

DEMAND

## PAVIATH INTEGRATED SOLUTION

**CIVIL ENGG** 

CIVIL UNIV

EARTH AND ROCKFILL DAMS AND SLOPE STABILITY

Paviath ONLINE

## ◆ CIVIL UNIVERSITY ◆ FOURTH YEAR I SEMESTER ◆ CODE A70137

IINIT-

EARTH AND ROCKFILL DAMS: GENERAL FEATURES, SELECTION OF SITE; MERITS AND DEMERITS OF THE EARTH AND ROCK FILL DAMS, CLASSIFICATION OF EARTH DAMS, CAUSES OF FAILURE, SAFE DESIGN CRITERIA. INSTRUMENTATION IN EARTH DAMS: PORE PRESSURE MEASUREMENTS, SETTLEMENT GAUGES, INCLINOMETERS, STRESS MEASUREMENTS,

SEISMIC MEASUREMENTS.

IINIT-I

FAILURES. DAMAGES AND PROTECTION OF EARTH DAMS: NATURE AND IMPORTANCE OF FAILURE, PIPING THROUGH EMBANKMENT AND FOUNDATIONS. METHODS OF SEEPAGE CONTROL THROUGH EMBANKMENTS AND FOUNDATIONS. DESIGN CRITERIA FOR FILTERS, TREATMENT OF UPSTREAM AND DOWN STREAM OF SLOPES, DRAINAGE CONTROL, FILTER DESIGN.

UNII-IV

MATS/SHOTCRETE)

METHODS OF SLOPE STABILITY: METHOD OF SLICES, EFFECT OF TENSION CRACKS, VERTICAL CUTS. BISHOP'S ANALYSIS, BISHOP AND MORGENSTERN ANALYSIS, NONCIRCULAR FAILURE SURFACES: JANBU ANALYSIS, SLIDING BLOCK ANALYSIS, SEISMIC STABILITY, STABILIZATION OF SLOPES: SOIL REINFORCEMENT (GEOSYNTHETICS/SOIL NAILING/MICRO PILES ETC), SOIL TREATMENT (CEMENT/LIME TREATMENT), SURFACE PROTECTION (VEGETATION/EROSION CONTROL

UNIT-\

ROCKFILL DAMS: REQUIREMENTS OF COMPACTED ROCKFILL. SHEAR STRENGTH OF ROCKFILL, ROCKFILL MIXTURES. ROCKFILL EMBANKMENTS. EARTH-CORE ROCKFILL DAMS, STABILITY, UPSTREAM & DOWNSTREAM SLOPES.

IINIT\_III

SLOPE STABILITY ANALYSIS: TYPES OF FAILURE: FAILURE SURFACES - PLANAR SURFACES,

CIRCULAR SURFACES, NON-CIRCULAR SURFACES, LIMIT EQUILIBRIUM METHODS, TOTAL

STRESS ANALYSIS VERSUS EFFECTIVE STRESS ANALYSIS. USE OF BISHOP'S PORE

PRESSURE PARAMETERS, SHORT TERM AND LONG TERM Stability in Slopes. Taylor

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TEXT RUUKS

I. SHERARD, WOODWARD, GIZIENSKI AND CLEVENGER. EARTH AND EARTH-ROCK DAMS. JOHN WILEY & SONS. 1963 REFERENCES:

1. BHARAT SINGH AND SHARMA, H. D. – EARTH AND ROCKFILL DAMS, 1999

2. SOWERS, G. F. AND SALLEY, H. I. – EARTH AND ROCKFILL DAMS, WILLAMS,

R.C., AND WILLACE, T.S. 1965.

3. ABRAMSON, L. W., LEE, T. S. AND SHARMA, S. -SLOPE STABILITY AND STABILISATION METHODS – JOHN WILEY & SONS.

(2002) 4. Bromhead, E. N. (1992). The Stability of

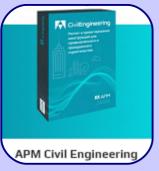
4. BROMHEAD, E. N. (1992). THE STABILITY OF SLOPES, BLACKIE ACADEMIC AND PROFESSIONAL. LONDON.

5. CHRISTIAN, EARTH & ROCKFILL DAMS -

PRINCIPLES OF DESIGN AND
CONSTRUCTION, KUTZNER PUBLISHED OXFORD

6. ORTIAGO, J. A. R. AND SAYAO, A. S. F. J. -HANDBOOK OF SLOPE

STABILISATION, 2004.



STC APM

SYLLABUS COACHING TRAINING - 2/UNIT TRAINING SELF - 4/UNIT ASSIGNMENT PRESENTATION - 2/UNIT SHOWTIME - 2/UNIT



**ASCON RENGA** 

SYLLABUS PERIOD
TRAINING - 2/2 HRS/UNIT
REMOTE - 2/2 HRS/UNIT
DURATION - SEMESTER
ONLINE/REMOTE ACCESS



ArCADia BIM | ArCADia-RAMA | NTERsoft-INTELLICAD | EuroConnections

ARCADIA BIM

FEATURES
TRAINING BY IND. PROFESSIONAL
INDUSTRY APPLICATION
TRAINER OPPORTUINITY
CERTIFICATION

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