

## ABE 290

### ASABE Student Competitions

**Robotics:** <https://www.asabe.org/awards-landmarks/student-awards,-competitions-scholarships/robotics-competition.aspx>

The ASABE Robotics Competition is a student design event that was conceived in 2005. The aim of the competition is to encourage undergraduate as well as graduate students to develop innovative robotic solutions to real life problems in the agricultural arena.

**¼ Scale Tractor:** <http://www.asabe.org/membership/preprofessionalstudents/14-scale-comp.aspx>

The International ¼ Scale Tractor Student Design Competition is unique among student engineering design contests in that it provides a realistic 360-degree workplace experience. Teams of students are given a 31 hp Briggs & Stratton engine and a set of Titan tires. The design of their tractor is up to them. A panel of industry experts then judges each design for innovation, manufacturability, serviceability, maneuverability, safety, sound level and ergonomics. Teams also submit a written design report in advance of the competition, and on-site, they must sell their design in a formal presentation to industry experts playing the role of corporate management team. Finally, machines are put to the test in two performance events – three tractor pulls and a durability course.

**AGCO Student Design Competition:** <http://www.asabe.org/awards-landmarks/student-awards,-competitions-scholarships/agco.aspx>

The purpose of the AGCO National Student Design Competition is to encourage undergraduate students to participate in the basic design of an engineering project useful to agriculture and related areas and to provide an arena of professionalism in which the student can experience peer recognition of a well-conceived and executed design project.

**Open Format – Gunlogson Environmental Design Student Competition:**

<http://www.asabe.org/awards-landmarks/student-awards,-competitions-scholarships/gunlogson-open-competiton.aspx>

The purpose of the competition is to encourage undergraduate students to participate in the design of a relevant engineering project and to provide an arena of professional competition for environmentally and biologically-related design projects. This competition is complementary to the AGCO National Design Competition, which focuses on agricultural and food-related projects, while Gunlogson focuses on environmentally and biologically-related projects.

**Undergraduate Student Poster Competition:** <http://www.asabe.org/awards-landmarks/student-awards,-competitions-scholarships/undergrad-poster-comp.aspx>

The Undergraduate Project Poster Competition is held at the ASABE Annual International Meeting. This competition encourages ASABE undergraduate student members to interact with industry, faculty and fellow students by giving a technical poster presentation that showcases the student's work on a project

related to agricultural and biological engineers. The goal of the poster competition is to develop the ability of undergraduate students to conduct research and competitively present those research findings to judges and an interested audience of professionals.

**Undergraduate Student Paper Award:** <http://www.asabe.org/awards-landmarks/student-awards,-competitions-scholarships/kk-barnes.aspx>

The objective of the K. K. Barnes Student Paper Awards Competition is to encourage undergraduate students in the preparation of better technical papers on subjects in the agricultural, food or biological engineering field. It is intended as a special inducement to supplement the training provided in the undergraduate curriculum by providing early practice in a type of performance required of professionals in the work in which they will later engage. The competition consists of two parts: a written competition and an oral competition. Authors of the top three written papers are invited to attend the ASABE Annual Meeting to participate in the oral competition.