## Program Learning Outcomes

| Knowledge and Understanding          |  |
|--------------------------------------|--|
| K1                                   | List basics and fundamentals associated with agricultural sciences.  |
| K2                                   | List the soil fertility factors and its physical and chemical properties necessary to improve the agricultural production.   |
| K3                                   | Recognize the field crops, horticultural crops and agricultural pests.   |
| K4                                   | Describe the plant propagation methods and both agricultural practices and farm machineries required for plant production.   |
| K5                                   | Describes plant pathological symptoms and treatment methods / Nutritional deficiencies / methods of transmission and spread of agricultural pests / non-insect animal pests / machinery used in pest control and its functional parts. |
| K6                                   | Mention the economic crop pests in Qassim and Saudi Arabia /   |
|                                      | Environmental conditions leading to increased spread of various pests.   |
| Skills                               |  |
| <b>S</b> 1                           | Evaluate the plant production / plant protection methods according to  |
|                                      | environmental, moral, social and Islamic considerations.   |
| S2                                   | Represent data graphically and analyze the results of agricultural   |
|                                      | experiments.   |
| <b>S</b> 3                           | Perform lab experiments and field operations that related to plant<br>production/protection correctly.   |
| S4                                   | Explain the effect of different factors related to production and quality of   |
|                                      | pastures, field and horticultural crops.   |
| <b>S</b> 5                           | Design Agricultural systems to maximize utilization of different agriculture production components.  |
| S6                                   | Identify the different pests and disease that attack plants, their symptoms, and the control methods.  |
| <b>S</b> 7                           | Apply good practices for handling, transporting, storage and the usage of pesticides / IPM / principles of honey bee and silkworms care.   |
| Values, Autonomy, and Responsibility |  |
| <b>V</b> 1                           | Illustrate the ability to work in teams, communicate with others, and take responsibility.   |
| V2                                   | Write reports that cover different aspects of plant production/ protection in a correct way linguistically and scientifically.   |
|                                      | Both tracks<br>Plant production<br>Plant protection  |