## Resolution 2021-22L Resolution to Approve New Major, Integrated Agriculture Technologies, in Bachelor of Science in Plant Science

Recommended for approval by the Commission on Undergraduate Studies and Policies First Reading: Faculty Senate: AP Faculty Senate: Staff Senate: Graduate and Professional Student Senate: Undergraduate Student Senate: Second Reading: Approved by University Council: Approved by the President:

First Effective Date to Declare Major: Fall 2022 First Effective Date to Graduate: Spring 2023

**WHEREAS**, predictions suggest that we will need to boost worldwide crop production by 50-70 percent over the next several decades in order to feed the projected world population; and

**WHEREAS**, we will need to prepare and train a new generation of students that will work in the agricultural sciences to help us find strategies to increase crop production while protecting the environment; and

**WHEREAS,** newer technologies such as drone and satellite imaging, robotics, sensors, and data analytics are expected to play a major role in helping improve the efficiency of future crop production; and

**WHEREAS**, students in the agricultural sciences will require knowledge and experience using these new technologies in agricultural settings as these skills are expected to be in high demand from private and public sectors; and

**WHEREAS**, the School of Plant and Environmental Sciences (SPES) recognizes that agriculture is experiencing a fast-paced technological revolution and believes that optimal deployment of these sophisticated tools will also require a thorough understanding of crop and soil sciences; and

**WHEREAS**, the School of Plant and Environmental Sciences seeks to train a new generation of students who can work across disciplines with a unique combination of technological know-how and practical knowledge in the crop and soil sciences, the School is proposing a new Major entitled Integrated Agriculture Technologies (IAT); and

**WHEREAS,** no new resources will be required to initiate the Major in Integrated Agriculture Technologies as the School of Plant and Environmental Sciences recently filled two tenure-track positions with faculty who will contribute to the new Major; and **WHEREAS**, letters of support have been received from all departments whose courses would be included in the proposed Major in Integrated Agriculture Technologies; and

**WHEREAS**, the new Major in Integrated Agriculture Technologies is anticipated to attract 20-30 additional students per year interested in pursuing careers in this field to Virginia Tech.

**THEREFORE, BE IT RESOLVED** that the Major in Integrated Agriculture Technologies under the Bachelor of Science in Plant Science within the School of Plant and Environmental Sciences be approved effective Fall 2022 and the proposal forwarded through University governance to the President for approval.