

## **Novel Higher-Educational Programs in Food Science: Going Beyond Classical University Formats**

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Educational needs in food science are rapidly changing due to challenges that the food sector is currently facing. Growth of the global population to about 10 billion by 2050, climate change and an increasing shortage of resources, as well as dietary induced diseases require future workers in this sector to come up with new and innovative solutions to these problems. Due to the increasing complexity of the global food system, more system science approaches are needed to avoid for example the fuel versus food competition scenario. Moreover, the generation of Millennials and post-Millennials (Generation Z), from whom these workers will be recruited have been immersed from birth in new digital technologies which has led to different information gathering and learning patterns. For these students, all required information is at their disposal and only fingertips away, and they often think globally. The challenge for these students is not to obtain the required information but rather to convert them to skills and to use them in practice in multinational, multidisciplinary teams. In this talk we will present some new formats and programs that are designed to address these new needs and challenges. Firstly, we will present the status of the design of a new Master of Food System Science, a collaborative effort between 10 European Universities under the umbrella of EIT Food to create a new breed of professionals that can help to integrate the fragmented food sector. Secondly, we will present some new curricular and extracurricular formats that can be used to help students and professionals with skill-building, such as problem-oriented semester or year-long projects with industrial-academic co-mentorship (EIT Food Solutions) that help students acquire team- and leadership skills as well as hands-on experience in business case developments. Finally, we will present some approaches that were recently used in select cases in Hohenheim to make lecture formats more interactive and appealing by flipping the classical lecture-student relationship (mini-conference / lecture contributions).