**Course Curricula and Syllabus for PhD Degree**

**Department of Agronomy**

**Bangladesh Agricultural University**

**Mymensingh**

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| **April – September Semester**  |
| **A: Compulsory Courses (9 Credits)**  |
| Course Code | Course Title | Credit |
| AGRON 601 | Advanced Crop Management | 3 |
| AGRON 603 | Seed Production and Quality Control | 3 |
| AGRON 605 | Scientific Research and Communication | 3 |
| **B: Elective Course (4 Credits)** |
| Course Code | Course Title | Credit |
| AGRON 613 | Agroecology and Sustainable Crop Production | 2 |
| AGRON 615 | Agronomy of Industrial Crops | 2 |
| AGRON 617 | Crop Husbandry for Vulnerable Ecosystem | 2 |
| AGRON 619 | Crop Quality Control and Improvement | 2 |
| AGRON 621 | Green Agriculture | 2 |
| AGRON 623 | Precision Agriculture and Crop Modeling | 2 |
| **October − March Semester** |
| **A: Compulsory Courses (9 Credits)** |
| Course Code | Course Title | Credit |
| AGRON 607 | Crop Environment Interactions | 3 |
| AGRON 609 | Climate Smart Agronomy  | 3 |
| AGRON 611 | Farming Systems  | 3 |
| **B: Elective Course (2 Credits)**  |
| Course Code | Course Title | Credit |
| AGRON 625 | Integrated Nutrient Management for Crop Production | 2 |
| AGRON 627 | Recent Trends in Weed Management  | 2 |
| AGRON 629 | Abiotic Stress Management in Crop | 2 |
| AGRON 631 | Advances in Water Management | 2 |
|  |
| Seminar (Two) | 4 (S/U) |
| Research Reports (End of first and third year) | 4 (S/U) |
| Research | 23(S/U) |
| Dissertation evaluation | 15(S/U) |
| Dissertation defense | 6(S/U) |
| **GRAND TOTAL** | **76** |

 **S/U where S=Satisfactory and U=Unsatisfactory**

**Course Curricula and Syllabus for PhD Degree**

**Department of Soil Science**

**Bangladesh Agricultural University**

**Mymensingh**

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| **April – September Semester**  |
| **A:Compulsory Courses (9 Credits)**  |
| Course Code | Course Title | Credit |
| SS 607 | Advanced Soil Fertility and Plant Nutrition  | 3 |
| SS 609 | Advanced Soil Degradation and Conservation  | 3 |
| SS 611 | Advanced Research and Reporting | 3 |
| **B:Elective Courses (2/4 Credits)** |
| Course Code | Course Title | Credit |
| SS 523 | Soil Water | 2 |
| SS 525 | Soil Resilience and Climate Change | 2 |
| SS 527 | Micronutrients in Soils and Plants  | 2 |
| SS 529 | Soil Health and Risk Reduction  | 2 |
| **October − March Semester** |
| **A:Compulsory Courses (9 Credits)** |
| Course Code | Course Title | Credit |
| SS 601 | Advanced Soil Physics | 3 |
| SS 603 | Advanced Soil Chemistry  | 3 |
| SS 605 | Advanced Soil Microbiology | 3 |
| **B:Elective Course (2/4 Credits)** |
| Course Code | Course Title | Credit |
| SS 515 | Waste Management and Biofertilizer | 2 |
| SS 517  | Soils of Bangladesh  | 2 |
| SS 519 | Soil, Water and Air Pollution  | 2 |
| SS 521 | Soil, Water and Fertilizer Management using Nuclear Techniques | 2 |
|  |
| Seminar (Two) |  | 4 (S/U) |
| Research Reports (End of first and third year) |  | 4 (S/U) |
| Research |  | 23(S/U) |
| Dissertation evaluation |  | 15(S/U) |
| Dissertation defense |  | 6(S/U) |
| **GRAND TOTAL** |  | 76(S/U) |

 **S/U where S=Satisfactory and U=Unsatisfactory**

**Course Curricula and Syllabus for PhD Degree**

**Department of Entomology**

**Bangladesh Agricultural University**

**Mymensingh**

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| **April- September Semester** |
| **A: Compulsory Courses (9 Credits)** |
| Course Code | Course Title | Credit  |
| ENTOM 601 | Advanced Insect Taxonomy | 3 |
| ENTOM 603 | Advanced Insect Ecology | 3 |
| ENTOM 605 | Applied Insect Pest Management | 3 |
| **B: Elective Courses (2/4 Credits)**  |
| Course Code | Course Title | Credit |
| ENTOM 613 | Advanced Insecticide Toxicology | 2 |
| ENTOM 615 | Plant Biosecurity and Biosafety | 2 |
| ENTOM 617 | Advanced Techniques in Entomology | 2 |
| ENTOM 619 | Molecular Approaches in Entomology | 2 |
| ENTOM 621 | Post Harvest Entomology | 2 |
| ENTOM 509 | Insect Nutrition & Biochemistry | 2 |
| ENTOM 513 | Insect Pathology | 2 |
| ENTOM 523 | Industrial Entomology | 2 |
| ENTOM 527 | Chemical Ecology | 2 |
| **October- March Semester**  |
| **A: Compulsory Courses (9 Credits)** |
| Course Code | Course Title | Credit  |
| ENTOM 607 | Advanced Insect Physiology | 3 |
| ENTOM 609 | Advances in Pesticide Management | 3 |
| ENTOM 611 | Research Methodology in Entomology | 3 |
| **B: Elective Courses (2/ 4 Credits)**  |
| Course Code | Course Title | Credit |
| ENTOM 623 | Advanced Host Plant Resistance | 2 |
| ENTOM 625 | Haor and Wet Land Entomology | 2 |
| ENTOM 627 | Invasive Pest Management | 2 |
| ENTOM 629 | Advanced Biological Control | 2 |
| ENTOM 631 | Integrated Pest management: Development and Implementation Perspective | 2 |
| ENTOM 517 | Insect Biodiversity and Evolution | 2 |
| ENTOM 525 | Insect Morphology | 2 |
| ENTOM 529 | Insect Biotechnology | 2 |
| ENTOM 531 | Acarology | 2 |
|  |
| Seminar (Two) | 4 (S/U) |
| Research Reports (End of first and third year) | 4 (S/U) |
| Research | 23 (S/U) |
| Dissertation evaluation | 15 (S/U) |
| Dissertation defense | 6 (S/U) |
| **GRAND TOTAL** | 76 |

 **S/U where S=Satisfactory and U=Unsatisfactory**

**Course Curricula and Syllabus for PhD Degree**

**Department of Horticulture**

**Bangladesh Agricultural University**

**Mymensingh**

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| **April-September Semester** |
| **A: Compulsory Courses (9 Credits)**  |
| **Course Code** | **Course Title** | **Credit** |
| Hort 601 | Advances in Pomology | 3 |
| Hort 603 | Advances in Ornamental and Landscape Horticulture | 3 |
| Hort 605 | Horticultural Crop Improvement | 3 |
| **B: Elective Courses (2/4 Credits)** |
| **Course Code** | **Course Title** | **Credit** |
| Hort 621 | Climate Smart Horticulture | 2 |
| Hort 623 | Homestead Agroforestry and Gardening | 2 |
| Hort 625 | Stress Management of Horticultural Crops | 2 |
| Hort 627 | Special Techniques for Horticultural Crop Production | 2 |
| Hort 629 | Roof Top Gardening | 2 |
| Hort 631 | Principles and Practices of Organic Horticulture | 2 |
| Hort 633 | Biodiversity and Conservation of Horticultural Crops | 2 |
| Hort.635 | Seed Technology of Horticultural Crops | 2 |
| Hort 637 | Medicinal, Aromatic and Plantation Crops | 2 |

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| **October-March Semester** |
| **A: Compulsory Courses (9 Credits)**  |
| **Course Code** | **Course Title** | **Credit** |
| Hort 611 | Advances in Floriculture | 3 |
| Hort 613 | Advanced Postharvest Technology of Horticultural Crops | 3 |
| Hort 615 | Research Methodology | 3 |
| **B: Elective Courses (2/4 Credits)** |
| **Course Code** | **Course Title** | **Credit** |
| Hort 641 | Sustainable Horticulture | 2 |
| Hort 643 | Horticulture and Human Nutrition | 2 |
| Hort 645 | Plant Growth Regulators in Horticulture | 2 |
| Hort 647 | Food Quality and Safety in Horticulture  | 2 |
| Hort 649 | Horticultural Production in Changing Climate | 2 |
| Hort 651 | Advanced Propagation Techniques of Horticultural Crops | 2 |
| Hort 653 | Advanced Nursery Management | 2 |
| Hort 655 | Advanced Physiology of Horticultural Crops | 2 |
| Hort 657 | Advances in Root and Tuber Crops  | 2 |
| Hort 659 | Underutilized Minor Fruits | 2 |
| Hort 661 | Aquatic Horticulture | 2 |
|  |
| Seminar (Two) | 4 (S/U) |
| Research Reports (End of first and third year) | 4 (S/U) |
| Research | 23(S/U) |
| Dissertation evaluation | 15(S/U) |
| Dissertation defense | 6(S/U) |
| **GRAND TOTAL** | 76(S/U) |

 S/U where S=Satisfactory and U=Unsatisfactory

**Course Curricula and Syllabus for PhD Degree**

**Department of Plant Pathology**

**Bangladesh Agricultural University**

**Mymensingh**

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| **April – September Semester**  |
| **A:Compulsory Courses (9 Credits)**  |
| **Course Code** | **Course Title** | **Credit** |
| P.PATH 615 | Signal Transduction in Plant Microbe Interaction | 3 |
| P.PATH 617 | Nanotechnology in Plant Pathology | 3 |
| P.PATH 619 | Molecular Techniques in Plant Pathology | 3 |
| **B:Elective Courses (3 Credits)** |
| **Course Code** | **Course Title** | **Credit** |
| P.PATH 621 | Formulation & Application of Microbial Bioagents | 3 |
| P.PATH 623 | Information Technology and Plant Pathology | 3 |
| P.PATH 625 | Biological Control of Plant Pathogens | 3 |
| P.PATH 627 | Breeding for Disease Resistance | 3 |
| P.PATH 604 | Plant Biosecurity and Biosafety | 3 |
| **October − March Semester** |
| **A:Compulsory Courses (9 Credits)** |
| **Course Code** | **Course Title** | **Credit** |
| P.PATH 601 | Advances in Plant Disease Management | 3 |
| P.PATH 603 | Professional Development and Ethics in Plant Pathology | 3 |
| P.PATH 605 | Microbial Biofilm and Plant Microbe Interaction | 3 |
| **B:Elective Course (3 Credits)** |
| **Course Code** | **Course Title** | **Credit** |
| P.PATH 607 | Microbial Pesticide and Pesticide Toxicology | 3 |
| P.PATH 609 | Genetics of Plant Pathogens | 3 |
| P.PATH 611 | Emerging Plant Disease and Food Security | 3 |
| P.PATH 613 | Plant health and Organic Agriculture | 3 |
| P.PATH 602 | Applied Bioinformatics in Plant Pathology | 3 |
|  |
| Seminar (Two) |  | 4 (S/U) |
| Research Reports (End of first and third year) |  | 4 (S/U) |
| Research |  | 23(S/U) |
| Dissertation evaluation |  | 15(S/U) |
| Dissertation defense |  | 6(S/U) |
| **GRAND TOTAL** |  | 76(S/U) |

 S/U where S=Satisfactory and U=Unsatisfactory

**Course Curricula and Syllabus for PhD Degree**

**Department of Crop Botany**

**Bangladesh Agricultural University**

**Mymensingh**

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| **April – September Semester**  |
| **A:Compulsory Courses (9 Credits)**  |
| **Course Code** | **Course Title** | **Credit** |
| CBOT 601 | Plant Morphometrics and Systematics  | 3 |
| CBOT 603 | Plant Ecology and Phytoclimate | 3 |
| CBOT 605 | Plant Physiology | 3 |
| **B:Elective Courses (2/4 Credits)** |
| **Course Code** | **Course Title** | **Credit** |
| CBOT 613  | Biodiversity and Conservation | 2 |
| CBOT 615 | Systems Ecology | 2 |
| CBOT 617  | Phyto-Nanotechnology | 2 |
| CBOT 619  | Crop Physiology | 2 |
| CBOT 621  | Crop Phylogeny and Evolution | 2 |
| CBOT 623  | Research Methodology and Report Writing | 2 |
| **October − March Semester** |
| **A:Compulsory Courses (9 Credits)** |
| **Course Code** | **Course Title** | **Credit** |
| CBOT 607  | Medicinal Plants  | 3 |
| CBOT 609  | Plant Stress Physiology | 3 |
| CBOT 611  | Eco-efficient and Climate Smart Agriculture | 3 |
| **B:Elective Course (2/4 Credits)** |
| **Course Code** | **Course Title** | **Credit** |
| CBOT 625 | Data Analysis and Visualization | 2 |
| CBOT 627 | Climate Change Impact Assessment | 2 |
| CBOT 629 | Internet of Things in Agriculture  | 2 |
| CBOT 631 | Photophysiology and Vertical Agriculture | 2 |
| CBOT 633 | Applied Plant Tissue Culture | 2 |
| CBOT 635 | Plant Ecophysiology | 2 |
|  |
| Seminar (Two) | 4 (S/U) |
| Research Reports (End of first and third year) | 4 (S/U) |
| Research | 23(S/U) |
| Dissertation evaluation | 15(S/U) |
| Dissertation defense | 6(S/U) |
| **GRAND TOTAL** | 76(S/U) |

 S/U where S=Satisfactory and U=Unsatisfactory

**Course Curricula and Syllabus for PhD Degree**

**Department of Genetics and Plant Breeding**

**Bangladesh Agricultural University**

**Mymensingh**

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| **April – September Semester**  |
| **A:Compulsory Courses (9 Credits)**  |
| **Course Code** | **Course Title** | **Credit** |
| GPB 601 | Advanced Plant Breeding | 3 |
| GPB 603 | Molecular Genetics & Cytogenetics  | 3 |
| GPB 605 | Genetics of Plant Stress & Adaptation | 3 |
| **B:Elective Courses (4 Credits)** |
| **Course Code** | **Course Title** | **Credit** |
| GPB 613 | Scientific Writing & Communication  | 2 |
| GPB 615 | Plant Genetic Resources and Pre-breeding  | 2 |
| GPB 617 | Applied Hybrid Breeding | 2 |
| GPB 619 | Analytical Genomics and Bioinformatics | 2 |
| **October − March Semester** |
| **A:Compulsory Courses (9 Credits)** |
| **Course Code** | **Course Title** | **Credit** |
| GPB 607  | Molecular Breeding | 3 |
| GPB 609 | Applied Biometrical Genetics | 3 |
| GPB 611 | Plant Biotechnology & Genetic Engineering | 3 |
| **B:Elective Course (2 Credits)** |
| **Course Code** | **Course Title** | **Credit** |
| GPB 621 | Applied Stress Breeding | 2 |
| GPB 623 | Industrial Plant Breeding | 2 |
| GPB 625 | Multivariate Statistics | 2 |
| GPB 602 | Skill Development and Field Attachment | 2 |
|  |
| Seminar (Two) |  | 4 (S/U) |
| Research Reports (End of first and third year) |  | 4 (S/U) |
| Research |  | 23(S/U) |
| Dissertation evaluation |  | 15(S/U) |
| Dissertation defense |  | 6(S/U) |
| **GRAND TOTAL** |  | 76(S/U) |

 S/U where S=Satisfactory and U=Unsatisfactory

**Course Curricula and Syllabus for PhD Degree**

**Department of Agricultural Extension Education**

**Bangladesh Agricultural University**

**Mymensingh**

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| **April – September Semester**  |
| **A:Compulsory Courses (9 Credits)**  |
| **Course Code** | **Course Title** | **Credit** |
| AGEXT 601 | Advanced Research Methods in Social Science-I | 3 |
| AGEXT 603 | Ethics in Research and Academia | 3 |
| AGEXT 605 | Communication and Innovation Management | 3 |
| **B:Elective Courses (3 Credits)** |
| **Course Code** | **Course Title** | **Credit** |
| AGEXT 607 | Human Resource and Training Management | 3 |
| AGEXT 609 | Extension Approaches to Climate Risk Management  | 3 |
| **October − March Semester** |
| **A:Compulsory Courses (9 Credits)** |
| **Course Code** | **Course Title** | **Credit** |
| AGEXT 611 | Advanced Research Methods in Social Science-II | 3 |
| AGEXT 613 | Theoretical Approaches of Extension Education | 3 |
| AGEXT 615 | Leadership Development in Agricultural Extension  | 3 |
| **B:Elective Course ( 3 Credits)** |
| **Course Code** | **Course Title** | **Credit** |
| AGEXT 617: | Participatory Community Development | 3 |
| AGEXT 619: | Project Development and Evaluation | 3 |
|  |
| Seminar (Two) |  | 4 (S/U) |
| Research Reports (End of first and third year) |  | 4 (S/U) |
| Research |  | 23 (S/U) |
| Dissertation evaluation |  | 15 (S/U) |
| Dissertation defense |  | 6 (S/U) |
| **GRAND TOTAL** |  | 76 |

 S/U where S=Satisfactory and U=Unsatisfactory

**Course Curricula and Syllabus for PhD Degree**

**Department of Agricultural Chemistry**

**Bangladesh Agricultural University**

**Mymensingh**

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| **April – September Semester**  |
| **A: Compulsory Courses (9 Credits)**  |
| **Course Code** | **Course Title** | **Credit** |
| ACHEM 604 | Advanced Research Methodology and Data Processing  | 3 |
| ACHEM 605 | Nuclear Chemistry in Agriculture  | 3 |
| ACHEM 607 | Applied Environmental Chemistry | 3 |
| **B: Elective Courses (2/4 Credits)** |
| **Course Code** | **Course Title** | **Credit** |
| ACHEM 621 | Formulation Techniques of Agrochemicals  | 3 |
| ACHEM 623 | Rhizosphere Technology and Plant Ionomics  | 3 |
| ACHEM 625 | Chemistry and Technology of Bio and Renewable Energy | 3 |
| ACHEM 627 | Green Chemistry and Sustainable Agriculture | 3 |
| ACHEM 629 | Nanotechnology in Agriculture  | 3 |
| ACHEM 631 | Micro and Trace Elements in Agriculture | 3 |
| **October − March Semester** |
| **A: Compulsory Courses (9 Credits)** |
| **Course Code** | **Course Title** | **Credit** |
| ACHEM 601 | Advanced Chemistry of Agrochemicals  | 3 |
| ACHEM 602 | Advanced Instrumental Methods and Analytical Techniques  | 3 |
| ACHEM 603 | Mineral Nutrition of Higher Plants | 3 |
| **B: Elective Courses (2/4 Credits)** |
| **Course Code** | **Course Title** | **Credit** |
| ACHEM 609 | Applied Waste Management Technologies | 3 |
| ACHEM 611 | Advanced Water Science  | 3 |
| ACHEM 613 | Chemical Sensors and Biosensors  | 3 |
| ACHEM 615 | Quality Control and Food Safety  | 3 |
| ACHEM 617 | Chemistry and Technology of Organic Agriculture | 3 |
| ACHEM 619 | Chemistry and Technology of Biosorption | 3 |
|  |
| Seminar (Two) |  | 4 (S/U) |
| Research Reports (End of first and third year) |  | 4 (S/U) |
| Research |  | 23 (S/U) |
| Dissertation evaluation |  | 15 (S/U) |
| Dissertation defense |  | 6 (S/U) |
| **GRAND TOTAL** |  | 76 |

**S/U where S=Satisfactory and U=Unsatisfactory**

**Course Curricula and Syllabus for PhD Degree**

**Department of Biochemistry and Molecular Biology**

**Bangladesh Agricultural University**

**Mymensingh**

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| **April – September Semester** |
| **A:Compulsory Courses (9 Credits)** |
| **Course Code** | **Course Title** | **Credit** |
| BMB 607: | Applied Molecular Biology | 3 |
| BMB 609: | Bioinformatics and System Biology | 3 |
| BMB 611: | Research Methodology | 3 |
| **B:Elective Courses (2/4 Credits)** |
| **Course Code** | **Course Title** | **Credit** |
| BMB 619: | Special Topics in Biochemistry | 2 |
| BMB 621: | Comparative Biochemistry | 2 |
| BMB 623: | Advanced Animal Biochemistry | 2 |
| **October − March Semester** |
| **A:Compulsory Courses (9 Credits)** |
| **Course Code** | **Course Title** | **Credit** |
| BMB 601: | Advanced Chemistry of Biomolecules | 3 |
| BMB 603: | Advanced Protein Structure and Functions | 3 |
| BMB 605: | Advanced Nutrition and Metabolism | 3 |
| **B:Elective Course (2/4 Credits)** |
| **Course Code** | **Course Title** | **Credit** |
| BMB 613: | Biochemistry of Natural Products | 2 |
| BMB 615: | Applied Plant Biochemistry | 2 |
| BMB 617: | Advanced Diagnostics and DNA Forensic Sciences | 2 |
|  |
| Seminar (Two) | 4 (S/U) |
| Research Reports (End of first and third year) | 4 (S/U) |
| Research | 23 (S/U) |
| Dissertation evaluation | 15 (S/U) |
| Dissertation defense | 6 (S/U) |
| **GRAND TOTAL** | 76 |

 **S/U where S=Satisfactory and U=Unsatisfactory**

**Course Curricula and Syllabus for PhD Degree**

**Department of Agroforestry**

**Bangladesh Agricultural University**

**Mymensingh**

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| --- |
| **April-September Semester** |
| **A: Compulsory Courses (9 Credits)** |
| **Course Code** | **Course Title** | **Credit** |
| AF 601  | Principles and Practices of Agroforestry | 3 |
| AF 603 | Agroforestry Species | 3 |
| AF 605 | Participatory Forestry and Rural Development | 3 |
| **B: Elective Courses (3 Credits)** |
| **Course Code** | **Course Title** | **Credit** |
| AF 613  | Soil Conservation in Agroforestry | 3 |
| AF 615 | Medicinal Plants in Agroforestry | 3 |
| **October-March Semester** |
| **A: Compulsory Courses (9 Credits)** |
| **Course Code** | **Course Title** | **Credit** |
| AF 607 | Agroforestry Components and Interactions | 3 |
| AF 609 | Impact Assessment Procedure in Agroforestry | 3 |
| AF 611 | Advanced Research Methodology in Agroforestry | 3 |
| **B: Elective Courses (3 Credits)** |
| **Course Code** | **Course Title** | **Credit** |
| AF 617 | Silvicultural Management in Agroforestry  | 3 |
| AF 619 | Conservation of Environment through Agroforestry | 3 |
|  |
| Seminar (two) | 4 (S/U) |
| Research Reports (End of first and third year) | 4 (S/U) |
| Research  | 23 (S/U) |
| Dissertation evaluation | 15 (S/U) |
| Dissertation defense | 6 (S/U) |
| **GRAND TOTAL** | 76 |

 **S/U where S=Satisfactory and U=Unsatisfactory**

**Course Curricula and Syllabus for PhD Degree**

**Department of Biotechnology**

**Bangladesh Agricultural University**

**Mymensingh**

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| --- |
| **April- September Semester** |
| **A: Compulsory Courses (9 credits)** |
| **Course Code** | **Course Title** | **Credit** |
| BIOTECH 601 | Advanced Molecular Cell Biology | 3 |
| BIOTECH 603 | Genetic Engineering | 3 |
| BIOTECH 605 | Advanced Molecular Techniques in Bioscience | 3 |
| **B: Elective Courses (2 credits)**  |
| **Course Code** | **Course Title** | **Credit** |
| BIOTECH 613 | Fish and Marine Biotechnology | 2 |
| BIOTECH 615 | Animal Biotechnology | 2 |
| BIOTECH 617 | Plant Biotechnology | 2 |
| **October- March Semester**  |
| **A: Compulsory Courses (9 credits)** |
| **Course Code** | **Course Title** | **Credit** |
| BIOTECH 607 | Genomics and Bioinformatics | 3 |
| BIOTECH 609 | Biosafety and Bioethics in Biotechnology | 3 |
| BIOTECH 611 | Research Methodology and Scientific Writing | 3 |
| **B: Elective Courses (4 credits)**  |
| **Course Code** | **Course Title** | **Credit** |
| BIOTECH 619 | Industrial Biotechnology | 2 |
| BIOTECH 621 | Environmental Biotechnology | 2 |
| BIOTECH 623 | Pharmaceutical Biotechnology | 2 |
| BIOTECH 625 | Synthetic Biology | 2 |
|  |
| Seminar (Two) | 4 (S/U) |
| Research Reports (End of first and third year) | 4 (S/U) |
| Research | 23 (S/U) |
| Dissertation evaluation | 15 (S/U) |
| Dissertation defense | 6 (S/U) |
| **Grand Total** | 76 |

 **S/U where S=Satisfactory and U=Unsatisfactory**

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| **Course Curricula and Syllabus for PhD Degree****Department of Environmental Science****Bangladesh Agricultural University** **Mymensingh** |
| **April - September Semester** |
| **A. Compulsory courses (9 Credits)** |
| **Course Code** | **Course Title** | **Credits** |
| ENVSC 607  | Ecosystem and biodiversity | 3 |
| ENVSC 609 | Climate Change: Science, Impacts and Solutions | 3 |
| ENVSC 611 | Disaster Science and Management | 3 |
| **B. Elective courses (2/4 Credits)** |
| **Course Code** | **Course Title** | **Credits** |
| ENVSC 621 | Waste Management  | 2 |
| ENVSC 623 | Ecotoxicology and Environmental Hazards | 2 |
| ENVSC 625 | Applied Environmental Impact Assessment | 2 |
| AAS 613 | Environmental Statistics | 2 |
| **October - March Semester** |
| **A. Compulsory courses (9 Credits)** |
| **Course Code** | **Course Title** | **Credits** |
| ENVSC 601 | Advanced Environmental Science | 3 |
| ENVSC 603 | Environmental Pollution and Management | 3 |
| ENVSC 605 | Research Methodology | 3 |
| **B. Elective courses (2/4 Credits)** |
| **Course Code** | **Course Title** | **Credits** |
| ENVSC 613 | Atmospheric Aerosols  | 2 |
| ENVSC 615 | Meteorology and Weather Forecasting  | 2 |
| ENVSC 617 | GIS, Climate Modeling and Geographic Mapping | 2 |
| ENVSC 619 | Advanced Environmental Instrumental Analysis  | 2 |
|  |
| **Seminar (Two)**   | 4 (S/U) |
| **Research Reports (End of first and third year)**  | 4 (S/U) |
| **Research**  | 23 (S/U) |
| **Dissertation evaluation**  | 15 (S/U) |
| **Dissertation Defense**  | 6 (S/U) |
| **GRAND TOTAL** | 76 |

 **S/U where S=Satisfactory and U=Unsatisfactory**

**Course Curricula and Syllabus for PhD Degree**

**Department of Seed Science and Technology**

**Bangladesh Agricultural University**

**Mymensingh**

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| **April – September Semester**  |
| **A:Compulsory Courses (9 Credits)**  |
| **Course Code** | **Course Title** | **Credit** |
| SST 601 | Advances in Seed Production, Regulation and Governance | 3 |
| SST 603 | Seed Physiology and Technology | 3 |
| SST 605 | Tree seed technology | 3 |
| **B:Elective Courses (2/4 Credits)** |
| **Course Code** | **Course Title** | **Credit** |
| SST 620 | Seed Quality Enhancement | 2 |
| SST 622 | Biosafety of GM Seeds | 2 |
| SST 624 | Hybrid Seed Technology | 2 |
| **October − March Semester** |
| **A:Compulsory Courses (9 Credits)** |
| **Course Code** | **Course Title** | **Credit** |
| SST 607 | Seed Conditioning and storage facilities | 3 |
| SST 609 | Seed Planning, Movement and Marketing management | 3 |
| SST 611 | Seed Health management | 3 |
| **B:Elective Course (2/4 Credits)** |
| **Course Code** | **Course Title** | **Credit** |
| SST 626 | Advanced Laboratory Techniques in Seed Science and Technology | 2 |
| SST 628 | Ecological Aspects of Seeds | 2 |
| SST 630 | Seed Technology and Nutrient Uptake | 2 |
|  |  |  |
|  |
| Seminar (Two) |  | 4 (S/U) |
| Research Reports (End of first and third year) |  | 4 (S/U) |
| Research |  | 23 (S/U) |
| Dissertation evaluation |  | 15 (S/U) |
| Dissertation defense |  | 6 (S/U) |
| **GRAND TOTAL** |  | 76 |

 **S/U where S=Satisfactory and U=Unsatisfactory**