

Rationale

The increasing demand for horticultural products is placing significant pressure on the environment, the few horticultural scientists and the development of new technologies in production, handling, marketing and improvement. Therefore, institutions of higher learning are obligated to train personnel that will meet the challenges in the horticultural industry. The horticultural industry ranks among the four leading foreign exchange earning sectors in Kenya. It also contributes significantly to food security, employment and grower incomes. The industry is rapidly expanding but is faced with competition, inadequate advanced scientists, and changing environment in which it has to operate. To remain competitive and attain its vast potential, it requires personnel with the highest level of training to handle emerging issues such as the genetically modified organisms and pesticide minimum residue level restrictions. The degree of doctor of philosophy in horticulture shall represent the attainment of a high level of scholarship and achievement in coursework and independent research. It is conceptualized and designed to produce personnel with the highest level of training, who are expected to contribute towards the goal of realizing the full potential of horticulture in national development and promotion of living standards.

Programme Objectives

The general objective of this programme is to equip graduates with the highest level of both coursework and research training, which are essential for effective performance of advanced research, teaching and management in the lucrative horticultural industry. On completion of the training, graduates should be able to do the following in the best way possible:

- i) Promote public awareness of the importance horticulture in the economy;
- ii) Increase production and marketing of horticultural produce;
- iii) Manage or establish horticultural enterprises;
- iv) Integrate horticultural activities with other farm enterprises;
- v) Carryout advanced scientific research on various facets of horticulture;
- vi) Develop rural, urban, and institutional landscapes;
- vii) Promote environmental conservation by effecting sound agricultural practices and policies;
- viii) Handle emerging issues such as those in plant biotechnology and of pesticide residues;
- ix) Pursue careers in horticulture and related disciplines.

Admission Requirements

Applicants should be holders of a Master of Science degree in Horticulture or equivalent academic qualifications of Egerton University or any other recognized institution of higher learning. Where a prospective applicant's credentials are not easily evaluated, the Department of CHS shall require the applicant to pass an entry examination, administered both in written and oral form.

There shall be two categories of registration:

- i) Full-time students, who shall be required to complete their degree requirements within a minimum of three years and a maximum of five years;
- ii) Part-time students, who shall be required to complete their degree requirements within a minimum of three years and a maximum of seven years.

Course Structure and Duration

A student shall be admitted to doctoral candidacy in horticulture after satisfying all the Egerton

University general requirements, including passing the thesis proposal defense. The degree of doctor of philosophy in horticulture shall be offered through coursework, independent research and thesis. Each candidate shall be guided by at least two (2) supervisors from related areas of specialization. The degree shall be achieved through 36 compulsory credit factors (C.F.s). The coursework consist of 18 compulsory credit factors beyond the Master's degree coursework. The other 18 C.F.s shall be earned for the research and thesis. A maximum of 9 credit factors of coursework, passed with at least grade B, may be transferred from the Master's degree coursework, with the recommendation of the study committee, including supervisors.

The following coursework loads shall apply, except where a student shall have completed the coursework requirements: minimum C.F.s per semester of 9 for full-time students, and 6 for part-time students. A student shall be required to obtain a cumulative weighted average of at least grade B (60%) in coursework to be eligible for continuation with the Ph.D. studies. The passing grade for individual courses is C.

With the consent of the lecturers concerned, graduate students may audit courses not included in their regular programme. Audited courses shall be designated as AU.

The courses are coded as follows:

- i) The abbreviation HORT refers to Horticulture;
- ii) The first digit indicates the level of training;
- iii) The second digit represents the level of advancement of the content;
- iv) The third digit refers to the series of courses in a particular field.

Examination Regulations

All examination for this programme shall be conducted in accordance with the examination regulation as stipulated in the Egerton University Statute XXIX.

Grading System

The grading of examination for this programme shall be conducted in accordance with Egerton University Statute XXIX.

Graduation Requirement

To graduate, a student shall be required to take and pass ALL scheduled courses within the stipulated period.

Degree Classification

The Doctor of Philosophy degree in Horticulture is not classified.

Summary of Courses

The degree shall be achieved through 36 compulsory credit factors (C.Fs). The coursework consist of 18 credit factors. The other 18 C.Fs shall be earned through research work.

Compulsory Courses:

Candidates must take 12 C.Fs of compulsory courses, and at least 6 C.Fs of elective courses as indicated below.

Courses shall be offered in 2 semesters as follows: