



## Module Description/Course Syllabi

Study Program : S1 Undergraduate Program  
Faculty of Agriculture  
University of Andalas

### 1. Course number and name

PIT612 05 Irrigation and Drainage

### 2. Credits and contact hours/Number of ECTS credits allocated

3 credits (2 classes, 1 practicum)

### 3. Instructors and course coordinator

Prof. Dr. Ir. Azwar Rasyidin, M. Agr Sc  
Prof. Dr. Ir. Aprisal, MP  
Nofrita Sandi, SP. MP

### 4. Text book, title, outhor, and year

- 1.Hansen, V.E., Israelsen, O.W., Stringham, G.E. 1979. Irrigation Principles and Practices, John Willey and Sons
- 2.Smedema, L.K., Rycroft, D.W. 1983. Land Drainage; Planning and Design of Agricultural drainage Systems  
3.Basford Academic and Educational Ltd, London
- 4.FAO Soil Bulletin no 42, 1979. Soil Survey Investigations for Irrigation
- 5.Neil Southorn. 1997. Farm Irrigation Planning and Management.
- 6.Willem Wlotman, Lambert Smedema, Davit Rycroft. 2020. Modern Land Drainage. Planning, Design and Management. Earth Sciences, Engineering & Technology, Environment & Agriculture.

### 5. Specific course information

#### *Brief description of the content of the course (catalog description)*

Students know the problem of plant water needs and can evaluate the relationship between climatic conditions, especially rainfall with the design of irrigation or drainage needs in an area, especially in determining water needs for rice field planting. Students understand the role of institutions in the sustainability of an irrigation system.

### B. Level of course unit (according to EQF: first cycle Bachelor, second cycle Master)

First Cycle Bachelor

### C. Semester when the course unit is delivered

Even Semester

### D. Mode of delivery (face-to-face, distance learning)

Face to face
<b>6. Intended Learning Outcomes (CPL)</b>
ILO 4: Able to apply their professional responsibilities to make decisions in land and environmental management PI 5 : Preparing regional development planning
<b>7. Course Learning Outcomes (CPMK) ex. The student will be able to explain the significance of current research about a particular topic.</b>
1. Preparing regional development planning
<b>8. Learning and teaching methods</b>
Cooperative Learning and Problem Based Learning
<b>9. Language of instruction</b>
English
<b>10. Assessment methods and criteria</b>
<b>Summative Assessment :</b> 1. Assignment 2. UTS 3. UAS 4. Internship <b>Formative Assessment:</b> 1. Minutes paper