Karmaveer Bhaurao Patil University, Satara
Faculty of Science and Technology

B. Sc. (Plant Protection)
Programme and Credit Structure as per NEP 2020

{Ref. Government of Maharashtra letter no. □□□□□.□□□□/□□□.□.□□/□□□□-□□□ □□ □□ □□□□□□: □□ □□□□□ □□□□}

The degree shall be titled as 'Bachelor of Science [Plant Protection) under the faculty of Science and Technology

B. Sc. Sem. I & II from Academic Year 2024-25
B. Sc. Sem. III & IV from Academic Year 2025-26
B. Sc. Sem. V & VI from Academic Year 2026-27
B. Sc. Sem. VII&VIII from Academic Year 2027-28

Programme Outcomes for B. Sc. (Plant Protection)

PO. No.	**Programme Outcomes** **After completing B. Sc. Programme: The students will be able to…….**
PO-1	Graduate with proficiency in the subject.
PO-2	Develop scientific attitude and become open minded, critical and curious so that they enter research field with a positive approach.
PO-3	Develop skill in practical work, experiments and laboratory materials.
PO-4	Become eligible to continue higher studies in their subject in India as well as abroad.
PO-5	Become eligible to appear for the examinations for jobs in government organizations.
PO-6	Become eligible to appear for jobs with minimum eligibility as science graduate.
PO-7	Be able to establish their own entrepreneurial ventures.
PO-8	Acquire increased ability of critical thinking, development of scientific attitude, handling of problems and generating solution, improve practical skills, enhance communication skill, social interaction, increase awareness in judicious use of plant resources by recognizing the ethical value system
PSO. NO	**Programme Specific Outcomes** **After completing B. Sc. (Plant Protection) Programme the students will ….**
PSO-1	Explain, discuss and answer questions related to the various aspects of plant protection and major agronomical crops
PSO-2	Gain in-depth knowledge of plant diseases, pests, and weeds, including their biology, ecology, and control methods.
PSO-3	Utilize biological, chemical, cultural, and physical control methods in a balanced approach to manage pests and diseases
PSO-4	Explain the basics of plant pathology and weed science.
PSO-5	Acquire knowledge about the different classes of pesticides, their modes of action, application techniques, and safety protocols.
PSO-6	Become skilled to enter into industries and research institutes related to plant protection.
PSO-7	Be able to set up their own business and consultancies related to protection of plants.

Semester, Credit Framework, NSQF Level and Exit Points

Sr. No.	Semester	Year	Year	Credits	Level	Exit Points &Award
1	Sem. I & II	2024-25	1Year	44	4.5	UG Certificate in Plant Protection
2	Sem. III & IV	2025-26	2Year	88	5.0	UG Diploma in Plant Protection
3	Sem. V &VI	2026-27	3Year	132	5.5	B. Sc. in Plant Protection (UG Three Year Degree)
4	Sem. VII & VIII	2027-28	4Year	176	6.0	B. Sc. in Plant Protection [Honors/Research] (UG Four Year Degree)

Credit Distribution

Sr. No.	Course	3 Year Degree Programme			4 Year Honors Degree Programme			4 Year Honors with Research Degree Programme		
		Courses (3 Yr)	Credits (3 Yr)	%	Courses (4 Yr)	Credits (4 Yr)	%	Courses (4 Yr)	Credits (4 Yr)	%
1	Major	26	52	39.39	34	80	45.45	32	72	40.91
2	Elective	04	08	6.06	08	16	9.09	08	16	9.09
3	IKS	02	04	3.03	02	04	2.27	02	04	2.27
4	VSC	04	08	6.06	04	08	4.55	04	08	4.55
5	FP	01	02	1.52	01	02	1.14	01	02	1.14
6	OJT	01	04	3.03	02	08	4.55	01	04	2.27
7	RP	00	00	0.00	00	00	00	02	12	6.82
8	SEC	03	06	4.55	03	06	3.41	03	06	3.41
9	CEP	01	02	1.52	01	02	1.14	01	02	1.14
Total (Major) (A)		**42**	**86**	**65.15**	**55**	**126**	**71.59**	**54**	**126**	**71.59**
1	Minor & RM	12	24	18.18	13	28	15.91	13	28	15.91
Total (Minor) (B)		**12**	**24**	**18.18**	**12**	**28**	**15.91**	**13**	**28**	**15.91**
1	OE	04	08	6.06	04	08	4.55	04	08	4.55
2	AEC	04	08	6.06	04	08	4.55	04	08	4.55
3	VEC	02	04	3.03	02	04	2.27	02	04	2.27
4	CC	01	02	1.52	01	02	1.14	01	02	1.14
Total (C)		**11**	**22**	**16.67**	**11**	**22**	**12.50**	**11**	**22**	**12.50**
Grand Total (A+B+C)		**65**	**132**	**100**	**79**	**176**	**100**	**78**	**176**	**100**

Duration:

The program shall be a full-time program.

The duration of program shall be three years for Bachelor of Science and four years for Bachelor of Science with Honors or Bachelor of Science with Research.

Every year students will have exist option with:

(1st Year: Certificate, 2nd Year: Diploma, 3rd Year: Degree, 4th Year: Honors / Research)

These students are allowed to re-enter the degree program within three years and complete the degree program within the stipulated maximum period of Seven Years.

Eligibility: 12th Pass with Science, or equivalent.

Medium of Instruction: The medium of instructions shall be in English.

Scheme of Examination & Standard of Passing (CCE and ESE):

End Semester Exam (ESE): 30 Marks (Min 12 Marks for Passing)

Continuous Comprehensive Evaluation (CCE): 20 Marks (Min 08 Marks for Passing)

Total Marks = 50 Marks

Minimum 40% Marks Required for Passing and there is separate head of Passing for End

Scheme of Examination & Standard of Passing for ESE and CCE:

As per the decision of the concern Board of Studies or Competent Authority.

A candidate who acquire 32 credits or more during semester – I & II shall be admitted to B. Sc. II (appear for semester – III & IV examination).

However the candidate shall not be admitted to B.Sc. III (Semester - V) unless he/she passed in all the subjects at B.Sc. I (Semester - I & Semester - II) and acquire 32 credits or more during semester – III & IV.

However the candidate shall not be admitted to B. Sc. IV (Semester - VII) unless he/she passed in all the subjects at B. Sc II and. III (Semester –III,IV V & Semester - VI).

However under the National Education Policy the rules extended by KBP University, time to time regarding ATKT will be applicable.

Eligibility of the Core Faculty:

As per rules and regulations of Karmaveer Bhaurao Patil University, Satara and Govt. of Maharashtra.

Eligibility for Professor of Practice or Professional Trainer:

Any other eligibility as per the guidelines and regulations passed by concern board of studies, academic council of the autonomous college and rules & regulations of Karmaveer Bhaurao Patil University, Satara and Government of Maharashtra and UGC norms.

Karmaveer Bhaurao Patil University, Satara
Faculty of Science and Technology
B. Sc. (Plant Protection) Part-I

Semester I				
Sr. No.	**Components**	**Course Code**	**Course**	**Credits**
1	Course-I	BPPT 111	Fundamentals of Plant Pathology	02
		BPPT 112	Fundamentals of Soil Science	02
		BPPP 113	Practical Based on BPPT 111 and BPPT 112	02
2	Course-II	-	DSC I, DSC II, DSP I	06
3	Course-III	-	DSC I, DSC II, DSP I	06
4	OE	BPPTOE1	Scientific writing-I	02
5	IKS	BPPTIKS 1	Introduction to Indian Knowledge system	02
			Total	**22**
			Semester II	
Sr. No.	**Components**	**Course Code**	**Course**	**Credits**
1	Course-I	BPPT 121	Biofertilizer Production Technology	02
		BPPT 122	Principles of Organic Farming	02
		BPPP 123	Practical Based on BPPT 121 and BPPT 122	02
2	Course-II	-	DSC III, DSC IV, DSP II	06
3	Course-III	-	DSC III, DSC IV, DSP II	06
4	OE	BPPTOE2	Scientific writing-II	02
5	VEC	BPPTVEC1	Democracy, Good Governance and Constitution of India	02
			Total	**22**
EXIT OPTION: Award of UG Certificate in Major **with 44 credits** & an additional 4 credits core NSQF Course/Internship OR Continue with Major & Minor.				

B. Sc. (Plant Protection) Part-II

Semester III				
Sr. No.	**Components**	**Course Code**	**Course**	**Credits**
1	Major	BPPT 231	Plant Pathology	02
2	Major	BPPT 232	Major Crops, Methods of IntegratedPlant Protection	02
3	Major Lab-III	BPPP 233	Practical Based on Paper V and Paper VI	02
4	Minor	-	DSC V, DSC VI, DSP III	06
5	OE	BPPTOE3	Scientific writing-III	02
6	VSC	BPPPVSC 1	Biofertilizer Production	02
7	SEC	BPPPSEC 1	SUSTAINABLE AGRICULTURAL PRACTICES	02
8	AEC	BETAEC 1	English P-I	02
9	IKS	BPPTIKS 2	Indian Agriculture	02
			Total	**22**
Semester IV				
Sr. No.	**Components**	**Course Code**	**Course**	**Credits**
1	Major	BPPT 241	Insect Pests and their Management	02
2	Major	BPPT 242	Weeds and Their Management	02

3	Major Lab IV	BPPP 243	Practical Based on Paper VII and Paper VIII	02
4	Minor	-	DSC VII, DSC VIII, DSP IV	06
5	OE	BPPTOE 4	Scientific writing--IV	02
6	VSC	BPPPVSC 2	Post-Harvest Management	02
7	SEC	BPPPSEC 2	Soil and Water Management	02
8	AEC	BPPTAEC 2	English P-II	02
9	VEC	BPPTVEC 2	ENVIRONMENTAL STUDIES IN PLANT PROTECTION	02
			Total	**22**
EXIT OPTION: Award of UG Diploma in Major and Minor with **88 Credits** & an additional 4 credits core NSQF Course/ Internship OR Continue with Major & Minor				

B. Sc. (Plant Protection) Part-III

Semester V				
Sr. No.	**Components**	**Course Code**	**Course**	**Credits**
1	Major	BPPT 351	Plant Diseases and their Management	02
2	Major	BPPT 352	Plant Insect pests ,Management and Toxicological Studies	02
3	Major Lab	BPPT 353	Horticulture	02
4	Electives (Any one out of two)	BPPT 354	Agricultural Microbiology	02
		BPPT 354	Field Crop Production -I	02
5	Major	BPPP 355	Lab – V	02
6	Elective Lab	BPPP 356	Lab – I	02
7	VSC	BPPPVSC 3	Seed Pathology and Plant Protection	02
8	AEC	BPPTAEC 3	English P-III	02
9	OJT	BPPTOJT 1	On Job Training in Plant Protection I	04
10	CEP	BPPTCEP 1	Community Engagement Programme in Plant Protection	02
			Total	**22**
Semester VI				
Sr.	**Components**		**Course**	**Credits**
1	Major	BPPT 361	Field Techniques in Plant Protection	02
2	Major	BPPT 362	Laboratory Techniques Techniques in Plant Protection	02
3	Major	BPPT 363	Agricultural Entomology	02
4	Electives (Any one out of two)	BPPT 364	Manures Fertilizers and Agrochemicals	02
		BPPT 364	Field Crop Production -II	02
5	Major Lab	BPPP 365	Lab – VI	02
6	Elective Lab	BPPP 366	Lab – II	02
7	VSC	BPPPVSC 4	Weed Management	02
8	SEC	BPPPSEC 3	Artificial Intelligence in Plant Protection	02
9	FP	BPPTFP 1	Field Project in Plant Protection	02
10	CC	BPPTCC 1	Co-curricular Course in Plant Protection	02
11	AEC	BPPTAEC 4	English P-IV	02
			Total	**22**
EXIT OPTION: Award of UG Degree in Major with **132 credits** OR Continue with Major & Minor.				

B. Sc. (Plant Protection) Part-IV Honors Degree

Semester VII				
Sr. No.	**Components**	**Course Code**	**Course**	**Credits**
1	Major	BPPT 471	Plant Protection (P-XVII)	04
2	Major	BPPT 472	Plant Protection (P-XVIII)	04

3	Major	BPPT 473	Plant Protection (P-XIX)	04
4	Electives (Any one out of two)	BPPT 474	Plant Protection (P-XXE1)	02
		BPPT 474	Plant Protection (P-XXE2)	02
5	Major Lab	BPPP 475	Lab – VII	02
6	Elective Lab	BPPP 476	Lab – III	02
7	Minor	BPPT 477	Research Methodology	04
			Total	**22**

Semester VIII

Sr. No.	Components	Course Code	Course	Credits
1	Major	BPPT 481	Plant Protection (P-XXI)	04
2	Major	BPPT 482	Plant Protection (P-XXII)	04
3	Major	BPPT 483	Plant Protection (P-XXIII)	04
4	Electives	BPPT 484	Plant Protection (P-XXIVE1)	02
		BPPT 484	Plant Protection (P-XXIVE2)	02
5	Major Lab	BPPP 485	Lab – VIII	02
6	Elective Lab	BPPP 486	Lab – IV	02
7	OJT	BPPTOJT 2	On Job Training in Plant Protection II	04
			Total	**22**

Award of Four year UG Honors Degree in Major and Minor with 176 credits.

B. Sc. (Plant Protection) Part-IV Honors with Research Degree

Semester VII

Sr. No.	Components	Course Code	Course	Credits
1	Major	BPPT 471	Plant Protection (P-XVII)	04
2	Major	BPPT 473	Plant Protection (P-XVIII)	04
3	Electives	BPPT 474	Plant Protection (P-XIXE1)	04
			Plant Protection (P-XIXE2)	
4	Major Lab	BPPP 594	Lab – VII	02
5	Minor	-	Research Methodology	04
6	RP	BPPTRP 1	Research Project in **Plant Protection** I	04
			Total	**22**

Semester VIII

Sr. No.	Components	Course Code	Course	Credits
1	Major	BPPT 481	Plant Protection (P-XXI)	04
2	Major	BPPT 482	Plant Protection (P-XXII)	04
3	Electives	BPPT 603	Plant Protection (P-XXIIE1)/ Plant Protection (P-XXIIE2)	04
4	Major Lab	BPPP 604	Lab – VIII	02
5	RP	BPPTRP 2	Research Project in **Plant Protection** II	08
			Total	**22**

Award of Four year UG Honors Degree in Major and Minor with 176 credits.

Chairman
BoS in Zoology

Secretary
Academic Council

Chairman
Academic Council