Minor: Smart Agri-Food Value Chains AAVC

Coordinator	BUP	Study Points	15

Elements	ECTS	Course	Mode of Exam	Period	Literature
AVVC01	5	Company Project or Internship	Assessment	2	Martindale, W., Duong, L., & Jagtop, S. (2022). Food industry 4.0: unlocking advancement opportunities in the food manufacturing sector. CABI.
AVVC02	5	Applied Research Project	Assignment	2	Martindale, W., Duong, L., & Jagtop, S. (2022). Food industry 4.0: unlocking advancement opportunities in the food manufacturing sector. CABI.
AVVC03	5	Theory	Exam	1	Martindale, W., Duong, L., & Jagtop, S. (2022). Food industry 4.0: unlocking advancement opportunities in the food manufacturing sector. CABI.

Pre-requisites	Completed three years of a business or engineering or related bachelor degree program.
Professional Task	Researcher, engineer, consultant, manager
Professional Role	Precision Agriculture Specialist Agri-food Digital Transformation Consultant Agricultural Automation Engineer Agri-food Supply Chain Manager Sustainable Agriculture Technologist Agri-food Process Control Engineer
Method of Instruction	Asynchronous lessons and class work online.
Learning Objectives	
Company Project or Internship	• The student can decide one of two options a) company project with real life company, or b) internship related to industry 4.0 in agri-food systems. • The student will understand how to enable digital transformation while operating within a company and throughout the entire supply chain.
Applied Research Project	• The student is able to apply the theory towards a applied research project, at their internship companies, company project, or a research provided by a professorship.
Theory	• The student understand key trends and technologies in industry 4.0 in agri-food systems • The student can identifying barriers and success factors for industry 4.0 in agri-food systems • The student understand and can analyse the potential of emerging digital technologies in food supply chains • The student can analyse a companies process of digital transformation and align it to readiness levels.

	• The student can perform requirements engineering tactics. • The student can role out feasibility studies • The student can identify how industry 4.0 technology will impact sustainability in the agri-food system. • The student will be able to understand a systems approach and apply basic food system mapping.
Aeres-competencies: • **To present (level 3)** • **To research (level 3)** • **To innovate (level 3)**	
End qualifications • Management of organizations, processes and project and people • Optimizing logistics and managing the quality in agri-food chains	
Mode of instruction: This course will be offered in a blended format. Classes will be organised every second week, online and in the classroom. Coaching will be offered weekly. The internship is a minimum of two days per week for 14 weeks.	