FACULTY OF AGRICULTURE

DEPARTMENT OF ANIMAL SCIENCE

UNDERGRADUATE PROGRAM **MODULE HANDBOOK**

Module designation	Practicum For Smart Application On Feed Technology
Semester(s) in which the module is taught	6th semester
Person responsible for the module	Prof. Dr. Ir. Samadi, M.Sc
Language	Indonesia, English
Relation to curriculum	Elective Modules
Teaching methods	Laboratory Practice, Field Demonstration, Case Study, Simulation, Project Work
Workload (incl. contact hours, self-study hours)	170 minutes of practice and demonstration per week
Credit points	1 SKS = 1,6 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	Students are able to implement SMART (Specific, Measurable, Achievable, Relevant, Time-bound) applications in feed technology through practical activities, utilize digital tools for feed formulation and quality monitoring, and design precision feeding strategies for different livestock production systems.
Content	Hands-on training in digital feed formulation tools; laboratory analysis of feed quality parameters; use of IoT-based sensors for monitoring feed intake and quality; implementation of automated feeding systems; field demonstration of precision feeding plans; project work integrating SMART applications in real farm conditions.
Examination and Assessment Formats	Practical Project Report, Logbook, Oral Presentation
Study and examination requirements	Case Method 30% Practical Implementation 40% Assignment/Report 30%
Reading list	Cheli, F., & Pinotti, L. (2020). Digital Technologies for Livestock Feeding Management. Animal Feed Science and Technology, 264, 114456. Makkar, H.P.S. (2018). Smart Livestock Feeding Strategies. FAO. Ensminger, M.E., & Perry, R.C. (2022). Feeds and Nutrition. Pearson Education.