

**CORSO DI LAUREA MAGISTRALE INTERNAZIONALE IN INNOVATION DEVELOPMENT IN AGRIFOOD SYSTEMS**  
**(IDEAS) (coorte 2022/2023)**  
**MANIFESTO DEGLI STUDI PER STUDENTI A TEMPO PIENO**

SSD	Attività didattica	CFU/ECTS	Ex	Accertamento	Valutazione
<b>I anno – I semestre</b>					
<b>AGR03</b>	<b>Fruit tree eco-physiology and strategies to cope with climate change</b>	9 (6L - 3Ex/Lab)	1	Esame	Voto
	<b>I.C. Innovative and smart technologies in crop protection</b>	9 (6L - 3Ex/Lab)			
<b>AGR11</b>	Innovative and advanced control strategies of plant feeders (3 ECTS, 2L - 1Ex/Lab)		1	Esame	Voto
<b>AGR12</b>	Smart technologies to manage plant pathogens (6 ECTS, 4L - 2Ex/Lab)				
	<b>I.C. Food and food components from agrifood of by-products and novel sources</b>	6 (2L - 1Ex/Lab)			
<b>AGR16</b>	Food bioprocesses from by-products and novel sources (3 ECTS, 2L - 1Ex/Lab)		-	Prova in itinere	
<b>AGR13</b>	<b>I.C. Innovation in biomass and wastes management in agrifood systems</b>	9 (4L - 2Ex/Lab)			
	Sustainable biomass management (6 ECTS, 4L - 2Ex/Lab)		-	Prova in itinere	
	Totale I sem	27	3		
<b>I anno - II semestre</b>					
<b>AGR02</b>	<b>Advanced data analysis methods for sustainable agronomic and environmental management</b>	6 (4L - 2Ex/Lab)	1	Esame	Voto
<b>AGR07</b>	<b>Modern plant breeding strategies</b>	9 (6L - 3Ex/Lab)	1	Esame	Voto
	<b>I.C. Food and food components from agrifood of by-products and novel sources</b>	6 (2L - 1Ex/Lab)			
<b>AGR15</b>	Technology management of by-products for food production (3 ECTS, 2L - 1Ex/Lab)		1	Esame	Voto
<b>AGR01</b>	<b>Circular economy and policies</b>	6 (4L - 2Ex/Lab)	1	Esame	Voto



<b>AGR13</b>	<b>I.C. Innovation in biomass and wastes management in agrifood systems</b>	9 (2L - 1Ex/Lab)			
	Biomass and wastes characterization (3 ECTS, 2L - 1Ex/Lab)		1	Esame	Voto
	Totale II sem	27	4		
	<b>Total I year</b>	<b>54</b>	<b>7</b>		
<b>II anno</b>					
	<b>I.C. Sustainable field cropping systems for bio-based sectors and bio-energy</b>	9 (6L - 3Ex/Lab)			
<b>AGR02</b>	Non-food and industrial energy cropping systems (3 ECTS, 2L - 1Ex/Lab)				
<b>AGR09</b>	Mechanization and monitoring of cropping systems (3 ECTS, 2L - 1Ex/Lab)		1*	Esame	Voto
<b>AGR10</b>	Sustainable non-food and industrial energy supply chains and processing systems (3 ECTS, 2L - 1Ex/Lab)				
<b>Gli studenti devono scegliere due attività didattiche (totale 18 ECTS) fra le seguenti opzioni</b>					
	<b>I.C. Sustainable innovative technologies improving soil, microorganism and plant interactions (Option 1)</b>	9 (6L - 3Ex/Lab)			
<b>AGR12</b>	Sustainable innovative approach in managing soil-borne pathogens (3 ECTS, 2L - 1Ex/Lab)		1*	Esame	Voto
<b>AGR13</b>	Sustainable clean soil strategies (3 ECTS, 2L - 1Ex/Lab)				
<b>AGR16</b>	Soil microbiota management improving agricultural systems (3 ECTS, 2L - 1Ex/Lab)				
	<b>I.C. Innovation in managing fresh commodities losses (Option 2)</b>	9 (6L - 3Ex/Lab)			
<b>AGR12</b>	Innovative technologies in managing postharvest diseases (3 ECTS, 2L - 1Ex/Lab)		1*	Esame	Voto
<b>AGR16</b>	Biotechnologies for shelf life improvement (3 ECTS, 2L - 1Ex/Lab)				



<b>AGR15</b>	Innovative active packaging (3 ECTS, 2L - 1Ex/Lab)				
	<b>I.C. Eco-friendly technologies for biomass recycling (Option 3)</b>	9 (6L - 3Ex/Lab)			
<b>AGR11</b>	Eco-friendly insect mediated biomass recycling (3 ECTS, 2L - 1Ex/Lab)		1*	Esame	Voto
<b>AGR13</b>	Waste biorefinery (3 ECTS, 2L - 1Ex/Lab)				
<b>ING IND22</b>	Biomaterials from agrifood wastes (3 ECTS, 2L - 1Ex/Lab)				
	<b>I.C. Biodiversity mainstreaming in crop production (Option 4)</b>	9 (6L - 3Ex/Lab)			
<b>AGR07</b>	Genetic approaches for resilience to climate change (3 ECTS, 2L - 1Ex/Lab)		1*	Esame	Voto
<b>AGR11</b>	Biodiversity and ecosystem services in agriculture (3 ECTS, 2L - 1Ex/Lab)				
<b>AGR12</b>	Host-pathogen interactions and microorganism diversity (3 ECTS, 2L - 1Ex/Lab)				
	<b>I.C. Innovation in fruit and vegetable crops (Option 5)</b>	9 (6L - 3Ex/Lab)			
<b>AGR03</b>	Sub-tropical and semi-arid fruit crops (6 ECTS, 2L - 1Ex/Lab)		1*	Esame	Voto
<b>AGR04</b>	Innovative and sustainable vegetable cultivation (3 ECTS, 2L - 1Ex/Lab)				
	<b>I.C. Innovative thinking in bioeconomy scenarios (Option 6)</b>	9 (6L - 3Ex/Lab)			
<b>CHIM12</b>	Innovation, creative thinking and sustainability (3 ECTS, 2L - 1Ex/Lab)		1	Esame	Voto
<b>SPS10</b>	Social innovation in local community and enterprises (3 ECTS, 2L - 1Ex/Lab)				
<b>SECS-P08</b>	Innovative enterprises management (3 ECTS, 2L - 1Ex/Lab)				
	Attività Didattica a scelta libero dello studente	9	1**	Esame	Voto
	Totale I sem	36	4		
<b>II anno - II semestre</b>					



	Tirocinio finalizzato alla preparazione della tesi di laurea magistrale	7		Attestato	
	Altre conoscenze utili per l'ingresso nel mondo del lavoro	3		Attestato	
	Tesi di laurea ed esame finale	20		Esame	Voto
	Totale II sem	30			
	<b>Totale</b>	<b>120</b>	<b>11</b>		

SSD: Settore Scientifico Disciplinare;

I.C.=corso integrato, 1\*: gli studenti devono scegliere due attività didattiche fra le sei attività proposte come opzioni (1-6); 1\*\*= attività didattica a scelta libera dello studente così come dettagliato nel regolamento

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SSD	Attività didattica	CFU/ECTS	Ex	Accertamento	Valutazione
<b>I anno</b>					
AGR07	<b>Modern plant breeding strategies</b>	9 (6L - 3Ex/Lab)	1	Esame	Voto
AGR03	<b>Fruit tree eco-physiology and strategies to cope with climate change</b>	9 (6L - 3Ex/Lab)	1	Esame	Voto
	<b>I.C. Innovative and smart technologies in crop protection</b>	9 (6L - 3Ex/Lab)			
AGR11	Innovative and advanced control strategies of plant feeders (3 ECTS, 2L - 1Ex/Lab)		1	Esame	Voto
AGR12	Smart technologies to manage plant pathogens (6 ECTS, 4L - 2Ex/Lab)				
AGR02	<b>Advanced data analysis methods for sustainable agronomic and environmental management</b>	6 (4L - 2Ex/Lab)	1	Esame	Voto
	<b>I.C. Food and food components from agrifood of by-products and novel sources</b>	6 (4L - 2Ex/Lab)			
	Technology management of by-products for food production (3 ECTS, 2L - 1Ex/Lab)		1	Esame	Voto
AGR15					
AGR16	Food bioprocesses from by-products and novel sources (3 ECTS, 2L - 1Ex/Lab)				
AGR01	<b>Circular economy and policies</b>	6 (4L - 2Ex/Lab)	1	Esame	Voto
AGR13	<b>I.C. Innovation in biomass and wastes management in agrifood systems</b>	9 (6L - 3Ex/Lab)			
	Sustainable biomass management (6 ECTS, 4L - 2Ex/Lab)		1	Esame	Voto
	Biomass and wastes characterization (3 ECTS, 2L - 1Ex/Lab)				
	<b>Total I year</b>	<b>54</b>	<b>7</b>		
<b>II anno - I semestre</b>					
	<b>I.C. Sustainable field cropping systems for bio-based sectors and bio-energy</b>	9 (6L - 3Ex/Lab)	1*	Esame	Voto



<b>AGR02</b>	Non-food and industrial energy cropping systems (3 ECTS, 2L - 1Ex/Lab)				
<b>AGR09</b>	Mechanization and monitoring of cropping systems (3 ECTS, 2L - 1Ex/Lab)				
<b>AGR10</b>	Sustainable non-food and industrial energy supply chains and processing systems (3 ECTS, 2L - 1Ex/Lab)				
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	<b>I.C. Sustainable innovative technologies improving soil, microorganism and plant interactions (Option 1)</b>	9 (6L - 3Ex/Lab)			
<b>AGR12</b>	Sustainable innovative approach in managing soil-borne pathogens (3 ECTS, 2L - 1Ex/Lab)		1*	Esame	Voto
<b>AGR13</b>	Sustainable clean soil strategies (3 ECTS, 2L - 1Ex/Lab)				
<b>AGR16</b>	Soil microbiota management improving agricultural systems (3 ECTS, 2L - 1Ex/Lab)				
	<b>I.C. Innovation in managing fresh commodities losses (Option 2)</b>	9 (6L - 3Ex/Lab)			
<b>AGR12</b>	Innovative technologies in managing postharvest diseases (3 ECTS, 2L - 1Ex/Lab)		1*	Esame	Voto
<b>AGR16</b>	Biotechnologies for shelf life improvement (3 ECTS, 2L - 1Ex/Lab)				
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	<b>I.C. Eco-friendly technologies for biomass recycling (Option 3)</b>	9 (6L - 3Ex/Lab)			
<b>AGR11</b>	Eco-friendly insect mediated biomass recycling (3 ECTS, 2L - 1Ex/Lab)		1*	Esame	Voto
<b>AGR13</b>	Waste biorefinery (3 ECTS, 2L - 1Ex/Lab)				
<b>ING IND22</b>	Biomaterials from agrifood wastes (3 ECTS, 2L - 1Ex/Lab)				
	<b>I.C. Biodiversity mainstreaming in crop production (Option 4)</b>	9 (6L - 3Ex/Lab)			
			1*	Esame	Voto



<b>AGR07</b>	Genetic approaches for resilience to climate change (3 ECTS, 2L - 1Ex/Lab)				
<b>AGR11</b>	Biodiversity and ecosystem services in agriculture (3 ECTS, 2L - 1Ex/Lab)				
<b>AGR12</b>	Host-pathogen interactions and microorganism diversity (3 ECTS, 2L - 1Ex/Lab)				
	<b>I.C. Innovation in fruit and vegetable crops (Option 5)</b>	9 (6L - 3Ex/Lab)			
<b>AGR03</b>	Sub-tropical and semi-arid fruit crops (6 ECTS, 2L - 1Ex/Lab)		1*	Esame	Voto
<b>AGR04</b>	Innovative and sustainable vegetable cultivation (3 ECTS, 2L - 1Ex/Lab)				
	Totale I sem	36	4		
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	Tirocinio finalizzato alla preparazione della tesi di laurea magistrale	7		Attestato	
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