



Ph.D. Agriculture (Genetics and Plant Breeding)

Program Scheme

School of Agriculture

ITM University, Gwalior, Madhya Pradesh 474001

Semester I

| Sl. No. | Course Title | Subject Code | Credits | Course Distribution | | | Total work load Hrs./Week | Nature |
|----------------------|---|--------------|-------------|---------------------|---|-----|---------------------------|-----------------------|
| | | | | L | P | S/R | | |
| 1 | Advances in Plant Breeding System | GPB-601 | 3+0 | 3 | 0 | 0 | 3 | Major |
| 2 | Molecular cytogenetics for crop Improvement | GPB-603 | 2+0 | 2 | 0 | 0 | 2 | Major |
| 3 | Plant genetic resources, Conservation and Utilization | GPB- 604 | 2+0 | 2 | 0 | 0 | 2 | Major |
| 4 | Hybrid seed Production Technology | SST- 601 | 2+1 | 2 | 1 | 0 | 4 | Minor |
| 5 | Library and Information Services | PGS- 501 | 0+1 | 0 | 1 | 0 | 2 | Compulsory Non-Credit |
| 6 | Intellectual Property and Its Management | PGS- 503 | 0+1 | 0 | 1 | 0 | 2 | Compulsory Non-Credit |
| 7 | Technical Writing and Communication Skill | PGS- 502 | 0+1 | 0 | 1 | 0 | 2 | Compulsory Non-Credit |
| Total Credits | | | 11+5 | | | | | |

Semester II

| Sl. No. | Course Title | Subject Code | Credits | Course Distribution | | | Total work load Hrs./Week | Nature |
|----------------------|--|--------------|------------|---------------------|---|-----|---------------------------|------------|
| | | | | L | P | S/R | | |
| 1 | Advances in Biometrical Genetics | GPB- 602 | 2+1 | 2 | 1 | 0 | 4 | Major |
| 2 | Genomics in Plant Breeding | GPB- 605 | 3+0 | 3 | 0 | 0 | 3 | Major |
| 3 | Genetic Purity and DUS Testing | SST- 604 | 2+1 | 2 | 1 | 0 | 4 | Minor |
| 4 | Techniques in Biochemistry | BIOCHEM-505 | 2+2 | 2 | 2 | 0 | 6 | Supporting |
| 5 | Data Analysis Using Statistical Packages | STAT-522 | 2+1 | 2 | 1 | 0 | 4 | Supporting |
| 6 | Doctoral Research | GPB- 699 | 0+5 | 0 | 5 | 0 | 05 | Research |
| Total Credits | | | 9+9 | | | | | |

Semester III

| | | | | | | | | |
|----------------------|-------------------|----------|-------------|---|----|---|----|----------------|
| 1 | Doctoral Research | GPB- 699 | 0+20 | 0 | 20 | 0 | 20 | Research |
| | Seminar- I | GPB- 691 | 1+0 | 1 | 0 | 0 | 1 | Credit Seminar |
| Total Credits | | | 1+20 | | | | | |

Semester IV

| | | | | | | | | |
|----------------------|-------------------|----------|-------------|---|----|---|----|----------------|
| 1 | Doctoral Research | GPB- 699 | 0+15 | 0 | 15 | 0 | 15 | Research |
| 2 | Seminar- II | GPB- 692 | 1+0 | 1 | 0 | 0 | 1 | Credit Seminar |
| Total Credits | | | 1+15 | | | | | |

Semester V

| | | | | | | | | |
|----------------------|-------------------|----------|-------------|---|----|---|----|----------|
| 1 | Doctoral Research | GPB- 699 | 0+20 | 0 | 15 | 0 | 20 | Research |
| Total Credits | | | 0+20 | | | | | |

Semester VI

| | | | | | | | | |
|----------------------|----------------------------|----------|-------------|---|----|---|----|------------------|
| 1 | Doctoral Research | GPB- 699 | 0+14 | 0 | 14 | 0 | 14 | Research |
| 2 | Doctoral Thesis Seminar | GPB- 693 | 0+1 | 0 | 1 | 0 | 1 | Doctoral Seminar |
| Total Credits | | | 0+15 | | | | | |

Note:

¹The above stated supporting courses are indicative however student may opt other course as per the Ph.D. dissertation work.

²Compulsory non-credit courses are only applicable for those students who have not completed in their respective Master's programme.