

School of Agriculture (SOA)
Uttaranchal University, Dehradun
Ph.D. Plant Pathology
Summary of Study and Evaluation Scheme

Session: 2026-2027

Year -I & Semester-I											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
						Internal Examination			End Term Examination	Subject Total	
			L	T	P	Mid term Theory Examination	Assignment	Practical Examination			
Major courses (Gradial courses)											
1	DPP C601	Advances in Mycology**	1	0	4	20	20	20	40	100	3(1+2)
2		Elective courses	2	0	2	20	20	20	40	100	3(2+1)
Minor courses (Gradial courses)											
3		Elective courses	2	0	2	20	20	20	40	100	3(2+1)
Supporting courses (compulsory for all students) (Gradial courses)											
4	DPP S601	Research Methodology in Plant Pathology*	2	0	2	20	20	20	40	100	3(2+1)
5	DPP S602	Computer & statistics application in Research	1	0	0	30	20	-	50	100	1(1+0)
6	DPP S603	Research and Publication Ethics	1	0	0	30	20	-	50	100	1(1+0)
Doctoral Seminar (Gradial courses)											
7	DPP C691	Doctoral Seminar-I*	0	0	2	-	-	100	-	100	1(0+1)
Non-Gradial Compulsory Courses (To be opted if not in course curriculum of M.Sc. degree Programme of a student)											
8	SOA N501	Intellectual Property and Its Management in Agriculture	1	0	0	30	20	-	50	100	1(1+0)
9	SOA N502	Technical Writing and Communication Skills	0	0	2	30	20	50	-	100	1(0+1)
10	SOA N505	Basic Concepts in Laboratory Techniques	0	0	2	30	20	50	-	100	1(0+1)
Total (Gradial)			9	0	12	140	120	180	260	700	15(9+6)
Total (Gradial+Non-Gradial)			10	0	16	230	180	280	310	1000	18(10+8)

Session: 2026-2027

Year -1 & Semester-II											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
			L	T	P	Internal Examination			End Term Examination	Subject Total	
						Mid term Theory Examination	Assignment	Practical Examination			
Major courses (Gradial courses)											
1	DPP C604	Molecular Basis of Host-pathogen Interaction**	2	0	2	20	20	20	40	100	3(2+1)
2		Elective courses	3	0	0	30	20	-	50	100	3(3+0)
Minor courses (Plant Pathology)											
3		Elective courses	3	0	0	30	20	-	50	100	3(3+0)
Doctoral Seminar (Gradial courses)											
4	DPP C692	Doctoral Seminar-II*	0	0	2	-	-	100	-	100	1(0+1)
Non-Gradial Compulsory Courses (To be opted if not in course curriculum of M.Sc. degree Programme of a student)											
5	SOA N503	Disaster Management	1	0	0	30	20	-	50	100	1(1+0)
6	SOA N504	Library and Information Services	0	0	2	30	20	50	-	100	1(0+1)
7	SOA N506	Agriculture Research, Research Ethics and Rural Development Programme	1	0	0	30	20	-	50	100	1(1+0)
Total (Gradial)			8	0	4	80	60	120	140	400	10(8+2)
Total (Gradial+Non-Gradial)			10	0	6	170	120	170	240	700	13(10+3)

Doctoral Research Work

S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
			L	T	P	Internal Examination			End Term Examination	Subject Total	
						Mid term Theory Examination	Assignment	Practical Examination			
1	DPP C699	Doctoral Research* #	-	-	-	-	-	-	-	-	75(0+75)

* Compulsory Course; **Compulsory Core Course; # Separate certificate shall be given to a student after satisfactory review and examination of research work and submission of thesis report
The total number of elective courses, along with their credit hours, evaluation schemes, and periods per week may vary based on the student's choice.

Session: 2026-2027

List of Major courses (Elective Course)											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
			L	T	P	Internal Examination			End Term Examination	Subject Total	
						Mid term Theory Examination	Assignment	Practical Examination			
1	DPP C602	Advances in Virology	1	0	2	20	20	20	40	100	2(1+1)
2	DPP C603	Advances in Plant Pathogenic Prokaryotes	1	0	2	20	20	20	40	100	2(1+1)
3	DPP C605	Principles and Procedures of Certification	2	0	0	30	20	-	50	100	2(2+0)
4	DPP C606	Plant Biosecurity and Biosafety	2	0	0	30	20	-	50	100	2(2+0)
5	DPP C607	Plant Health Diagnostics and Management	1	0	2	20	20	20	40	100	2(1+1)
6	DPP C608	Modern Technologies in Mushroom Cultivation	2	0	2	20	20	20	40	100	3(2+1)
7	DPP C609	Advances in Bacterial Plant Pathology	2	0	2	20	20	20	40	100	3(2+1)

List of Minor courses (Elective Course)											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
			L	T	P	Internal Examination			End Term Examination	Subject Total	
						Mid term Theory Examination	Assignment	Practical Examination			
1	DPP M601	Insect Phylogeny and Systematics	1	0	4	20	20	20	40	100	3(1+2)
2	DPP M602	Insect Physiology and Nutrition	2	0	2	20	20	20	40	100	3(2+1)
3	DPP M603	Insect Ecology and Diversity	2	0	2	20	20	20	40	100	3(2+1)
4	DPP M604	Insect Behavior	2	0	2	20	20	20	40	100	3(2+1)
5	DPP M606	Insect Toxicology and Residue	1	0	2	20	20	20	40	100	2(1+1)
6	DPP M607	Plant Resistance to Insects	1	0	2	20	20	20	40	100	2(1+1)
7	DPP M610	Integrated Pest Management	1	0	0	30	20	-	50	100	1(1+0)

School of Agriculture (SOA)
Uttaranchal University, Dehradun
Ph.D. Genetics & Plant Breeding
Summary of Study and Evaluation Scheme

Session: 2026-2027

Year -I & Semester-I											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
						Internal Examination			End Term Examination	Subject Total	
			L	T	P	Mid term Theory Examination	Assignment	Practical Examination			
Major courses (Gradial courses)											
1	DPG C601	Advances in Plant Breeding Systems**	3	0	0	30	20	-	50	100	3(3+0)
2		Elective courses	3	0	0	30	20	-	50	100	3(3+0)
Minor courses (Gradial courses) (Seed Science and Technology)											
3		Elective courses	2	0	2	20	20	20	40	100	3(2+1)
Supporting courses (compulsory for all students) (Gradial courses)											
4	DPG S601	Research Methodology in Genetics & Plant Breeding*	2	0	2	20	20	20	40	100	3(2+1)
5	DPG S602	Computer & statistics application in Research*	1	0	0	30	20	-	50	100	1(1+0)
6	DPG S603	Research and Publication Ethics*	1	0	0	30	20	-	50	100	1(1+0)
Doctoral Seminar (Gradial courses)											
7	DPG C691	Doctoral Seminar-I*	0	0	2	-	-	100	-	100	1(0+1)
Non-Gradial Compulsory Courses (To be opted if not in course curriculum of M.Sc. degree Programme of a student)											
8	SOA N501	Intellectual Property and Its Management in Agriculture	1	0	0	30	20	-	50	100	1(1+0)
9	SOA N502	Technical Writing and Communication Skills	0	0	2	30	20	50	-	100	1(0+1)
10	SOA N505	Basic Concepts in Laboratory Techniques	0	0	2	30	20	50	-	100	1(0+1)
Total (Gradial)			12	0	6	160	120	140	280	700	15(12+3)
Total (Gradial+Non-Gradial)			13	0	10	250	180	240	330	1000	18(13+5)

Session: 2026-2027

Year -1 & Semester-II											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
			L	T	P	Internal Examination			End Term Examination	Subject Total	
						Mid term Theory Examination	Assignment	Practical Examination			
Major courses (Gradial courses)											
1	DPG C605	Genomics in Plant Breeding**	2	0	2	20	20	20	40	100	3(2+1)
2	DPG C609	IPR and Regulatory Mechanism**	1	0	0	30	20	-	50	100	1(1+0)
3		Elective courses	2	0	0	30	20	-	50	100	2(2+0)
Minor courses (Gradial courses) (Seed Science and Technology)											
4		Elective courses	3	0	0	30	20	-	50	100	3(3+0)
Doctoral Seminar (Gradial courses)											
5	DPG C692	Doctoral Seminar-II*	0	0	2	-	-	100	-	100	1(0+1)
Non-Gradial Compulsory Courses (To be opted if not in course curriculum of M.Sc. degree Programme of a student)											
6	SOA N503	Disaster Management	1	0	0	30	20	-	50	100	1(1+0)
7	SOA N504	Library and Information Services	0	0	2	30	20	50	-	100	1(0+1)
8	SOA N506	Agriculture Research, Research Ethics and Rural Development Programme	1	0	0	30	20	-	50	100	1(1+0)
Total (Gradial)			8	0	4	110	80	120	190	500	10(8+2)
Total (Gradial+Non-Gradial)			10	0	6	200	140	170	290	800	13(9+4)

Doctoral Research Work											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
			L	T	P	Internal Examination			End Term Examination	Subject Total	
						Mid term Theory Examination	Assignment	Practical Examination			
1	DPG C699	Doctoral Research* #	-	-	-	-	-	-	-	-	75(0+75)

* Compulsory Course; **Compulsory Core Course; # Separate certificate shall be given to a student after satisfactory review and examination of research work and submission of thesis report
The total number of elective courses, along with their credit hours, evaluation schemes, and periods per week may vary based on the student's choice.

Session: 2026-2027

List of Major courses (Elective Course)											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
						Internal Examination			End Term Examination	Subject Total	
			L	T	P	Mid term Theory Examination	Assignment	Practical Examination			
1	DPG C602	Advances in Biometrical Genetics	3	0	2	20	20	20	40	100	3(2+1)
2	DPG C603	Molecular Cytogenetics for Crop Improvement	2	0	0	30	20	-	50	100	2(2+0)
3	DPG C604	Plant Genetics Resources, Conservation and Utilization	2	0	0	30	20	-	50	100	2(2+0)
4	DPG C606	Population Genetics	2	0	0	30	20	-	50	100	2(2+0)
5	DPG C607	Crop Evolution	3	0	0	30	20	-	50	100	3(3+0)
6	DPG C608	Breeding Designer Crops	1	0	2	20	20	20	40	100	2(1+1)

List of Minor courses (Elective Course)											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
						Internal Examination			End Term Examination	Subject Total	
			L	T	P	Mid term Theory Examination	Assignment	Practical Examination			
1	DPG M601	Hybrid Seed Production Technology	2	0	2	20	20	20	40	100	3(2+1)
2	DPG M602	Physiology and Biochemistry of Seeds	1	0	2	20	20	20	40	100	2(1+1)
3	DPG M603	Genetic Purity and DUS Testing	2	0	2	20	20	20	40	100	3(2+1)
4	DPG M604	Advances in Seed Quality Enhancement	1	0	2	20	20	20	40	100	2(1+1)
5	DPG M605	Germplasm Conservation Techniques	1	0	2	20	20	20	40	100	2(1+1)

School of Agriculture (SOA)
Uttaranchal University, Dehradun
Ph.D. Entomology
Summary of Study and Evaluation Scheme

Session: 2026-2027

Year -1 & Semester-I											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
			L	T	P	Internal Examination			End Term Examination	Subject Total	
						Mid term Theory Examination	Assignment	Practical Examination			
Major courses (Gradial courses)											
1	DPE C601	Insect Phylogeny and Systematics **	1	0	4	20	10	20	50	100	3(1+2)
2		Elective courses	2	0	2	20	10	20	50	100	3(2+1)
Minor courses (Gradial courses)											
3		Elective courses	2	0	2	20	10	20	50	100	3(2+1)
Supporting courses (compulsory for all students) (Gradial courses)											
4	DPE S601	Research Methodology in Entomology*	2	0	2	20	10	20	50	100	3(2+1)
5	DPE S602	Computer & statistics application in Research*	1	0	0	30	20	-	50	100	1(1+0)
6	DPE S603	Research and Publication Ethics*	1	0	0	30	20	-	50	100	1(1+0)
Doctoral Seminar (Gradial courses)											
7	DPE C691	Doctoral Seminar-I*	0	0	2	-	-	100	-	100	1(0+1)
Non-Gradial Compulsory Courses (To be opted if not in course curriculum of M.Sc. degree Programme of a student)											
8	SOA N501	Intellectual Property and Its Management in Agriculture	1	0	0	30	20	-	50	100	1(1+0)
9	SOA N502	Technical Writing and Communication Skills	0	0	2	30	20	50	-	100	1(0+1)
10	SOA N505	Basic Concepts in Laboratory Techniques	0	0	2	30	20	50	-	100	1(0+1)
Total (Gradial)			9	0	12	140	80	180	300	700	15(9+6)
Total (Gradial+Non-Gradial)			10	0	16	230	140	280	350	1000	18(10+8)

Session: 2026-2027

Year -1 & Semester-II											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
			L	T	P	Internal Examination			End Term Examination	Subject Total	
						Mid term Theory Examination	Assignment	Practical Examination			
Major courses (Gradial courses)											
1	DPE C606	Insect Toxicology and Residue**	2	0	2	20	10	20	50	100	3(2+1)
2		Elective courses	3	0	0	30	20	-	50	100	3(3+0)
Minor courses (Plant Pathology)											
3		Elective courses	3	0	0	30	20	-	50	100	3(3+0)
Doctoral Seminar (Gradial courses)											
5	DPE C692	Doctoral Seminar-II*	0	0	2	-	-	100	-	100	1(0+1)
Non-Gradial Compulsory Courses (To be opted if not in course curriculum of M.Sc. degree Programme of a student)											
6	SOA N503	Disaster Management	1	0	0	30	20	-	50	100	1(1+0)
7	SOA N504	Library and Information Services	0	0	2	30	20	50	-	100	1(0+1)
8	SOA N506	Agriculture Research, Research Ethics and Rural Development Programme	1	0	0	30	20	-	50	100	1(1+0)
Total (Gradial)			8	0	4	80	50	120	150	400	10(8+2)
Total (Gradial+Non-Gradial)			10	0	6	170	110	170	250	700	13(10+3)

Doctoral Research Work											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
			L	T	P	Internal Examination			End Term Examination	Subject Total	
						Mid term Theory Examination	Assignment	Practical Examination			
1	DPE C699	Doctoral Research* #	-	-	-	-	-	-	-	-	75(0+75)

* Compulsory Course; **Compulsory Core Course; # Separate certificate shall be given to a student after satisfactory review and examination of research work and submission of thesis report
The total number of elective courses, along with their credit hours, evaluation schemes, and periods per week may vary based on the student's choice.

Session: 2026-2027

List of Major courses (Elective Course)											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
			L	T	P	Internal Examination			End Term Examination	Subject Total	
						Mid term Theory Examination	Assignment	Practical Examination			
1	DPEC 601	Insect Phylogeny and Systematics	1	0	4	20	10	20	50	100	3(1+2)
2	DPEC 602	Insect Physiology and Nutrition	2	0	2	20	10	20	50	100	3(2+1)
3	DPEC 603	Insect Ecology and Diversity	2	0	2	20	10	20	50	100	3(2+1)
4	DPEC 604	Insect Behavior	1	0	2	20	10	20	50	100	2(1+1)
5	DPEC 605	Bio-inputs for Pest Management	2	0	2	20	10	20	50	100	3(2+1)
6	DPEC 607	Plant Resistance to Insects	2	0	0	30	20	0	50	100	2(1+1)
7	DPEC 609	Molecular Entomology	1	0	2	20	10	20	50	100	2(1+1)
8	DPEC 610	Integrated Pest Management	2	0	0	30	20	-	50	100	2(2+0)
9	DPEC 611	Modern Technologies in Beekeeping	2	0	2	20	10	20	50	100	3(2+1)
10	DPEC 612	Principles of Insect Farming	2	0	2	20	10	20	50	100	3(2+1)

List of Minor courses (Elective Course)											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
			L	T	P	Internal Examination			End Term Examination	Subject Total	
						Mid term Theory Examination	Assignment	Practical Examination			
1	DPE M601	Advances in Mycology	2	0	2	20	10	20	50	100	3(2+1)
2	DPE M602	Advances in Plant Virology	2	0	2	20	10	20	50	100	3(2+1)
3	DPE M603	Advances in Plant Pathogenic Prokaryotes	2	0	2	20	10	20	50	100	3(2+1)
4	DPE M604	Principles and Procedures of Certification	1	0	0	30	20	-	50	100	1(1+0)
5	DPE M606	Plant Biosecurity and Biosafety	2	0	0	30	20	-	50	100	2(2+0)
6	DPE M607	Plant Health Diagnostics and Management	2	0	2	20	10	20	50	100	2(2+1)

School of Agriculture (SOA)
Uttaranchal University, Dehradun
Ph.D. (Forestry) Silviculture & Agroforestry
Summary of Study and Evaluation Scheme

Session: 2026-2027

Year -1 & Semester-I											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
			L	T	P	Internal Examination			End Term Examination	Subject Total	
						Mid term Theory Examination	Assignment	Practical Examination			
Major courses (Gradial courses)											
1	DPT C601	Quantitative Silviculture**	2	0	2	20	10	20	50	100	3(2+1)
2		Elective courses	1	0	2	20	10	20	50	100	3(2+1)
Minor courses (Gradial courses)											
3		Elective courses	2	0	2	20	10	20	50	100	3(2+1)
Supporting courses (Compulsory for all students) (Gradial courses)											
4	DPT S601	Research Methodology in Forestry*	3	0	0	40	10	-	50	100	3(3+0)
5	DPT S602	Computer & Statistics Application in Research*	1	0	0	40	10	-	50	100	1(1+0)
6	DPT S603	Research and Publication Ethics*	1	0	0	40	10	-	50	100	1(1+0)
Doctoral Seminar (Gradial courses)											
7	DPT C691	Doctoral Seminar-I*	0	0	2	-	-	100	-	100	1(0+1)
Non-Gradial Compulsory Courses (To be opted if not in course curriculum of M.Sc. degree Programme of a student)											
8	SOA N501	Intellectual Property and Its Management in Agriculture	1	0	0	30	20	-	50	100	1(1+0)
9	SOA N502	Technical Writing and Communication Skills	0	0	2	30	20	50	-	100	1(0+1)
10	SOA N505	Basic Concepts in Laboratory Techniques	0	0	2	30	20	50	-	100	1(0+1)
Total (Gradial)			10	0	8	180	60	160	300	700	15(11+4)
Total (Gradial+Non-Gradial)			11	0	12	270	120	260	350	1000	18(12+6)

Year -1 & Semester-II

S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
						Internal Examination			End Term Examination	Subject Total	
			L	T	P	Mid term Theory Examination	Assignment	Practical Examination			
Major courses (Gradial courses)											
1	DPT C602	Agroforestry Research and Management**	2	0	2	20	10	20	50	100	3(2+1)
2		Elective courses	2	0	0	40	10	0	50	100	3(3+0)
Minor courses (Gradial courses)											
3		Elective courses	2	0	2	20	10	20	50	100	3(2+1)
Doctoral Seminar (Gradial courses)											
4	DPT C692	Doctoral Seminar-II*	0	0	2	-	-	100	-	100	1(0+1)
Non-Gradial Compulsory Courses (To be opted if not in course curriculum of M.Sc. degree Programme of a student)											
5	SOA N503	Disaster Management	1	0	0	30	20	-	50	100	1(1+0)
6	SOA N504	Library and Information Services	0	0	2	30	20	50	-	100	1(0+1)
7	SOA N506	Agriculture Research, Research Ethics and Rural Development Programme	1	0	0	30	20	-	50	100	1(1+0)
Total (Gradial)			6	0	6	80	30	140	150	400	10(7+3)
Total (Gradial+Non-Gradial)			8	0	8	170	90	190	250	700	13(9+4)

Doctoral Research Work

S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
						Internal Examination			End Term Examination	Subject Total	
			L	T	P	Mid term Theory Examination	Assignment	Practical Examination			
1	DPT C699	Doctoral Research* #	-	-	-	-	-	-	-	-	75(0+75)

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The total number of elective courses, along with their credit hours, evaluation schemes, and periods per week may vary based on the student's choice.

List of Major courses (Elective Course)											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
			L	T	P	Internal Examination			End Term Examination	Subject Total	
						Mid term Theory Examination	Assignment	Practical Examination			
1	DPT C603	Forest Stand Dynamics	1	0	0	40	10	-	50	100	1(1+0)
2	DPT C604	Productivity and Evaluation of Agroforestry Systems	2	0	2	20	10	20	50	100	3(2+1)
3	DPT C605	Forest Stand Management Techniques	1	0	2	20	10	20	50	100	2(1+1)
4	DPT C606	Agroforestry for Ecosystem Services and Environmental Benefits	2	0	0	40	10	-	50	100	2(2+0)
5	DPT C607	Plantation Forest Productivity	1	0	2	20	10	20	50	100	2(1+1)
6	DPT C608	Restoration Forestry	1	0	0	40	10	-	50	100	1(1+0)
7	DPT C609	Regeneration Silviculture	2	0	2	20	10	20	50	100	3(2+1)
8	DPT C610	Forest Soil Management	1	0	2	20	10	20	50	100	2(1+1)
9	DPT C611	Agroforestry for Sustainable Agriculture	1	0	0	40	10	-	50	100	1(1+0)

List of Minor courses (Elective Course)											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
			L	T	P	Internal Examination			End Term Examination	Subject Total	
						Mid term Theory Examination	Assignment	Practical Examination			
1	DPT M606	Processing Technology of Forest Products	2	0	2	20	10	20	50	100	3(2+1)
2	DPT M607	Value Addition and Marketing of Forest Products	2	0	2	20	10	20	50	100	3(2+1)
3	DPT M608	Modern Trends in Wood Modification	2	0	2	20	10	20	50	100	3(2+1)
4	DPT M609	Development in Pulp and Paper Technology	2	0	0	40	10	-	50	100	2(2+0)
5	DPT M610	Application of Traditional Knowledge	2	0	0	40	10	-	50	100	2(2+0)
6	DPT M611	Value Additions and Marketing of Medicinal and Aromatic Plants	2	0	2	20	10	20	50	100	3(2+1)

School of Agriculture (SOA)
Uttaranchal University, Dehradun
Ph.D. Agronomy
Summary of Study and Evaluation Scheme

Session: 2026-2027

Year -I & Semester-I											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
			L	T	P	Internal Examination			External Theory Examination	Subject Total	
						Mid term Theory Examination	Assignment	Practical Examination			
Major courses (Gradial courses)											
1	DPA C601	Current trends in Agronomy**	3	0	0	30	20	-	50	100	3(3+0)
2		Elective Course	2	0	0	20	20	20	40	100	3(2+1)
Minor courses (Gradial courses)											
3		Elective Course	2	0	0	20	20	20	40	100	3(2+1)
Supporting courses (Compulsory for all students) (Gradial courses)											
4	DPA S601	Research Methodology in Agronomy*	3	0	0	30	20	-	50	100	3(3+0)
5	DPA S602	Computer & Statistics Application in Research*	1	0	0	30	20	-	50	100	1(1+0)
6	DPA S603	Research and Publication Ethics*	1	0	0	30	20	-	50	100	1(1+0)
Doctoral Seminar (Gradial courses)											
7	DPA C691	Doctoral Seminar-I*	0	0	2	-	-	100	-	100	1(0+1)
Non-Gradial Compulsory Courses											
8	SOA N501	Intellectual Property and Its Management in Agriculture	1	0	0	30	20	-	50	100	1(1+0)
9	SOA N502	Technical Writing and Communication Skills	0	0	2	30	20	50	-	100	1(0+1)
10	SOA N505	Basic Concepts in Laboratory Techniques	0	0	2	30	20	50	-	100	1(0+1)
Total (Gradial)			12	0	2	160	120	140	280	700	15(12+3)
Total (Gradial+Non-Gradial)			13	0	6	250	180	240	330	1000	18(13+5)

Session: 2026-2027

Year -1 & Semester-II											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
						Internal Examination			External Theory Examination	Subject Total	
			L	T	P	Mid term Theory Examination	Assignment	Practical Examination			
Major courses (Gradial courses)											
1	DPA C602	Recent Trends in Crop Growth and Productivity**	2	0	2	20	20	20	40	100	3(2+1)
3		Elective course	2	0	2	20	10	20	50	100	3(2+1)
Minor courses (Gradial courses)											
3		Elective Course	2	0	0	20	10	20	50	100	3(2+1)
Doctoral Seminar (Gradial courses)											
5	DPA C692	Doctoral Seminar-II*	0	0	2	-	-	100	-	100	1(0+1)
Non-Gradial Compulsory Courses											
6	SOA N503	Disaster Management	1	0	0	30	20	-	50	100	1(1+0)
7	SOA N504	Library and Information Services	0	0	2	30	20	50	-	100	1(0+1)
8	SOA N506	Agriculture Research, Research Ethics and Rural Development Programme	1	0	0	30	20	-	50	100	1(1+0)
Total (Gradial)			6	0	6	60	40	160	140	400	10(6+4)
Total (Gradial+Non-Gradial)			8	0	8	150	100	210	240	700	13(8+5)

Doctoral Research Work

S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
						Internal Examination			External Theory Examination	Subject Total	
			L	T	P	Mid term Theory Examination	Assignment	Practical Examination			
1	DPA C699	Doctoral Research* #	-	-	-	-	-	-	-	-	75(0+75)

* Compulsory Course; **Compusory Core Course; # Separate certificate shall be given to a student after satisfactory review and examination of research work and submission of thesis report
The total number of elective courses, along with their credit hours, evaluation schemes, and periods per week may vary based on the student's choice.

Session: 2026-2027

List of Major courses (Elective Course)											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
			L	T	P	Internal Examination			External Theory Examination	Subject Total	
						Mid term Theory Examination	Assignment	Practical Examination			
1	DPA C603	Irrigation management	2	0	2	20	20	20	40	100	3(2+1)
2	DPA C604	Recent trends in Weed Management	2	0	2	30	20	-	50	100	2(2+0)
3	DPA C605	Integrated Farming Systems for Sustainable Agriculture	2	0	2	30	20	-	50	100	2(2+0)
4	DPA C606	Soil Conservation and Watershed Management	2	0	2	20	20	20	40	100	3(2+1)
5	DPA C607	Stress Crop Production	2	0	2	20	20	20	40	100	3(2+1)
6	DPA C608	Organic farming and Precision Agriculture	2	0	2	20	20	20	40	100	3(2+1)
7	DPA C609	Advances in Crop Ecology	2	0	2	20	20	20	40	100	3(2+1)
8	DPA C610	Regenerative Agronomy for Soil Health	2	0	2	20	20	20	40	100	3(2+1)

List of Minor courses (Elective Course)											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
			L	T	P	Internal Examination			External Theory Examination	Subject Total	
						Mid term Theory Examination	Assignment	Practical Examination			
1	DPA M601	Recent Trends in Soil Physics	2	0	0	30	20	-	50	100	2(2+0)
2	DPA M602	Modern Concept in Soil Fertility	2	0	0	30	20	-	50	100	2(2+0)
3	DPA M603	Physical Chemistry of Soil	2	0	0	30	20	-	50	100	2(2+0)
4	DPA M604	Soil Genesis and Micromorphology	2	0	0	30	20	-	50	100	2(2+0)
5	DPA M605	Biochemistry of Soil Organic Matter	2	0	0	30	20	-	50	100	2(2+0)
6	DPA M606	Soil Resource Management	3	0	0	30	20	-	50	100	3(3+0)
7	DPA M607	Modelling of Soil Plant System	2	0	0	30	20	-	50	100	2(2+0)
8	DPA M610	Analytical Techniques and Instrumental Methods In Soil And Plant Analysis	2	0	2	20	20	20	40	100	3(2+1)
9	DPA M611	Recent Trends in Soil Microbial Biodiversity	2	0	2	20	20	20	40	100	3(2+1)

School of Agriculture (SOA)
Uttaranchal University, Dehradun
Ph.D. (Hort.) Fruit Science
Summary of Study and Evaluation Scheme

Session: 2026-2027

Year -1 & Semester-I											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
			L	T	P	Internal Examination			External Theory Examination	Subject Total	
						Mid term Theory Examination	Assignment	Practical Examination			
Major courses (Gradial courses)											
1	DPF C601	Innovative Approaches in Fruit Breeding**	3	0	0	30	20	-	50	100	3(3+0)
2		Elective Course	3	0	2	20	20	20	40	100	3(2+1)
Minor courses (Gradial courses)											
3		Elective Course	3	0	0	30	20	-	50	100	3(3+0)
Supporting courses (Compulsory for all students) (Gradial courses)											
4	DPF S601	Research Methodology in Horticulture*	3	0	0	30	20	-	50	100	3(3+0)
5	DPF S602	Computer & Statistics Application in Research*	1	0	0	30	20	-	50	100	1(1+0)
6	DPF S303	Research and Publication Ethics*	1	0	0	30	20	-	50	100	1(1+0)
Doctoral Seminar (Gradial courses)											
7	DPF C691	Doctoral Seminar-I*	0	0	2	-	-	100	-	100	1(0+1)
Non-Gradial Compulsory Courses											
8	SOA N501	Intellectual Property and Its Management in Agriculture	1	0	0	30	20	-	50	100	1(1+0)
9	SOA N502	Technical Writing and Communication Skills	0	0	2	30	20	50	-	100	1(0+1)
10	SOA N505	Basic Concepts in Laboratory Techniques	0	0	2	30	20	50	-	100	1(0+1)
Total (Gradial)			14	0	4	170	120	120	290	700	15(13+2)
Total (Gradial+Non-Gradial)			15	0	8	260	180	220	340	1000	18(14+4)

Year -1 & Semester-II											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
						Internal Examination			External Theory Examination	Subject Total	
			L	T	P	Mid term Theory Examination	Assignment	Practical Examination			
Major courses (Gradial courses)											
1	DPF C602	Modern Trends in Fruit Production**	3	0	0	30	20	-	50	100	3(3+0)
2		Elective Course	2	0	0	30	20	0	50	100	3(3+0)
Minor courses (Gradial courses)											
3		Elective Course	2	0	2	20	20	20	40	100	3(2+1)
Doctoral Seminar (Gradial courses)											
4	DPF C692	Doctoral Seminar-II*	0	0	2	-	-	100	-	100	1(0+1)
Non-Gradial Compulsory Courses											
5	SOA N503	Disaster Management	1	0	0	30	20	-	50	100	1(1+0)
6	SOA N504	Library and Information Services	0	0	2	30	20	50	-	100	1(0+1)
7	SOA N506	Agriculture Research, Research Ethics and Rural Development Programme	1	0	0	30	20	-	50	100	1(1+0)
Total (Gradial)			7	0	4	80	60	120	140	400	10(8+2)
Total (Gradial+Non-Gradial)			9	0	6	170	120	170	240	700	13(10+3)

Doctoral Research Work											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
						Internal Examination			External Theory Examination	Subject Total	
			L	T	P	Mid term Theory Examination	Assignment	Practical Examination			
1	DPF C699	Doctoral Research* #	-	-	-	-	-	-	-	-	75(0+75)

* Compulsory Course; **Compulsory Core Course; # Separate certificate shall be given to a student after satisfactory review and examination of research work and submission of thesis report
The total number of elective courses, along with their credit hours, evaluation schemes, and periods per week may vary based on the student's choice.

List of Major courses (Elective Course)											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
			L	T	P	Internal Examination			External Theory Examination	Subject Total	
						Mid term Theory Examination	Assignment	Practical Examination			
1	DPF C603	Recent Developments in Growth Regulation	3	0	0	30	20	-	50	100	3(3+0)
2	DPF C604	Advanced Laboratory Techniques	1	0	4	20	20	20	40	100	3(1+2)
3	DPF C605	Arid and Dry Land Fruit Production	2	0	0	30	20	-	50	100	2(2+0)
4	DPF C606	Abiotic Stress Management in Fruit Crops	3	0	2	20	20	20	40	100	3(2+1)
5	DPF C607	Biodiversity and Conservation of Fruit Crops	2	0	2	20	20	20	40	100	3(2+1)
6	DPF C608	Smart Fruit Production	2	0	0	30	20	-	50	100	2(2+0)

List of Minor courses (Elective Course)											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
			L	T	P	Internal Examination			External Theory Examination	Subject Total	
						Mid term Theory Examination	Assignment	Practical Examination			
1	DPV M601	Recent Trends in Vegetable Production	3	0	0	30	20	-	50	100	3(3+0)
2	DPV M602	Advances in Breeding of Vegetable Crops	3	0	0	30	20	-	50	100	3(3+0)
3	DPV M603	Abiotic Stress Management in Vegetable Crops	2	0	2	20	20	20	40	100	3(2+1)
4	DPV M604	Seed Certification, Processing and Storage of Vegetable Crops	2	0	2	20	20	20	40	100	3(2+1)
5	DPV M605	Breeding for Special Traits in Vegetable Crops	2	0	0	30	20	-	50	100	2(2+0)
6	DPV M606	Biodiversity and Conservation of Vegetable Crops	2	0	2	20	20	20	40	100	3(2+1)

School of Agriculture (SOA)
Uttaranchal University, Dehradun
Ph.D. (Hort.) Vegetable Science
Summary of Study and Evaluation Scheme

Session: 2026-2027

Year -1 & Semester-I											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
			L	T	P	Internal Examination			End Term Examination	Subject Total	
						Mid term Theory Examination	Assignment	Practical Examination			
Major courses (Gradial courses)											
1	DPV C601	Recent Trends in Vegetable Production**	3	0	0	30	20	-	50	100	3(3+0)
2		Elective courses	3	0	0	30	20	-	50	100	3(3+0)
Minor courses (Gradial courses)											
3		Elective courses	3	0	0	30	20	-	50	100	3(3+0)
Supporting courses (Compulsory for all students) (Gradial courses)											
4	DPV S601	Research Methodology in Horticulture**	2	0	2	20	20	20	40	100	3(2+1)
5	DPV S602	Computer & Statistics Application in Research	1	0	0	30	20	-	50	100	1(1+0)
6	DPV S603	Research and Publication Ethics	1	0	0	30	20	-	50	100	1(1+0)
Doctoral Seminar (Gradial courses)											
7	DPV C691	Doctoral Seminar-I*	0	0	2	-	-	100	-	100	1(0+1)
Non-Gradial Compulsory Courses											
8	SOA N501	Intellectual Property and Its Management in Agriculture	1	0	0	30	20	-	50	100	1(1+0)
9	SOA N502	Technical Writing and Communication Skills	0	0	2	30	20	50	-	100	1(0+1)
10	SOA N505	Basic Concepts in Laboratory Techniques	0	0	2	30	20	50	-	100	1(0+1)
Total (Gradial)			13	0	4	170	120	120	290	700	15(13+2)
Total (Gradial+Non-Gradial)			14	0	8	260	180	220	340	1000	18(14+4)

Session: 2026-2027

Year -1 & Semester-II											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
			L	T	P	Internal Examination			End Term Examination	Subject Total	
						Mid term Theory Examination	Assignment	Practical Examination			
Major courses (Gradial courses)											
1	DPV C604	Seed Certification, Processing and storage of Vegetable Crops**	2	0	2	20	20	20	40	100	3(2+1)
2		Elective courses	2	0	0	30	20	-	50	100	3(3+0)
Minor courses (Gradial courses)											
3		Elective courses	2	0	2	20	20	20	40	100	3(2+1)
Doctoral Seminar (Gradial courses)											
4	DPV C692	Doctoral Seminar-II*	0	0	2	-	-	100	-	100	1(0+1)
Non-Gradial Compulsory Courses											
5	SOA N503	Disaster Management	1	0	0	30	20	-	50	100	1(1+0)
6	SOA N504	Library and Information Services	0	0	2	30	20	50	-	100	1(0+1)
7	SOA N506	Agriculture Research, Research Ethics and Rural Development Programme	1	0	0	30	20	-	50	100	1(1+0)
Total (Gradial)			6	0	6	70	60	140	130	400	10(7+3)
Total (Gradial+Non-Gradial)			8	0	8	160	120	190	230	700	13(9+4)

Doctoral Research Work

S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
			L	T	P	Internal Examination			End Term Examination	Subject Total	
						Mid term Theory Examination	Assignment	Practical Examination			
1	DPV C699	Doctoral Research* #	-	-	-	-	-	-	-	-	75(0+75)

* Compulsory Course; **Compulsory Core Course; # Separate certificate shall be given to a student after satisfactory review and examination of research work and submission of thesis report

The total number of elective courses, along with their credit hours, evaluation schemes, and periods per week may vary based on the student's choice.

List of Major courses (Elective Course)											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
			L	T	P	Internal Examination			End Term Examination	Subject Total	
						Mid term Theory Examination	Assignment	Practical Examination			
1	DPV C602	Advances in Breeding of Vegetable Crops	3	0	0	30	20	-	50	100	3(3+0)
2	DPV C603	Abiotic Stress Management in Vegetable Crops	2	0	2	20	20	20	50	110	3(2+1)
3	DPV C605	Breeding for Special Traits in Vegetable Crops	2	0	0	30	20	-	50	100	2(2+0)
4	DPV C606	Biodiversity and Conservation of Vegetable Crops	3	0	0	30	20	-	50	100	3(3+0)
5	DPV C607	Biotechnological Approaches in Vegetable Crops	2	0	0	30	20	-	50	100	2(2+0)
6	DPV C608	Principles of Aquaponics	2	0	2	20	20	20	40	100	2(2+1)

List of Minor courses (Elective Course)											
S.No	CODE	Course Title	Periods per week			Evaluation Scheme					Credit Hours (Theory + Practical)
			L	T	P	Internal Examination			End Term Examination	Subject Total	
						Mid term Theory Examination	Assignment	Practical Examination			
1	DPV M601	Innovative Approaches in Fruit Breeding	3	0	0	30	20	-	50	100	3(3+0)
2	DPV M602	Modern Trends in Fruit Production	3	0	0	30	20	-	50	100	3(3+0)
3	DPV M603	Recent Developments in Growth Regulation	3	0	0	30	20	-	50	100	3(3+0)
4	DPV M606	Abiotic Stress Management in Fruit Crops	2	0	2	20	20	20	40	100	2(2+1)
5	DPV M607	Biodiversity and Conservation of Fruit Crops.	2	0	2	20	20	20	40	100	3(2+1)
6	DPV M608	Smart Fruit Production	2	0	0	30	20	-	50	100	2(2+0)