HASANUDDIN UNIVERSITY

Agricultural Engineering
Bachelor Program

2023
MODULE DESCRIPTION

BACHELOR PROGRAM
AGRICULTURAL ENGINEERING
FACULTY OF AGRICULTURE
HASANUDDIN UNIVERSITY
2023

Water Resources Management

Elective

Module designation	*Water Resources Management*
Semester(s) in which the module is taught	*Elective*
Person responsible for the module	Dr. Ir Sitti Nur Faridah, MP. Dr. Suhardi, STP., MP.
Language	*Indonesia*
Relation to curriculum	*Compulsory*
Teaching methods	*Lecture*
Workload (incl. contact hours, self-study hours)	*(Estimated) Total workload:* *2 SKS x 1.7 = 3.4 ECTS = 91.8 hours* • *Lecture = 23.3 hours* • *Excercise = 28 hours* • *Sel study = 28 hours* • *Exam = 4 hours (MID term and final)* • *Exam preparation = 8.5 hours*
Credit points	*2 SKS = 3.4 ECTS*
Required and recommended prerequisites for joining the module	*Enginering Hidrology* *Fluid of Mechanics*
Module objectives/intended learning outcomes	*ILO 6: manage and utilize agricultural resources effectively, efficiently, and sustainably*
Content	*This lecture discusses the definition and scope of Water Resources Management activities; basic principles, principles; institutions and introduction of regulations, legislation related to Water Resources Management, water source supply systems, types and methods of water demand estimates (irrigation and non-irrigation), data requirements for Water Resources Management, determination of reservoir capacity, reservoir release regulation method, optimization of water allocation models, macro and micro scale flood control, environmental aspects in Water Resources Management.*
Examination forms	*Writing*
Study and examination requirements	*Attendance above 80%*
Reading list	UU No. 7 th 2004 tentang Sumber Daya Air • Grigg, N.S., 1996. Water Resources Management: Principles, Regulation, and Cases. New York: McGraw Hill.