



JOY UNIVERSITY  
semper paratus

**School of Agricultural Sciences**

**M.Sc. (Hort.) Vegetable Science  
I Semester**

<b>Sl. No</b>	<b>Course Code</b>	<b>Course Title</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Contact Hrs /Wk</b>	<b>Credits</b>
1	MSHV 7610	Breeding of vegetable crops	2	0	1	5	3
2	MSHV 7611	Production technology of warm season vegetable crops	2	0	1	5	3
3	MSHV 7612	Systematics of vegetable crops	2	0	1	5	2
4	MSHV 7613	Statistical Methods and Design of Experiments	2	0	1	5	3
5	MSHV 7614	Computer Application for Agricultural Research	1	0	1	4	2
6	MSHV 3615	Research	0	0	1	3	1
7	MSHV 4616	Agricultural Research Ethics and Methodology	0	0	1	3	1
8	MSHV 4617	Technical Writing and Communication Skill	0	0	1	3	1
		<b>TOTAL</b>	<b>9</b>	<b>0</b>	<b>8</b>	<b>33</b>	<b>17</b>

## II Semester

Sl. No	Course Code	Course Title	L	T	P	Contact Hrs / Wk	Credits
1	MSHV 7620	Protected and precision horticulture	2	0	1	5	3
2	MSHV 7621	Production technology of cool season vegetable crops	2	0	1	5	3
3	MSHV 7622	Organic vegetable production	1	0	1	4	2
4	MSHV 7623	Principles and processing of vegetable crops	2	0	1	5	3
5	MSHV 7624	Concepts in crop physiology	2	0	1	5	3
6	MSHV 3625	Research	0	0	2	6	2
7	MSHV 4626	Basic Concepts In Laboratory Techniques (O+1)	0	0	1	3	1
8	MSHV 4627	Library and Information Services (O+1)	0	0	1	3	1
		<b>TOTAL</b>	<b>9</b>	<b>0</b>	<b>9</b>	<b>36</b>	<b>18</b>

## III Semester

Sl. No	Course Code	Course Title	L	T	P	Contact Hrs / Wk	Credits
1	MSHV 763#	Minor Course - Related discipline	2	0	1	5	3
2	MSHV 763#	Minor Course - Related discipline	2	0	1	5	3
3	MSHV 3632	Research	0	0	8	24	8
4	MSHV 6633	Seminar	0	0	1	3	1
5	MSHV 4634	Intellectual property and its management in agriculture	1	0	0	1	1
6	MSHV 4635	Disaster management	1	0	0	1	1
7	MSHV 4636	Constitution of India	1	0	0	1	1
		<b>TOTAL</b>	<b>7</b>	<b>0</b>	<b>11</b>	<b>40</b>	<b>18</b>

# Minor course

#### IV Semester

Sl. No	Course Code	Course Title	L	T	P	Contact Hrs / Wk	Credits
1	MSHV 3640	Research	0	0	9	27	9
2	MSHV 1641	Value Added Course	3	0	0	3	3
		<b>TOTAL</b>	<b>3</b>	<b>0</b>	<b>9</b>	<b>30</b>	<b>12</b>

**VAC\*- Value added course (as per approval in the Board of Studies)**

#### SEMESTER WISE CREDIT LOAD

S. No.	SEMESTER	L	T	P	C
1.	SEMESTER I	9	0	8	17
2.	SEMESTER II	9	0	9	18
3.	SEMESTER III	7	0	11	18
4.	SEMESTER IV	3	0	9	12
	<b>TOTAL</b>	<b>28</b>	<b>0</b>	<b>37</b>	<b>65</b>

**Total credits with Non-Credit courses (7 credits) as recommended by ICAR  
= 58+7 =65**

## DISTRIBUTION OF COURSES

MAJOR – 21 CREDITS							
S. No.	Course Code	Courses	L	T	P	Contact Hrs / Wk	Credits
1.	MSHV 7610	Breeding of vegetable crops	2	0	1	5	3
2.	MSHV 7611	Production technology of warm season vegetable crops	2	0	1	5	3
3.	MSHV 7612	Systematics of vegetable crops	2	0	1	5	2
4.	MSHV 7620	Protected and precision horticulture	2	0	1	5	3
5.	MSHV 7621	Production technology of cool season vegetable crops	2	0	1	5	3
6.	MSHV 7622	Organic vegetable production	2	0	1	5	3
7.	MSHV 7623	Principles and processing of vegetable crops	2	0	1	5	3
<b>Total</b>			<b>14</b>	<b>0</b>	<b>7</b>	<b>35</b>	<b>21</b>
MINOR- 9 CREDITS							
1.	MSHV 7624	Concepts in crop physiology	2	0	1	5	3
2.	MSHV 763#	Minor Course - Related discipline	2	0	1	5	3
3.	MSHV 763#	Minor Course - Related discipline	2	0	1	5	3
<b>Total</b>			<b>6</b>	<b>0</b>	<b>3</b>	<b>15</b>	<b>9</b>
SUPPORTING COURSES - 5 CREDITS							
1.	MSHV 7613	Statistical Methods and Design of Experiments	2	0	1	5	3
2.	MSHV 7614	Computer Application for Agricultural Research	1	0	1	4	2
<b>Total</b>			<b>3</b>	<b>0</b>	<b>2</b>	<b>9</b>	<b>5</b>
SEMINAR AND RESEARCH- 21 CREDITS							
1.	MSHV 6633	Seminar	0	0	1	3	1
2.	MSHV 3615	Research	0	0	1	3	1
3.	MSHV 3625	Research	0	0	2	6	2
4.	MSHV 3632	Research	0	0	8	24	8
5.	MSHV 3640	Research	0	0	9	27	9
<b>Total</b>			<b>0</b>	<b>0</b>	<b>21</b>	<b>63</b>	<b>21</b>
<b>Grand Total</b>			<b>22</b>	<b>0</b>	<b>33</b>	<b>120</b>	<b>55</b>

### NON-CREDIT COMPULSORY COURSE

S. No.	Course Code	Courses	L	T	P	Contact Hrs / Wk	Credits
1.	MSHV 4616	Agriculture research ethics and methodology	0	0	1	3	1
2.	MSHV 4617	Technical writing and communication skills	0	0	1	3	1
3.	MSHV 4626	Basic concepts in laboratory techniques	0	0	1	3	1
4.	MSHV 4627	Library and information services	0	0	1	3	1
5.	MSHV 4634	Intellectual property and its management in agriculture	1	0	0	1	1
6.	MSHV 4635	Disaster management	1	0	0	1	1
7.	MSHV 4636	Constitution of India	1	0	0	1	1

### MINOR COURSES

S. No.	Course Code	Courses	L	T	P	Contact Hrs / Wk	Credits
1.	MSHV 763A	Organic farming and precision agriculture	2	0	1	5	3
2.	MSHV 763B	Dry farming and water shed management	2	0	1	5	3
3.	MSHV 763C	Productive insects and weed killers	2	0	1	5	3
4.	MSHV 763D	Pest management in organic farming	2	0	1	5	3
5.	MSHV 763E	Biological control of crop diseases	2	0	1	5	3
6.	MSHV 763F	Mushroom technology	2	0	1	5	3
7.	MSHV 763G	Microbial inoculant production technology	2	0	1	5	3
8.	MSHV 763H	Industrial microbiology	2	0	1	5	3
9.	MSHV 763I	Soil, Water and air pollution	2	0	1	5	3
10.	MSHV 763J	Soil health management	2	0	1	5	3
11.	MSHV 763K	Concepts of crop physiology	2	0	1	5	3
12.	MSHV 763L	Bio-instrumentation	2	0	1	5	3
13.	MSHV 763M	Plant tissue culture	2	0	1	5	3
14.	MSHV 763N	Germplasm collection,	2	0	1	5	3

		exchange and quarantine					
15.	MSHV 763O	Fundamentals of genetics	2	0	1	5	3
16.	MSHV 763P	Seed production techniques in crops	2	0	1	5	3
17.	MSHV 763Q	Seed quality testing and certification	2	0	1	5	3
18.	MSHV 763R	Propagation and nursery management of horticultural crops	2	0	1	5	3
19.	MSHV 763S	Genetic resources and conservation of fruit crops	2	0	1	5	3
20.	MSHV 763T	Hi - tech vegetable production	2	0	1	5	3
21.	MSHV 763U	Ornamental horticulture	2	0	1	5	3
22.	MSHV 763V	Genetic resources and conservation of medicinal and aromatic plants	2	0	1	5	3
23.	MSHV 763W	Natural resource and environmental economics	2	0	1	5	3
24.	MSHV 763X	Agribusiness analysis	2	0	1	5	3
25.	MSHV 763Y	Agricultural insurance and risk management	2	0	1	5	3
26.	MSHV 763Z	Farm journalism	2	0	1	5	3
27.	MSHV 7631	Introduction to visual communication and advertising technologies	2	0	1	5	3