COURSES-UNDERGRADUATE PROGRAM OUTPUTS MATRİX IN THE AGRICULTURAL GENETİC ENGINEERING DEPARTMENT

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| **Course Type** | **Course Code** | **Course Title** | **Credit** | **Program Outputs** |
| **Ist Semester Courses** | **Class** | **Practice** | **ECTS** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** |
| Compulsory | TGM1001 | BOTANY | 2 | 2 | 5 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Compulsory | TGM1003 | MATHEMATICS | 3 | 0 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 |
| Compulsory | TGM1005 | CHEMISTRY | 3 | 0 | 4 | 4 | 4 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 |
| Compulsory | TGM1007 | AGRICULTURAL ECOLOGY | 2 | 2 | 4 | 4 | 4 | 5 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Compulsory | TGM1009 | SAFETY AND HEALTH AT WORK I | 2 | 0 | 2 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Compulsory | TGM1013 | FOREIGN LANGUAGE I | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 4 | 5 | 0 | 0 | 0 |
| Common Compulsory | TGM1111 | BASIC COMPUTER | 2 | 2 | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Common Compulsory | TGM1113 | TURKISH LANGUAGE I | 2 | 0 | 2 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Common Compulsory | TGM1115 | ATATURK PRINCIPLES AND THE HISTORY OF REV I | 2 | 0 | 2 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| **2nd Semester Courses** |  |
| Compulsory | TGM1002 | ANALYTICAL CHEMISTRY | 2 | 0 | 4 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Compulsory | TGM1004 | AGRICULTURAL ECONOMY | 2 | 0 | 3 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| Compulsory | TGM1006 | INTRODUCTION TO AGRICULTURAL GENETIC ENG. | 2 | 0 | 4 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Compulsory | TGM1008 | BIOLOGY OF CROP SPECIES | 2 | 2 | 5 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Compulsory | TGM1010 | GENETICS | 3 | 0 | 5 | 4 | 0 | 0 | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 |
| Compulsory | TGM1012 | SAFETY AND HEALTH AT WORK I | 2 | 0 | 2 | 4 | 4 | 0 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Compulsory | TGM1014 | FOREIGN LANGUAGE II | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 4 | 5 | 0 | 0 | 0 |
| Common Compulsory | TGM1112 | TURKISH LANGUAGE II | 2 | 0 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Common Compulsory | TGM1114 | ATATURK PRINCIPLES AND THE HISTORY OF REV. II | 2 | 0 | 2 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| **3rd Semester Courses** |  |
| Compulsory | TGM2001 | BIOCHEMISTRY | 2 | 1 | 5 | 5 | 0 | 0 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Compulsory | TGM2003 | BIOSTATISTICS | 2 | 0 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Compulsory | TGM2005 | SOIL SCIENCE | 2 | 2 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 0 |
| Compulsory | TGM2007 | BIOSYSTEM ENGINEERING | 2 | 1 | 5 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Compulsory | TGM2009 | PLANT PRODUCTION AND TECHNOLOGIES | 2 | 2 | 5 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Compulsory | TGM2011 | INTRODUCTION TO BIOTECHNOLOGY | 2 | 0 | 3 | 4 | 0 | 0 | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 |
| Compulsory | TGM2013 | PROFESSIONAL ENGLISH | 2 | 0 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| **4th Semester Courses** |  |
| Compulsory | TGM2002 | PLANT PHYSIOLOGY | 2 | 1 | 4 | 5 | 5 | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 5 |
| Compulsory | TGM2004 | HORTICULTURE | 2 | 1 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Compulsory | TGM2006 | FIELD CROPS | 2 | 1 | 4 | 4 | 0 | 0 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 |
| Compulsory | TGM2008 | PLANT SYSTEMATICS | 2 | 1 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Compulsory | TGM2010 | PLANT CELL, TISSUE AND ORGAN CULTURE | 2 | 2 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Compulsory | TGM2012 | PLANT GENETIC RESOURCES | 2 | 0 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Staj Dersi | TGM2014 | INTERNSHIP I | 0 | 0 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |

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| **5th Semester Courses** |  |
| Compulsory | TGM3001 | PHYTOPATHOLOGY | 2 | 1 | 5 | 4 | 4 | 0 | 0 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Compulsory | TGM3003 | PRINCIPLES OF PLANT BREEDING | 2 | 1 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Compulsory | TGM3005 | PLANT GENETIC ENGINEERING | 2 | 1 | 6 | 0 | 0 | 4 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Elective |  | TECHNICAL ELECTIVE COURSE I | 2 | 1 | 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Elective |  | TECHNICAL ELECTIVE COURSE II | 2 | 1 | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Elective |  | TECHNICAL ELECTIVE COURSE III | 2 | 1 | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **5th SEMESTER TECHNICAL ELECTIVE COURSE I** |  |
| Elective | TGM3021 | TURFGRASS | 2 | 1 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Elective | TGM3023 | ANIMAL PRODUCTION AND TECHNOLOGIES | 2 | 1 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 0 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Elective | TGM3025 | CLIMATE CHANGE | 2 | 1 | 5 | 3 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 |
| Elective | TGM3027 | MODELLING AND DECISION SUPPORT SYSTEMS | 2 | 1 | 5 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Elective | TGM3029 | HYDROLOGY | 2 | 1 | 5 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **5th SEMESTER TECHNICAL ELECTIVE COURSE II-III** |  |
| Elective | TGM3031 | CYTOGENETICS | 2 | 1 | 4 | 0 | 0 | 3 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Elective | TGM3033 | QUANTITATIVE GENETICS | 2 | 1 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Elective | TGM3035 | POPULATION GENETICS | 2 | 1 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| **6th Semester Courses** |  |
| Compulsory | TGM3002 | APPLIED PLANT BREEDING | 2 | 1 | 4 | 0 | 5 | 5 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Compulsory | TGM3004 | ENTOMOLOGY | 2 | 1 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Compulsory | TGM3006 | BIOINFORMATICS | 2 | 1 | 4 | 0 | 4 | 0 | 4 | 0 | 4 | 4 | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 0 |
| Staj Dersi | TGM3008 | INTERNSHIP II | 0 | 0 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Elective |  | TECHNICAL ELECTIVE COURSE VI | 2 | 1 | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Elective |  | TECHNICAL ELECTIVE COURSE V | 2 | 1 | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Elective |  | TECHNICAL ELECTIVE COURSE VI | 2 | 1 | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **6th SEMESTER TECHNICAL ELECTIVE COURSE IV** |  |
| Elective | TGM3022 | SEEDLING AND NURSERY TREE PRODUCTION | 2 | 1 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Elective | TGM3024 | INTEGRATED PEST MANAGEMENT | 2 | 1 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Elective | TGM3026 | ORGANIC ANIMAL HUSBANDRY | 2 | 1 | 4 | 4 | 0 | 0 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Elective | TGM3028 | APICULTURE AND POLLINATION | 2 | 1 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Elective | TGM3030 | POULTRY PRODUCTION | 2 | 1 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Elective | TGM3032 | AGRICULTURAL IRRIGATION AND DRAINAGE | 2 | 1 | 4 | 4 | 3 | 0 | 0 | 4 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Elective | TGM3034 | WATER QUALITY AND SALINITY | 2 | 1 | 4 | 3 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Elective | TGM3036 | BIOTECHNOLOGY IN ANIMAL SCIENCE | 2 | 1 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Elective | TGM3038 | PLANT DISEASES | 2 | 1 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 4 | 4 |
| **6th SEMESTER TECHNICAL ELECTIVE COURSE V-VI** |  |
| Elective | TGM3040 | MOLECULAR MARKERS | 2 | 1 | 4 | 3 | 0 | 0 | 3 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 3 | 0 | 0 | 0 |
| Elective | TGM3042 | MOLECULAR TECHNIQUES IN PLANT BREEDING | 2 | 1 | 4 | 3 | 0 | 0 | 3 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 3 | 0 | 0 | 0 |
| Elective | TGM3044 | RECOMBINANT DNA TECHNOLOGY | 2 | 1 | 4 | 4 | 4 | 0 | 4 | 0 | 4 | 4 | 0 | 0 | 4 | 4 | 0 | 4 | 4 | 4 |

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| **7th Semester Courses** |  |
| Compulsory | TGM4000 | GRADUATION THESIS | 0 | 2 | 5 | 0 | 5 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Compulsory | TGM4001 | SEED SCIENCE AND TECHNOLOGY | 2 | 2 | 6 | 5 | 0 | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Elective |  | SOCIAL ELECTIVE COURSE I | 4 | 0 | 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Elective |  | TECHNICAL ELECTIVE COURSE VII | 2 | 0 | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Elective |  | TECHNICAL ELECTIVE COURSE VIII | 3 | 0 | 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Elective |  | TECHNICAL ELECTIVE COURSE IX | 3 | 0 | 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **7th SEMESTER SOCIAL ELECTIVE COURSE I** |  |
| Elective | TBT4051 | WRITING AND PRESENTATION TECHNIQUES | 4 | 0 | 4 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 4 | 5 | 4 | 5 | 0 | 0 | 0 | 0 |
| Elective | TBT4053 | SCIENTIFIC RESEARCH METHODS | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Elective | TBT4061 | PROJECT WRITING AND EVALUATION | 4 | 0 | 4 | 0 | 5 | 0 | 0 | 4 | 0 | 0 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Elective | TBT4055 | PROFESSIONAL COMMUNICATION | 4 | 0 | 4 | 0 | 4 | 0 | 0 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 4 |
| Elective | TBT4059 | ENTREPRENEURSHIP | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 4 | 3 | 3 | 0 | 0 | 5 | 0 |
| Elective | TBT4057 | ENTERPRISE PLANNING | 4 | 0 | 4 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 4 | 3 | 3 | 0 | 0 | 5 | 0 |
| Elective | TBT4063 | SPANISH I | 4 | 0 | 4 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 8 | 0 |
| Elective | TBT4065 | RUSSIAN I | 4 | 0 | 4 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 8 | 0 |
| **7th SEMESTER TECHNICAL ELECTIVE COURSE VII** |  |
| Elective | TGM4033 | THE HISTORY OF AGRICULTURE AND DEONTOLOGY | 2 | 0 | 5 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Elective | TGM4035 | BIOSAFETY | 2 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 |
| Elective | TGM4037 | LEGISLATION OF BREEDER'S RIGHTS | 2 | 0 | 5 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Elective | TGM4039 | BIOTECHNOLOGY AND SOCIETY | 2 | 0 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **7th SEMESTER TECHNICAL ELECTIVE COURSE VIII-IX** |  |
| Elective | TGM4041 | EVOLUTION AND ORIGIN OF PLANT SPECIES | 3 | 0 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Elective | TGM4043 | INTRODUCTION TO PROTEOMICS | 3 | 0 | 5 | 5 | 5 | 0 | 5 | 0 | 5 | 5 | 5 | 0 | 5 | 5 | 0 | 5 | 5 | 5 |
| Elective | TGM4045 | INTRODUCTION TO GENOMICS | 3 | 0 | 5 | 0 | 0 | 4 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Elective | TGM4047 | INTRODUCTION TO METABOLOMICS | 3 | 0 | 5 | 5 | 5 | 0 | 5 | 0 | 5 | 5 | 5 | 0 | 5 | 5 | 0 | 5 | 5 | 5 |

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| **8th Semester Courses** |  |
| Compulsory | TGM4000 | GRADUATION THESIS | 0 | 2 | 5 | 0 | 5 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Compulsory | TGM4002 | SEED PRODUCTION TECHNIQUES | 2 | 2 | 6 | 5 | 5 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Elective |  | SOCIAL ELECTIVE COURSE II | 2 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Elective |  | TECHNICAL ELECTIVE COURSE X | 2 | 2 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Elective |  | TECHNICAL ELECTIVE COURSE XI | 3 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Elective |  | TECHNICAL ELECTIVE COURSE XII | 3 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **8th SEMESTER SOCIAL ELECTIVE COURSE II** |  |
| Elective | TBT4052 | ENVIRONMENT AND SOCIETY | 2 | 0 | 4 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 5 |
| Elective | TBT4054 | THE HISTORY OF TURKISH DEMOCRACY | 2 | 0 | 4 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Elective | TBT4056 | TURKEY AND EU RELATIONS | 2 | 0 | 4 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Elective | TBT4058 | WORLD MUSIC CULTURES | 2 | 0 | 4 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Elective | TBT4060 | INTERNATIONAL AFFAIRS AND GLOBALIZATION | 2 | 0 | 4 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Elective | TBT4062 | DEMOCRACY AND HUMAN RIGHTS | 2 | 0 | 4 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Elective | TBT4064 | MODERN POLITICAL ISSUES | 2 | 0 | 4 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Elective | TBT4066 | ART HISTORY | 2 | 0 | 4 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Elective | TBT4068 | INTRODUCTION TO PHILOSOPHY | 2 | 0 | 4 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 5 |
| Elective | TBT4070 | INTRODUCTION TO SOCIOLOGY | 2 | 0 | 4 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 5 |
| Elective | TBT4072 | ARCHEOLOGY | 2 | 0 | 4 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Elective | TBT4074 | POLITICAL SCIENCE | 2 | 0 | 4 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Elective | TBT4076 | THE HISTORY AND PHILOSOPHY OF SCIENCE | 2 | 0 | 4 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 5 |
| Elective | TBT4078 | SCIENCE SOCIOLOGY | 2 | 0 | 4 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 5 |
| Elective | TBT4080 | SPANISH II | 2 | 0 | 4 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 8 | 0 |
| Elective | TBT4082 | RUSSIAN II | 2 | 0 | 4 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 8 | 0 |
| **8th SEMESTER TECHNICAL ELECTIVE COURSE X** |  |
| Elective | TGM4050 | BREEDING OF CROSS POLLINATED CROPS | 2 | 2 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Elective | TGM4052 | BREEDING OF SELF POLLINATED CROPS | 2 | 2 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Elective | TGM4054 | BREEDING OF VEGETATIVELY PROPAGATED CROPS | 2 | 2 | 5 | 4 | 0 | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 4 | 0 | 0 |
| Elective | TGM4056 | ROOTSTOCK BREEDING | 2 | 2 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Elective | TGM4058 | MUTATION BREEDING | 2 | 2 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |

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| **8th SEMESTER TECHNICAL ELECTIVE COURSE XI-XII** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Elective | TGM4060 | BREEDING FOR ABIOTIC STRESS | 3 | 0 | 5 | 4 | 4 | 0 | 4 | 0 | 4 | 4 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 |
| Elective | TGM4062 | BREEDING FOR BIOTIC STRESS | 3 | 0 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 |
| Elective | TGM4064 | BREEDING FOR NUTRITIONAL QUALITY | 3 | 0 | 5 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 |
| Elective | TGM4066 | HAPLOIDY | 3 | 0 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |