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## **Innovation in precision agriculture: Facing the challenges of digitalization in agriculture**

This is a new course to encourage the entrepreneurial mindset of the students around the topic of Smart Farming and connect them with different options available to further develop their own ideas.

Digitalization is disrupting the food system on a global scale: from the way we grow our crops, to the business models of the AgroFood industry. In this environment characterized by uncertainty and constant technological change, a new generation of professionals is needed to explore the new challenges and opportunities that continuously redefine the sector.

Despite the importance of entrepreneurship in agriculture, students of agronomy from the ETH in general do not engage in venture creation opportunities offered by the ETH or other institutions. This is highly relevant, as an entrepreneurial mindset in the students of agronomy is not only important to develop their own ventures, but also key to support farmers and companies of the AgroFood sector as they face the challenges of digitalization.

In an effort to revert this situation, the new course “Innovation in Precision Agriculture” was created. Organized by the ETH Studio AgroFood (WFSC), the course is designed to encourage the entrepreneurial mindset of the students and serve as a bridge to other courses already offered at the ETH on the topic of entrepreneurship. In particular, it aims to reach beyond the technological aspects of digitalization in agriculture, as creation, delivery, and capture of value become key aspects in the development of new venture opportunities. At the same time, the course aims to connect the students with different options available to further develop their own ideas within or outside the ETH. The course counts with the support of the chair of Entrepreneurship from ETH (MTEC), Student Project House (SPH) and guests lecturers from Agroscope and the private startup sector.

The first version of the 10-week pilot course will be offered to 16 BSC and MSc students of Agronomy. Focus will be given to the pre-launch and opportunity recognition stages of the entrepreneurial cycle, framed within the topic of Smart Farming. Students will be supported throughout the course by experts on technological aspects, as well as entrepreneurship, in the exploration and development of their own ideas until a concept prototype. Future versions of the course are expected to open gradually to students from Food and Computer Sciences in order to maximize the opportunities of collaboration and generation of ideas in a multidisciplinary environment.