduate Studies, UAS, GKVK, Bengaluru -560 065

Courses Offered at CoA, GKVK for Doctoral Degree Programmes

1. Ph.D. in Agribusiness Management

Course No.	Title	Credit Hours
	I Semester of 2022-23	
Major Course	es	
ABM 602	Research Methods - I	3 (2+1)
ABM 603	Agri Input & Output Marketing	3 (2+1)

^{*} To register for Supporting and Minor Courses discuss with respective HoD

2. Ph.D. in Agricultural Economics

Course No.	Title	Credit Hours
	I Semester of 2022-23	
Major Course	s	
AEC 601	Advanced Micro Economic Analysis	2(1+1)
AEC 603	Advanced Econometrics	3(2+1)
AEC 604	Advanced Production Economics	3(2+1)

^{*} To register for Supporting and Minor Courses discuss with respective HoD

3. Ph.D. in Entomology

Course No.	Title	Credit Hours
	I Semester of 2022-23	
Major Course	s	
ENT 601	Insect Phylogeny and Systematics	3 (2+1)
ENT 606	Insect toxicology and Residue	3 (2+1)
Minor Course		
ENT 607	Plant Resistance to Insects	2 (1+1)

^{*} To register for Supporting and Minor Courses discuss with respective HoD

4. Ph.D. in Agricultural Extension Education

Course No.	Title	Credit Hours
	I Semester of 2022-23	
Major Course	S	
AEE 602	Methodologies for Social and Behavioural Sciences	3 (2+1)
AEE 604	Educational Technology and Instructional Design	3 (2+1)

^{*} To register for Supporting and Minor Courses discuss with respective HoD

5. Ph.D. in Microbiology

Course No.	Title	Credit Hours
	I Semester of 2022-23	
Major Course	s	
MIC 604	Recent approaches in Environmental	2 (2+0)
	Microbiology	
MIC 605	Plant-Microbe Interactions	3 (2+1)

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6. Ph.D. in Agronomy

Course No.	Title	Credit Hours
	I Semester of 2022-23	
Major Course	s	
AGR 601	Current Trends in Agronomy	3 (3+0)
AGR 605	Integrated Farming Systems and Sustainable Agriculture	2 (2+0)
Minor Course		
AGR 604	Recent Trends in Weed Management	2 (2+0)

^{*} To register for Supporting and Minor Courses discuss with respective HoD

7. Ph.D. in Plant Physiology

Course No.	Title	Credit Hours
	I Semester of 2022-23	
Major Courses		
PPH 601	Functional Genomics and Genes Associated with a Few Physiological Processes	2 (2+0)
PPH 607	Physiological and Molecular Aspects of Source- sink Capacity for Enhancing Yield	3 (3+0)

^{*} To register for Supporting and Minor Courses discuss with respective HoD

8. Ph.D. in Food Science and Nutrition

Course No.	Title	Credit
		Hours
	I Semester of 2022-23	
Major Course	s	
FSN 602	Metabolism of Vitamins and Hormones	2 (2+0)
FSN 605	Advances in Energy Metabolism	2 (2+0)
FSN 606	Nutrition and Agricultural Interface	2 (2+0)
FSN 608	Application of Biotechnology in food and nutrition	2 (2+0)

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9. Ph.D. in Forestry and Environmental Science

Course No.	Title	Credit
		Hours
	I Semester of 2022-23	
Major Course	es ·	
FES 604	Advances In Agro-Forestry Systems and Management	2 (2+0)
FES 605	Green Technologies and Environmental Protection	2 (1+1)
FES 607	Advances in Silviculture	2 (2+0)
FES 615	Advanced Wild Life Management	2 (1+1)

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10. Ph.D. in Genetics and Plant Breeding

Course No.	Title	Credit
		Hours
	I Semester of 2022-23	
Major Course	es	
GPB 601	Advances in Plant Breeding Systems	3 (3+0)
GPB 602	Advances in Biometrical Genetics	3 (2+1)
GPB 603	Molecular Cytogenetics for Crop Improvement	2 (2+0)
GPB 605	Genomics in Plant Breeding	3 (3+0)
GPB 609	IPR and Regulatory Mechanisms	1 (1+0)
Minor Course		
GPB 607	Crop Evolution	3 (3+0)

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11. Ph.D. in Horticulture

Course No.	Title	Credit
		Hours
	I Semester of 2022-23	
Major Course	es ·	
HRT 602	Advances in Production Technology of Vegetable	3 (2+1)
	crops	
HRT 603	Advances in Production Technology of	3 (2+1)
	Commercial flowers	
HRT 604	Advances in Production Technology of Plantation,	3 (2+1)
	Spices, Medicinal and Aromatic Crops	
Minor Courses		
HRT 608	Advances in Plant Propagation of Fruit Crops	2 (1+1)

^{*} To register for Supporting and Minor Courses discuss with respective HoD

12. Ph.D. in Biochemistry

Course No.	Title	Credit Hours
	I Semester of 2022-23	
Major Course	es	
BCM 602	Advanced Molecular Biology	3 (3+0)
BCM 607	Application of Techniques in Biochemistry	3 (1+2)

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13. Ph.D. in Molecular Biology and Biotechnology

Course No.	Title	Credit Hours
I Semester of 2022-23		
Major Courses		
MBB 601	Plant Molecular Biology	3 (3+0)
MBB 602	Plant Genome Engineering	3 (3+0)

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14. Ph.D. in Plant Pathology

Course No.	Title	Credit Hours	
I Semester of 2022-23			
Major Courses			
PAT 601	Advances in Mycology	3 (2+1)	
PAT 602	Advances in Virology	3 (2+1)	
PAT 604	Molecular Basis of Host-pathogen Interaction	3 (2+1)	

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15. Ph.D. in Seed Science and Technology

Course No.	Title	Credit Hours	
I Semester of 2022-23			
Major Courses			
SST 601	Hybrid Seed Production Technology	3 (2+1)	
SST 604	Genetic Purity and DUS Testing	3 (2+1)	
SST 607	Advances in Seed Quality Enhancement	2 (1+1)	

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16. Ph.D. in Sericulture

Course No.	Title	Credit Hours	
I Semester of 2022-23			
Major Courses			
SER 601	Advances in Genetics and Breeding of Mulberry	2 (1+1)	
SER 602	Physiology and Nutrition of Mulberry	2 (1+1)	
SER 606	Integrated Pest Management in Sericulture	2 (1+1)	

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17. Ph.D. in Soil Science

Course No.	Title	Credit	
		Hours	
I Semester of 2022-23			
Major Course	s		
SSC 602	Modern Concept in Soil Fertility	2 (2+0)	
SSC 603	Physical Chemistry of Soil	2 (2+0)	
SSC 604	Soil Genesis and Micro Morphology	2 (2+0)	
SSC 605	Bio-Chemistry of Soil Organic Matter	2 (2+0)	

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