

LIVESTOCK ENGINEERING

Module name:	Livestock Engineering
Module level, if applicable	
Code, if applicable	23I01121003
Subtitle, if applicable	
Courses, if applicable	
Semester(s) in which the module is taught	4 th Semester
Person responsible for the module	Prof. Dr. Ir. Lellah Rahim, M.Sc., IPU, ASEAN Eng.
Lecturer	Prof. Dr. Ir. Lellah Rahim, M.Sc., IPU, ASEAN Eng Prof. Dr. Ir. Muhammad Yusuf, S.Pt., IPU Dr. Wahniyathi, S.Pt., M.Si Dr. Ir. Muhammad Ihsan Andi Dagong, S.Pt., M.Si, Dr. Agr. Ir. Renny Fatmyah Utamy, S. Pt., M. Agr., IPM.
Language	Indonesian Language (Bahasa Indonesia)
Relation to curriculum	<i>Compulsory</i>
Type of teaching, contact hours	Task Paper Individual, Group Presentation, and Practicum/Field Practice
Workload	For this course, students are required to meet a minimum of 138 hours In one semester, which consist of: 27.00 hours for lecture 48.00 hours for structured assignments 48.00 hours for private study 15.00 hours for practicum
Credit points	3 credits
Requirements according to the examination regulations	
Recommended prerequisites	
Module objectives/intended learning outcomes	1. Able to apply animal science and technology that is oriented towards increasing production, efficiency, quality and sustainability.

	2. Able to synthesize production systems by integrating the field of Animal Science with other fields of science.
Content	1. Housing engineering and equipment for beef and dairy cattle 2. Engineering of reproductive equipment for cattle and goats 3. Housing engineering and equipment for goats, sheep and poultry 4. Feed and pasture industry engineering 5. Transportation, abattoir and livestock processing industry engineering
Study and examination requirements and forms of examination	
Media employed	
Reading list	1. Barbut, S. 2002. Poultry Products Processing: An Industry Guide. CRC. Press, Boca Raton, Florida, USA. 2. Charles, D. R., H. A. Elson, and M. P. Haywood. 1994. Poultry Housing, p. 249-272. In: C. M. Walther and D. R. Charles (eds.). Livestock Housing. CAB International, Wallingford, UK. 3. Gillespie, J. R. 2002. Modern Livestock and Poultry Production. 6th ed. Thomson Learning, Inc., Columbia, USA. 4. Mohamed Samer. 2022. Poultry Farms: Housing Systems, Mechanization, and Technology. https://www.researchgate.net/publication/221705093 2002. DOI: 10.13140/RG.2.1.2599.3766 5. Grandin, T. 2014. Livestock handling and transport. Department of Animal Sciences, Colorado State University, Fort Collins, CO 80523-1171, USA. ISBN. 781780643212 6. Myer Kutz. 2019. Handbook of Farm, Dairy and Food Machinery Engineering. 3rd Edition. Academic Press. ISBN: 9780128148037 7. Mohamed Samer. 2003. Physical Alleviation for Dairy Cows. tps://www.researchgate.net/publication/221705094. DOI: 10.13140/RG.2.1.1288.6561 8. Aberle, ED., Forrest, J.C., Gerrard, D.E., and Mills, E.W. 2012. Principle of Meat Science. 5th Edition. Kendall Hunt Pub Co. San Fransisco. 9. R Paul Singh and Dennis Heldman. 2013. Introduction to Food Engineering 5th Edition. Academic Press. eBook ISBN: 9780124016750 10. Filmer, D. 2002. Automation is the future for broiler nutrition. World Poultry, 18(6): 33-35. 11. Battaglia, R. A. 2001. Handbook of Livestock Management. 3rd ed. Prentice Hall, Inc., Upper Saddle

	River, New Jersey, USA. Blount, W.P. (2013). Intensive Livestock Farming. Elsevier. pp. 360–62. ISBN 978-1-4831-9565-0.
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