

SCHOOL OF AGRICULTURE SCIENCES



B. Sc.(Hons.)Agriculture

(As per ICAR Sixth Deans' Committee Recommendations)

Programme Structure
Bachelor of Science Honours in Agriculture

2024-2025

K. K. UNIVERSITY
NALANDA, BIHAR-803115



Rumk
Pro Vice Chancellor
KK University
Berauti, Nepura, Bihar Sharif
Nalanda - 803115 (Bihar)

Programme Structure
Undergraduate Programme of Bachelor of Science Honours in Agriculture

B.Sc. (Hons.) Agriculture : Four Year (8-Semester)			
Basic Structure: Distribution of Courses			
S.No.	Type of Courses		Credits
1	Core courses (Major & Minor/s)DSC	:	112
2	Common courses (MDC+VAC+AEC)	:	23
3	Skill Enhancement Courses (SEC)	:	12
4	Internship/ Student READY	:	20
5	**MOOCS/SWAYAM	:	10 non-gradial
6	Total	:	167+10**

Summary of credit distributions among different categories of courses (Credit hours)

Semester	Core Courses (Major and Minor)	Multi- Disciplinary Course (MDC)	Value Added Course(VAC)	Ability Enhancement Course (AEC)	Skill En-hancement Course (SEC)	Internship/Project/ Student READY	Total Credits	Non gradial	Internship	Onlinecourse/ MOOC
I	11	3(3)		1(4)+2(5)	4		21	2(1)+1(2)	----	10(15)
II	11	---	3(6)	1(4)+2(7)	4		21		10(13)	
III	14	3(8)	---	2(9)	2		21	---	---	
IV	16	---	3(10)	----	2		21		10(14)	
V	19	3(11)	----	----	----		22	2(12)	----	
VI	21	-	---	---	---		21		---	
VII	20	--	--	---	--		20		--	
VIII		--	--	---	--	20	20			
Total	112	9	6	8	12		167	4	20	10

- (1) Deeksharambh (Induction-cum-Foundation Course) of 2 credits (2 weeks duration).
- (2) Remedial Course: Mathematics of 1 credit
- (3) Farming based Livelihood systems
- (4) NCC/NSS
- (5) Communication Skills
- (6) Environmental Studies and Disaster management
- (7) Personality development
- (8) Entrepreneurship Development and Business Management
- (9) Physical Education, First Aid and Yoga Practices
- (10) Agricultural Informatics and Artificial Intelligence
- (11) Agricultural Marketing and Trade
- (12) Study tour (10-14 days)
- (13) Only for those opting for an exit with UG-Certificate and
- (14) Only for those opting for an exit with UG-Diploma
- (15) Online course: student will make his own planning and execution of online courses with intimation to the Dean



Course module designed for the B.Sc. (Hons.) Agriculture programme:

The B. Sc (Hons) Agriculture program will be of 177 credits, which will have 167 credits offered by the parent university and 10 credits of online courses taken by the student as per his/ her choice in consultation with university/HAEIs.

After the admission in the college, the students will register for the Foundation programme of 2 weeks' duration in the 1st semester. A course entitled "Deeksharambh" (0+2) (non-gradual) will be offered at the start of first semester for two weeks' duration. This will create a platform for students to learn from each other's life experiences, help for cultural Integration of students from different backgrounds, know about the operational framework of academic process in university, instilling life and social skills, social Awareness, ethics and values, team work, leadership, creativity, etc. It will also help in identifying the traditional values and indigenous cultures along with diverse potentialities both in indigenous and developed scenario. There will be sessions by alumni, business leaders, outstanding achievers in related fields, people with inspiring life experiences as well as the University academic & research managers.

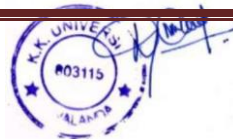
The first year of the course programme comprises of skill development courses along with other fundamental courses of agricultural science. After satisfactory completion of 42 credits of courses in two semesters of 1st year and subsequent satisfactory completion of 10 credits (10 weeks) of industry/ institute training/ internship, the student will become eligible for the award of UG-Certificate in Agriculture on exit. The students continuing the study further, would not have to attend the internship after 1st year.

The second year has been designed with the skill development courses, basic courses as well as fundamental courses in agriculture with adequate theory and practical components, enabling the student to get acquainted with the basic principles and applications of agricultural sciences. After satisfactory completion of the courses (84 credits) during first two years and subsequent satisfactory completion of 10 credits (10 weeks) of internship, the student will become eligible for the award of UG-Diploma in Agriculture on exit. The students continuing the study further, would not have to attend the internship after 2nd year.

During the 5th semester, the students will have a study tour of 10-12 days duration, which will be counted as 2 credits (non-gradual).

The third- and fourth-year courses have been designed to impart specialized knowledge to the students in the major disciplines. During the 7th semester, the students will adequately select 20 credits from a basket of elective courses, each course being of 4 credits giving an opportunity to them to gain advanced knowledge in frontier areas of agricultural science. The Universities will have flexibility to include more courses as Electives depending on specific needs and situational variations. The objective is to enable the student to acquire deeper understanding in any particular field.

In the 8th semester of the course the major focus has been on strengthening of the knowledge and skill for developing confidence of the students to take entrepreneurship as their future career. For this they will undergo an advanced skill enhancement through Student READY programme (Rural Entrepreneurship in Agriculture Development Yozna) which will have segments as i) RAWE (Rural Awareness Work Experience) ii) Student project work and internship (10+10 credits), iii) Internship (20 credits) iii) Elective with student project work (10+10



credits) /Experiential Learning / Hands on Training/Industrial attachment. A student will select option/s on choice to complete the degree and pursue future career with 20 credits. Each student will be attached to a mentor either from the institution or from an organization/ industry. A university or a college will have the freedom to select the options as referred above.

The core and elective courses can also be modified maximum up to 30% with approval from competent authority of the University.

The students will take a minimum of 12 credits of online courses during four years as a partial requirement for the B. Sc (Hons) Agriculture programme. The indicative list of courses has been provided; however, online courses can be from any field such as Agriculture and allied sciences, Basic Sciences, Humanities, Psychology, Anthropology, Economics, Business Management, Languages including foreign language, Communication skills/ Music, etc. and can be taken from NPTEL, mookIT,ed X, Coursera, SWAYAM or any other such reputed portal. The objective is to allow the students to groom their passion or strengthen their knowledge and competency in any field beyond prescribed courses. These online courses will be non-gradual and separate certificates would be issued by institute/organization offering the courses. However, the university/ institute will keep a record of such courses registered and completed by each student and will indicate the title of the (successfully completed) courses in final transcript issued to the student. A student must submit the list of online courses along with the content he intends to undertake to the Dean/Assoc. Dean/Principal of the college for a permission and records.

At each stage of exit (UG-certificate/ UG-Diploma and B. Sc (Hons) Agriculture, the students are expected to acquire competency and confidence to get jobs, to face the real challenges in varied jobs and research, as well as to start their own enterprise. The social skills acquired by the students will also make the students more empathetic towards the society and social issues.

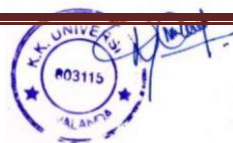
The credits (and contact hours) have been designed in such a way that along with class room teaching, the students will take up NSS/ NCC and Physical Education, Yoga, etc. in the first year as the case may. Further a balance has been made by inclusion of common courses, core courses in basic and applied areas, skill development courses, elective courses in advanced areas, online courses of choice, options for entrepreneurship and skill development to pursue future career. This will increase their acquaintance with the social/ technical problems, improve their analytical ability of the issues/ challenges and enhance their social responsibility.

Objective:

The course was design to gain a market increase in the turnover of the organization by enhancing the agricultural output using student’s energy, enthusiasm and expertise in the field of agricultural research and to the farmers directly.

A B.Sc. in Agriculture equips students with all-round knowledge of sector and normally includes the following:

1. **Agronomy:** Basics of Agronomy, Kharif and Rabi Crop, Crop Protection, Weed Management, Irrigation Techniques, Water Resource Management, Organic Farming, Sustainable Agriculture.
2. **Plant Genetics:** Botany, Basics of Genetics, Plant Breeding, Seed Technology, Basics of Biotechnology.

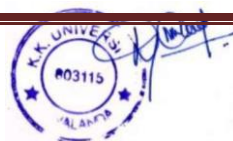


3. **Soil Science:**Introduction to Soil Science, Soil Fertility, Soil Chemistry, Fertilizers, Agricultural Chemistry.
4. **Entomology:** Pest Management, Beneficial Insects, Grain Storage and Management.
5. **Agricultural Economics:** Market prices, Trade prices, Marketing, Finance, Agribusiness Management, Farm Management.
6. **Agriculture Engineering:** Agriculture Machinery, Power and Tools, Harvest Technology, Environment Science and Engineering, Renewable Energy.
7. **Plant Pathology:** Crop Diseases, Nematology.
8. **Horticulture:** Fruit Crops, Medicinal Plants, Aromatic Plants, Flower Production, Spices, Plantation Crops.
9. **Agricultural Meteorology:** Climate patterns, Climatic hazards on Agriculture, Climatic Zones, Weather forecasting.
10. **Agricultural Extension:** Dimensions of Agricultural Extension, Extension Methodologies, Entrepreneurship Development program.

In all the above areas of study, practical sessions related to theoretical knowledge are also built into the course. There are some elective courses, study tours, field trips, in some semesters. These vary from university to university.

Pedagogy & Unique practices adopted:

- **Case Studies exposure:** *Case studies* provide live examples to the students from around the world demonstrating the best practices for sustainable *agriculture*. They provide evidence on farming practices in various ways. Case studies also demonstrate the dangers of excessive use of chemical fertilizers and pesticides in agriculture. Therefore, they understand sustainable organic agriculture practices too for achieving food security without harming the environment and public health.
- **Emphasis on practical exposure:** Emphasis on practical exposure is much better than mere attaining the theoretical knowledge. The primary reason behind emphasizing upon the importance of practical learning is the kind of exposure students receive from such practices which helps them improve their skills. Here students can test their skills and help themselves to identify their weaknesses. This student-centered space enables learner-oriented assessment, where the design of the task is created for active student learning. Therefore, Practical exposure helps students to learn from self-experiences which make them ready for the framework of the industry even before joining them.
- **Inclusion of IT tools in teaching:** Various types of IT tools are used to support student learning. In present scenario, technology has taken a front seat and classrooms are well equipped with equipment and gadgets. Computers and mobiles are playing an important role in teaching- learning process. The use of open educational resources and other technologies are helping to increase educational productivity by accelerating the rate of learning, reducing costs associated with instructional materials or program delivery and better utilizing teacher time.
- **Field/Live Projects:** Field work is one of the major important part in the field of Agriculture.



A truly hands on training is given to the students in Practical Crop Production (PCP) in which students learn by doing the each and every step of crop production.

- **Learning visits organized:** Our institute organizes learning visits of KVK, Industrial units, agriculture markets, Kisan Mela and various Agriculture institutes of repute. These visits are essential to give students hands on exposure and experience of how things work in industries. Such visits play a vital role to enhance students' exposure to practical learning in various domains.
- **Guest Lectures:** To cater the present needs of industry we organize guest lectures, as part of lecture-series. Guest lectures are delivered in the college by eminent speakers from industry/ academia. The objective of these lectures is to provide extra attention on some topics/concepts as they either may be high in difficulty level or requires experts from specific industry/domain to make things/concepts clear for a better understanding from the perspective of the industry.
- **Experience Learning Programme (ELP):** The Experiential Learning Programme aims at promoting professional skills and knowledge through hands on experience and confidence building sessions. Ability to work in project requires management capabilities to build confidence. This programme provides a good platform for students with an approach of "Learning by Doing" and "Seeing by Believing" in various area of agriculture. The experiential learning programme is offered in the final semester.
- **Special assistance programme:** A special attention is given on slow learners & fast learners to develop their potential. We identify slow & fast learners through continuous evaluation in class room practices as well sessional exam performance. We develop the mechanism to correcting knowledge gap according to their need through extra classes and personal interaction.
- **Orientation programme:** 15 days orientation programme is conducted for first year admitted students. Student's orientation programme is designed to guide students about university and college. The programme includes domains like syllabus, library, examination system, college environment, and physical facilities, which aids to their educational and personal goals. Orientation programme play a vital role in developing positive attitude, minimizing stress and creating self confidence among newly admitted students.
- **Mentor mentee scheme:** Faculty members of College of Agriculture Science are actively involved in mentoring of students. Students share their problems with their respective mentors. Teachers maintain the academic progress record on prescribed booklet.
- **Career & personal counseling:** Training and placement department is copiously involved in developing career oriented skill development activities and personality development to help the students in getting job.
- **Competitive exam preparation:** The College run competitive exam preparation classes for final year students to provide guidance, necessary literature and other information about cracking competitive examinations.
- **Extracurricular Activities:** Participation in extracurricular activities is set mandatory for the students to develop self-confidence and public speaking.

Following is the course module designed for the B.Sc. (Hons.) Agriculture programme:



1. **Core Course (CC):** A wide range of core courses are provided in the basic agriculture disciplines like agronomy, entomology, horticulture, plant pathology, agriculture economics, statistics etc. Core courses are offered in semester I, II, III, IV, V, and VII during the B.Sc. (Hons.) Agriculture programme.
2. **Remedial Courses (RC):** These courses are offered in Ist semester of programme. Students having Biology in intermediate (10+2) register for Elementary Mathematics (BAG1108) whereas the students having Mathematics register for Introductory Biology (BAG1107). Other students choose any of the above twocourses.
3. **Value added course (VAC)** Value added courses include *Practical Crop Production, Soft Skills, and Educational Tour*. These courses are offered in V and VI semesters of degree programme.
4. **Ability Enhancement Compulsory Course (AEC):** These courses enhance the ability in students in various aspects. These courses are offered in I, II, III, IV and V semester of degree programme.
5. **Discipline Specific Elective Course (DSEC):** The discipline specific elective course is offered to inculcate specific knowledge of a domain in learners. The specific areas may include agronomy, horticulture, and entomology. It will be covered in IV,V and VI semester of programme.
6. **Open Electives Courses (OEC):** Open elective courses are provided to the students in IVth and VIth semester where students can learn various concepts.
7. **Skill Enhancement Courses (SEC):** Here, students are made familiar with the rural agricultural activities. This course is offered in VII semester of degree programme.
8. **Student READY Programme:** The term READY refers to "Rural Entrepreneurship Awareness Development Yojana." This component envisages reorienting graduates of agriculture and allied subjects for ensuring and assuring employability and developing entrepreneurs for emerging knowledge intensive agriculture. Two types of courses are offered under READY programme Rural Agricultural Work Experience (RAWE) and Experience Learning Programme (ELP)
9. **Rural Agricultural Work Experience (RAWE):** The Rural Agricultural Work Experience (RAWE) helps the students primarily to understand the rural situations, status of agricultural technologies adopted by the farmers to prioritize the farmers' problems and to develop skills & attitude of working with farm families for overall development in rural area. It is offered in VII semester.
10. **Experience Learning Programme (ELP):** In this course, learning and development are achieved through personally determined experience and involvement, rather than on received teaching or training, typically in group, by observation, study of theory or hypothesis and bring in innovation or some other transfer of skills or knowledge. This course may be chosen from a pool of courses designed to provide value/skill based knowledge. In VIII semester, the student can choose two skill enhancement course of his/her choice.



DISCIPLINE WISE COURSES

S. No	Course title	Credit Hours	Total
Agronomy			
1	Fundamentals of Agronomy	3 (2+1)	22 (11+11)
2	Farming based livelihood systems	3 (2+1)	
3	Crop Production Technology-I (Kharif Crops)	3 (1+2)	
4	Crop Production Technology-II (Rabi Crops)	3(1+2)	
5	Water Management	2 (1+1)	
6	Weed Management	2 (1+1)	
7	Introductory Agro forestry	2 (1+1)	
8	Dryland agriculture/ Rainfed agriculture and watershed management	2 (1+1)	
9	Principles and Practices of Natural Farming	2 (1+1)	
Soil Science:			
1	Fundamentals of Soil Science	3 (2+1)	8 (5+3)
2	Soil Fertility Management	3 (2+1)	
2	Problematic Soils and their management	2 (1+1)	
Horticulture			
1.	Fundamentals of Horticulture	3 (2+1)	9 (5+4)
2.	Production Technology of Fruit and Plantation Crops	2 (1+1)	
3.	Production Technology of Vegetables and Spices	2 (1+1)	
4.	Ornamental Crops, MAPs, and Landscaping	2 (1+1)	
Genetics and Plant Breeding			
1.	Principles of Genetics	3 (2+1)	12 (7+5)
2.	Basics of Plant Breeding	3 (2+1)	
3.	Crop Improvement (Kharif crops) - I	2 (1+1)	
4.	Crop Improvement (Rabi crops)- II	2 (1+1)	
5.	Fundamentals of Seed Science and Technology	2 (1+1)	
Entomology			
1.	Fundamentals of Entomology	3 (2+1)	6 (4+2)
2.	Pest management in Crops and Stored Grains	3 (2+1)	
Plant Pathology			
1.	Fundamentals of Plant Pathology	3 (2+1)	8 (5+3)
2.	Diseases of Field & Horticultural Crops & their Management	3 (2+1)	
3.	Agricultural Microbiology and Phyto-remediation	2 (1+1)	
Extension Education			
1.	Rural Sociology and Educational Psychology	2 (2+0)	8 (5+3)
2.	Fundamentals of Extension Education	2 (1+1)	
3.	Communication skills	2 (1+1)	
4.	Personality development	2 (1+1)	
Agricultural Meteorology			
1.	Environmental Studies and Disaster mgt.	3 (2+1)	5 (3+2)
2.	Introduction to Agro-meteorology	2 (1+1)	
Agricultural Economics			



1.	Principles of Agricultural Economics and Farm Management	2 (2+0)	9 (6+3)
2.	Entrepreneurship Development and Business Communication	3 (2+1)	
3.	Agricultural Marketing and Trade	2 (1+1)	
4.	Agricultural Finance & Cooperation	2 (1+1)	
Agricultural Statistics			
1.	Agricultural Informatics and Artificial Intelligence	3 (2+1)	6 (4+2)
2.	Basic and Applied Agril Statistics	3 (2+1)	
3.	Introductory Mathematics	1 (1+0)	Non gradial
Agricultural Engineering			
1.	Farm Machinery and Power	2 (1+1)	4 (2+2)
2.	Renewable energy in Agriculture and Allied Sector	2 (1+1)	
Nematology			
1.	Fundamentals of Nematology	2 (1+1)	2 (1+1)
Biochemistry			
1.	Essentials of Plant Biochemistry	3 (2+1)	3 (2+1)
Crop Physiology			
1.	Fundamentals of Crop Physiology	3 (2+1)	3 (2+1)
Animal Husbandry			
1.	Livestock and poultry Management	2 (1+1)	2 (1+1)
Agricultural Bio-technology			
1.	Fundamentals of Agri Biotechnology	3 (2+1)	3 (2+1)
Students' Welfare			
1.	NCC/NSS	1 (0+1)	1 (0+1)
2.	NCC/NSS	1 (0+1)	1 (0+1)
3.	Physical Education, First Aid and Yoga Practices	2 (0+2)	2 (0+2)
4.	Study Tour	2 (0+2)	2 (0+2) Non gradial
*Elective Courses (Indicative)			
1	Agri-Business Management	4 (3+1)	20*(15+5) 5* Elective Courses
2	Management of natural resources	4 (3+1)	
3	Agrochemicals	4 (3+1)	
4	Agricultural Journalism	4 (3+1)	
5	Landscaping	4 (3+1)	
6	Commercial Plant breeding	4 (3+1)	
7	Food safety and standards	4 (3+1)	
8	Bioformulation and Nano formulation	4 (3+1)	
9	Biopesticides and Biofertilizers	4 (3+1)	
10	System Simulation and Agro advisory	4 (3+1)	
11	Hi-tech Horticulture	4 (3+1)	
12	Protected cultivation	4 (3+1)	
13	Climate Resilient Agriculture	4 (3+1)	
14	Biotechnology of Crop Improvement	4 (3+1)	
15	Geoinformatics and Remote Sensing, precision farming	4 (3+1)	
16	Micro-propagation Technologies	4 (3+1)	
17	Commercial Seed Production	4 (3+1)	
18	Principles and Practices of Organic Farming/Conservation Agriculture	4 (3+1)	
19	Food Science and Nutrition	4 (3+1)	
20	Post-Harvest Technology and Value Addition		
**Skill enhancement courses (SECs)			

Semester-wise distribution of courses

	Type of Course	Course Code	Course Title	L	T	P	Credits
I SEMESTER	NC	BSAG-1101	Deeksharambh (Induction cum Foundation course) **(NC)				1week
	SEC	BSAG-1102	Skill Enhancementcourse-I*	0	0	2	2
	SEC	BSAG-1103	Skill Enhancementcourse-II*	0	0	2	2
	AEC	BSAG-1104	Communication Skills	1	0	1	2
	MDC	BSAG-1105	Farming based livelihood systems	2	0	1	3
	CC	BSAG-1106	Rural Sociology and Educational Psychology	2	0	0	2
	CC	BSAG-1107	Fundamentals of Agronomy	2	0	1	3
	CC	BSAG-1108	Fundamentals of Soil Science	2	0	1	3
	CC	BSAG-1109	Fundamentals of Horticulture	2	0	1	3
	AEC	BSAG-1110	National Service Scheme (NSS-I)/ National Cadet Corps (NCC-I)	0	0	1	1
	NC	BSAG-1111	Introductory mathematics **(NC)	1	0	0	1
							21(11+10)
II SEMESTER	SEC	BSAG-1201	Skill Enhancement course-III*	0	0	2	2
	SEC	BSAG-1202	Skill Enhancement course-IV*	0	0	2	2
	AEC	BSAG-1203	Personality Development	1	0	1	2
	VAC	BSAG-1204	Environmental Studies and Disaster Management	2	0	1	3
	CC	BSAG-1205	Soil Fertility Management	2	0	1	3
	CC	BSAG-1206	Fundamentals of Entomology	2	0	1	3
	CC	BSAG-1207	Livestock and Poultry Management	1	0	1	2
	CC	BSAG-1208	Fundamentals of Plant Pathology	2	0	1	3
	AEC	BSAG-1209	NCC-II/NSS-II	0	0	1	1
							21(10+11)
III SEMESTER	SEC	BSAG-2301	Skill Enhancement course-V*	0		2	2
	CC	BSAG-2302	Entrepreneurship Development and Business Communication	2		1	3
	MDC	BSAG-2303	Physical Education, First Aid, Yoga Practices and Meditation	0		2	2
	CC	BSAG-2304	Principles of Genetics	2		1	3
	CC	BSAG-2305	Crop Production Technology-I (Kharif crops)	1		2	3
	CC	BSAG-2306	Production Technology of Fruit and Plantation Crops	1		1	2
	DSC	BSAG-2307	Fundamentals of Extension Education	1		1	2
	DSC	BSAG-2308	Fundamentals of Nematology	1		1	2
	AEC	BSAG-2309	Principles and Practices of Natural Farming	1		1	2
							21(9+12)



IV SEMESTER	CC	BSAG-2401	Skill Enhancement course-VI*	0	2	2
	VAC	BSAG-2402	Agricultural Informatics and Artificial Intelligence	2	1	3
	CC	BSAG-2403	Production Technology of Vegetables and Spices	1	1	2
	CC	BSAG-2404	Principles of Agricultural Economics and Farm Management	2	0	2
	DSC	BSAG-2405	Crop Production Technology-II (Rabi Crops)	1	2	3
	CC	BSAG-2406	Farm Machinery and Power	1	1	2
	DSC	BSAG-2407	Water Management	1	1	2
	CC	BSAG-2408	Problematic Soils and their management	1	1	2
	DSC	BSAG-2409	Basics of Plant Breeding	2	1	3
						21(11+10)
V SEMESTER	MDC	BSAG-3501	Agricultural Marketing and Trade	2	1	3
	DSC	BSAG-3502	Introduction to Agro-meteorology	1	1	2
	CC	BSAG-3503	Fundamentals of Crop Physiology	2	1	3
	CC	BSAG-3504	Pest management in Crops and Stored Grains	2	1	3
	CC	BSAG-3505	Diseases of Field & Horticultural Crops & their Management	2	1	3
	CC	BSAG-3506	Crop Improvement (kharif crops) - I	1	1	2
	CC	BSAG-3507	Weed Management	1	1	2
	DSC	BSAG-3508	Ornamental Crops, MAPs and Landscaping	1	1	2
	CC	BSAG-3509	Introductory Agro forestry	1	1	2
						22(13+9)
VI SEMESTER	DSC	BSAG-3601	Fundamentals of Agri Biotechnology	2	1	3
	DSC	BSAG-3602	Basic and Applied Agril Statistics	2	1	3
	CC	BSAG-3603	Crop Improvement (Rabi crops) - II	1	1	2
	DSC	BSAG-3604	Renewable energy in Agriculture and Allied Sector	1	1	2
	CC	BSAG-3605	Dryland agriculture/ Rainfed agriculture and watershed management	1	1	2
	CC	BSAG-3606	Agricultural Microbiology and Phyto remediation	1	1	2
	DSC	BSAG-3607	Agricultural Finance & Cooperation	1	1	2
	DSC	BSAG-3608	Essentials of Plant Biochemistry	2	1	3
	CC	BSAG-3609	Fundamentals of Seed Science & Technology	1	1	2
						21(12+9)

		5 Elective Courses each of 4 (3+1) credits/Research Project with related courses A student can select FIVE elective course out of the following and offer during the VII th Semester				
VII SEMESTER	Elective Course(OEC)	BSAG-4701	Application of Drone Technology in Agriculture & Horticulture	3	1	4
		BSAG-4702	Agri-Business Management	3	1	4
		BSAG-4703	Management of Natural Resources	3	1	4
		BSAG-4704	Agrochemicals	3	1	4
		BSAG-4705	Agricultural Journalism	3	1	4
		BSAG-4706	Landscaping	3	1	4
		BSAG-4707	Commercial Plant Breeding	3	1	4
		BSAG-4708	Food Safety and Standards	3	1	4
		BSAG-4709	Bioformulation and Nanoformulation	3	1	4
		BSAG-4710	Biopesticides and Biofertilizers	3	1	4
		BSAG-4711	System Simulation and Agroadvisory	3	1	4
		BSAG-4712	Hi-tech Horticulture	3	1	4
		BSAG-4713	Protected Cultivation	3	1	4
		BSAG-4714	Climate Resilient Agriculture	3	1	4
		BSAG-4715	Biotechnology of Crop Improvement 3 (2+1)	3	1	4
		BSAG-4716	Geoinformatics and Remote Sensing, Precision Farming	3	1	4
		BSAG-4717	Micro-propagation Technologies	3	1	4
		BSAG-4718	Commercial Seed Production	3	1	4
		BSAG-4719	Principles and Practices of Organic Farming/ Conservation Agriculture	3	1	4
		BSAG-4720	Food Science and Nutrition	3	1	4
BSAG-4721	Post -Harvest Technology and Value Addition	3	1	4		
						20*(15+5) 5* Elective Courses
VIII SEMESTER	BSAG-4801	Student READY (RAW) / Experiential Learning / Hands on Training /Industrial Attachment /Project Work / Internship etc.	5	15	20	
						20*(15+5)
		**MOOCS/SWAYAM	10 Non-Gradial			
		Total:	167+10**			

Indicative skill Enhancement courses

As per ICAR Sixth Deans' Committee Recommendations

SEC	Course title	credits
1	Biofertilizer and biopesticide production	2 (0+2)
2	Production Technology of Bioagents	2 (0+2)
3	Seed Production and Testing Technology	2 (0+2)
4	Mushroom Production Technology	2 (0+2)
5	Soil, Plant and Water Testing	2 (0+2)
6	Post-harvest Processing Technology	2 (0+2)
7	Beneficial Insect Farming	2 (0+2)
8	Plantation Crop Production and Processing	2 (0+2)
9	Poultry Production Technology	2 (0+2)
10	Piggery Production Technology	2 (0+2)
11	Commercial Horticulture	2 (0+2)
12	Floriculture and Landscaping	2 (0+2)
13	Food Processing	2 (0+2)
14	Agriculture Waste Management	2 (0+2)
15	Organic Production Technology	2 (0+2)
16	Commercial Sericulture	2 (0+2)
17	Video Production	2 (0+2)
18	Agri Drone Technology	2 (0+2)

