

# University of Asia Pacific

## Department of Civil Engineering

Course Title : Irrigation & Flood Control  
Course No : CE 461  
Credit Hours : 3.0  
Course Teacher : Prof. Dr. M. R. Kabir, Head, Department of Civil Engineering  
Total No of Lectures : 28

### **Objective of this course**

This course contains fundamental information on irrigation and flood control. After completion of this course one should be able to design an irrigation project which includes water requirements, canal design and hydraulic structures for irrigation project. In addition one should be able to design hydraulic structures for flood protection also.

### **Syllabus**

Importance of irrigation, Sources and Quality of irrigation water, Soil Water Relationship, Consumptive Use and Estimation of Irrigation, Methods of Irrigation, Water Requirements, Design of Irrigation, Canal System, Irrigation Structures, Irrigation Pumps, Problems of Irrigation Land. Flood and its Control

### **Reference Books**

1. Irrigation Engineering & Hydraulic Structures : *S K Garg*
2. Irrigation Development and Management in Bangladesh : *M A Sattar*
3. Irrigation Engineering : *N N Basak*
4. Irrigation Principles and Practices : *Vaughn E. Hansen & W. Israelsen*
5. Irrigation (Theory & Practice) : *A M Micheal (2<sup>nd</sup> Edition)*
6. Irrigation and Water Management : *Dilip Kumar Majumder*
7. Irrigation Engineering : *S. K. Mazumder*
8. Irrigation Engineering : *R. K. Sharma & T. K. Sharma*

### **Grading System**

- Class Assessment 30%  
(Attendance: 10, Minimum 4 Class test, Home work: 20)
- Mid Term Examination 20%
- Final Examination 50%

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Dr. M. R. Kabir

Head, Department of Civil Engineering

Pro-Vice Chancellor, University of Asia Pacific (UAP)