Module name:	**Science, Technology, Engineering and Mathematics (STEM)**	
Module-level, if applicable:	Bachelor	
Code:	MA100	
Subheading, if applicable:	-	
Classes, if applicable:	-	
Semester:	1st	
Module coordinator:	Dr. Ida Kaniawati, M.Si	
Lecturer(s):	Lecturer Team of STEM	
Language:	Bahasa Indonesia	
Classification within the curriculum:	Compulsory course / Core Expertise Courses of Faculty (MKKF)	
Type of Teaching	Contact hours per week during the semester	Class Size
1. Lecture (expository method, discussion, presentation, simulation). 2. Structured activity: exercise (assignments based on conceptual, contextual and problem-solving approaches) 3. Self-study: Project (Creating design/prototype of solution)	150 minutes	30
Workload:	The total workload is 136 hours/8160 minutes (4.8 ECTS) per semester, consisting of 2100 minutes (1.24 ECTS) lectures, 1260 minutes (0.74 ECTS) exercise, 2280 minutes (1.34 ECTS) structured activities, 2520 minutes (1.48 ECTS) self-study per week for 16 weeks.	
Credit points:	4.8 ECTS (3 SKS), 1 SKS = 1.6 ECTS	
Prerequisites course(s):	None	
Course Learning Outcomes:	After taking this course the students have ability to: ● CLO1. Aware and tolerance to real-life problems. ● CLO2. Literate in Mathematics, Science, Technology, and Engineering ● CLO3. Solve social, economic, and environment problems critically, creatively, integrative, and multidisciplinary. ● CLO4. Decide in solving problem by considering the local, national, and global challenges ● CLO5. Collaborate skills in group activities to achieve the goals. ● CLO6. Communicate actively and effectively	
Content:	Food sustainability and Transportation sustainability	

Study/exam achievements:	The final mark will be weight as follow:				
	No	CLO	Assessment Object	Assessment Techniques	Weight (%)
	1	CLO2,	Subject Specific competence: a. Group assignments	Worksheet	20
	2	CLO1, CLO3, CLO4	Generic and social competence: a. Group assignments	Communication skills Product	15 20
	3	CLO5-6	b. Peer assessment	Performance	15
		Total			100

Forms of media:	Powerpoints, zoom meeting, Board, LCD Projector, Laptop/Computer, stream video conference, LMS SPOT UPI
Literature:	1. Osman, Amina & Ladhani, Sultana & Findlater, Emma & Mckay, Veronica. (2017). *A Curriculum Framework for the Sustainable Development Goals First Edition*. 2. Arifin,B., Noer Azam, Achsani Drajat Martianto, Linda Karlina Sari, and Ahmad Heri. Firdaus. (2018). *Modeling the Future of Indonesian Food Consumption: Final Report*. Jakarta: Bappenas, WFP & FAO. 3. Commission, E. (2001). *A Framework for Indicators for the Economic and Social Dimensions of Sustainable Agriculture and Rural Development* 4. Dillemuth,A. (2016). *Growing Food Connections Partnership. Planning & Policy Brief* 5. FAO United Nations. (2017). *The future of food and agriculture: Trends and challenges. Food and Agriculture Organization of the United Nations*. Retrieved from http://www.fao.org/3/a-i6583e.pdf 6. Food and Agriculture Organization. (2019). *Moving Forward on Food Losses and Waste Production*. The State of Food and Agriculture 7. Gabriel, A. S., Ninomiya, K., & Uneyama, H. (2018). *The role of the Japanese traditional diet in healthy and sustainable dietary patterns around the world*. Nutrients, 10(2). https://doi.org/10.3390/nu10020173 . 8. Hanh, Nguyen. (2018). *Sustainable food systems Concept and framework*. FAO. 9. Critical Issues in Transportation (2018). *Transportation Research Board*. https://doi.org/10.17226/25314

PLO and CLO mapping

	BC-1	BC-2	BC-3	BC-4	BC-5	BC-6	BC-7	BC-8	BC-9	BC-10	BC-11	BC-12
CLO1	√						√	√			√	
CLO2	√						√	√			√	
CLO3	√						√	√			√	
CLO4	√						√	√			√	
CLO5	√						√	√			√	
CLO6	√						√	√			√	