



WARMADEWA UNIVERSITY **AGRICULTURAL INDUSTRY** **AND TECHNOLOGY**

COURSE **SYLLABUS**

WIP

International Program



AGRICULTURAL INDUSTRY AND TECHNOLOGY

5 ECTS

COURSE DESCRIPTION

The course on agricultural industry and technology provides students with an in-depth understanding of the agricultural sector and how technology is transforming it. It covers various aspects of modern agricultural practices, technological advancements, and their applications in improving productivity, sustainability, and profitability in the industry.

OBJECTIVES

By the end of this course, students should be able:

- To understand about Tourism-based agricultural industry technology
- To understand about industrial based on chocolate, honey and coffee industry
- To understand about home industry based on agricultural commodities
- To explain role of biotechnology in agriculture like biofertilizer technology and soil organism production technology
- To understand the important of soil health and soil conservation
- To understand of climate smart agriculture and agroforestry

OUTCOMES

- Attitude: Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.
- Ability: Develop the ability/skill needed to discover/innovate/ create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to self-life problems.
- Accomplishments: Demonstrate accomplishment of discovery/ innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.



LECTURING METHOD

The course will be presented in the form of lecture activities, discussion, case study, homework and presentation.

- Individual Assignment: Individual essay of opportunity recognition
- Group Assignment: Participation in preparation of group project work, presentation, discussion in class
- Presentation and discussion: Performance presentation of group assignment and discussion in class

ASSESSMENT METHOD

Class attendance 10 %,
Class participation and assignments 30 %,
Mid-term exam 30 %
Final exam 30 %

LECTURERS

WIP Team

LECTURE TOPICS

Week	Topics
1	Tourism-based agricultural industry technology
2	Chocolate industry technology
3	Industrial technology based on honey
4	Industrial technology based on the coffee industry
5	Home industry based on agricultural commodities
6	Sustainable Agriculture
7	Food Safety and Traceability
8	MIDTERM EXAM
9	Biotechnology in Agriculture
10	Biofertilizer Technology
11	Soil Organism Production Technology
12	Soil health
13	Soil Conservation



14 Climate-Smart Agriculture

15 Agroforestry

16 **FINAL EXAM**

WORKLOAD

16 weeks				Weeks per semester																TOTAL hrs
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Independent work	Homework, assignments			2	2	2	2	2	2	2			2	2	2	2	2	2		24
	Workshops					4				4										8
	Exam preparation									9								10		19
	Company visits, excursions																			0
	Preparation for presentations and papers				2			2		2			2		2		2			12
	Preparation for class			2	2	2	2	2	2			2	2	2	2	2	2	2		24
	Follow-up for class			1	1	1	1	1	1	1			1	1	1	1	1	1	1	12
	Final essay paper																		10	10
	Course evaluation																		2	2
	Workshops and Excursion Paper						2			2										4
																			115	
Hrs of exams												2						2	4	
Mandatory class attendance	Class	Weekly hrs ~ 2		2	2	2	2	2	2	2			2	2	2	2	2	2	26	
				TOTAL WORKLOAD PER COURSE (HOURS)																145
				TOTAL ECTS																5