

Post-IV semester**Internship (only for exit option for award of UG-Diploma) 10 weeks****10 (0+10)****Objective**

To provide students with an opportunity to put into practice the skills they have learned while studying in the institute, so that in case they exit with UG-Diploma, they will be able to get proper engagement/ employment and will be competent to start an enterprise

Activity

The students will have internship/ training for 10 weeks' duration either in the parent institute (attaching the students to facilities such as farm machinery testing centre, incubation centres, prototype production facilities, etc.) or in industry, farm machinery service centre or related organisations involved in agri-engineering activities. The College/ University will facilitate attaching the students to the organisations.

After completion of internship, the students will have to submit a report on their learnings and also present in form of a seminar.

The assessment will be based on the report / assessment received from the industry/ organisation and the report and the presentation made at the College. Ideally the weightage will be 50% each for both internal and external. The HAEIs may modify the weightage and breakups.

Semester V**Strength of Materials****2 (1+1)****Objective**

To make the students acquainted with the importance of strength parameters of different materials and the techniques to calculate unknown forces in 2D structures

Theory

Introduction to strength of materials.

Slope and deflection of beams: Slope and deflection of beam using integration techniques, moment area theorems, conjugate beam method, problems of slope and deflection.

Theory of columns and struts, problems of column and struts.

Steel connections: Analysis of rivet connections, analysis of welded connections.

Stability analysis of masonry dam; problems on masonry dam.

Statically indeterminate structures- analysis of propped beams, analysis of fixed beams, analysis of continuous beams using superimposition and three moment equation.

Analysis of beam using moment distribution method and solving problems.